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Beyond the prescription pad – Evaluating the impact of discharge electronic prescribing on hospital pharmacy workflows

Vandana Chandnani[1], Vicki Ibrahim[1], Ann Carrigan[2], Julie Li[2], Tamasha Jayawardena[2], Agnivo Sengupta[2], Melissa Baysari[2], Jacques Raubenheimer[3], A/Prof Jonathan Penm[3], Crystal Yim[1], Wei Liu[1], Claire Seong[4], Marvin Ong Sotto[4]

[1]Medicines Safety Program, National Program Delivery Branch, Australian Digital Health Agency, [2]Digital Health Human Factors Group, Sydney Nursing School, Faculty of Medicine and Health, University of Sydney, NSW, [3]School of Pharmacy, Faculty of Medicine and Health, University of Sydney, NSW, [4]Pharmacy Department, Royal Perth Hospital, WA

EMAIL Vandana.Chandnani@digitalhealth.gov.au

Background Electronic prescribing is increasingly being implemented in hospital settings. Its impact on discharge pharmacy workflows in hospitals remains under- evaluated, and the key enablers and barriers influencing its effective use are not yet well understood.

Aim To evaluate the impact of discharge electronic prescribing on hospital discharge pharmacy workflows.

Methods A pilot mixed-methods evaluation was undertaken using time and motion methodology and qualitative interviews with pharmacy staff.

The Work Observation Method By Activity Timing tool was used to capture pharmacy ward and dispensary activities, with findings analysed using descriptive statistics. Semi-structured interviews, based on the Extended Technology Acceptance Model, explored staff perceptions of electronic prescribing. Interviews were audio-recorded, transcribed verbatim, and analysed thematically using qualitative data analysis software.

Results Pharmacy staff reported mixed perceptions of electronic prescribing across constructs including perceived usefulness, ease of use, intention to use, actual use and availability of supporting resources. External factors such as IT infrastructure and technical support were consistently identified as barriers.

Paper prescriptions required an average of 44 minutes to dispense, compared with 32 minutes for electronic prescriptions. Although this 12-minute difference was not statistically significant, it may be clinically and operationally meaningful.

Discussion This pilot evaluation found that discharge electronic prescribing produced workflow impacts broadly comparable with paper-based process in a hybrid, site-specific implementation.

Pharmacy staff identified perceived benefits, including time savings, improved transparency and reduced clerical workload. Opportunities remain to refine workflows, reduce workarounds and support efficiency.

As an early single site implementation, this study provides important foundational insights while reflecting local context. Future multi-site evaluation is needed to examine how discharge electronic prescribing performs across diverse hospital settings, while co-design with end users can help refine usability, strengthen workflow integration and support scalable implementation across Australian hospitals.

Evaluation of Clinical Pharmacy Services in an Acute General Medicine Care at Home Pilot Program

Stephanie Gibson[1], An Pham[1], Bonnie Fung[1], Xin Han Ong[1], Mahmoud Salem[1], Marisa Hodgkinson[1]

[1]Monash Health, Melbourne, Vic

EMAIL stephanie.gibson@monashhealth.org

Background Hospital ‘at home’ programs enable patients to receive care at home, reducing hospital-acquired complications and costs while improving patient satisfaction. Geriatric evaluation and management ‘at home’ models, which include clinical pharmacists integrated within interdisciplinary teams, are well established. As models expand to higher-acuity general medicine patients, clinical pharmacy services are essential, as patients are often multimorbid, less clinically stable, and prescribed high-risk medicines.

Objective(s) To evaluate clinical pharmacy services provided during a general medicine at home (GMaH) pilot.

Action An 8-week GMaH pilot (July–September 2025), aimed to reduce hospital demand and support timely care transitions, was implemented at a hospital network using existing ‘at home’ pharmacy resources. Services included: admission history, medication reconciliation, review and supply, and patient/carer consultations (including counselling and dose administration support).

Evaluation A retrospective audit and descriptive analysis of pharmacy services for all GMaH pilot admissions was completed.

Twelve patients (mean age 70 years) were admitted with mean length of stay 5.25 days. Patients were prescribed a median 10 (interquartile range [IQR] 7–12) regular and 2 (IQR 1–2) as-required medicines on admission.

Pharmacists provided 35 consultations (34 telehealth, 1 home visit), with a mean of 3 (standard deviation +/– 2) per patient. Admission history and medication reconciliation were completed for all patients within 24 hours.

At least one medicine change occurred in 75% of patients; all required pharmacist input for supply and/or counselling (range 1–11 occasions per patient). Twenty clinical interventions were documented, including charting error corrections, dose adjustments, and deprescribing recommendations.

Discussion Clinical pharmacy services were highly utilised during the GMaH pilot. Frequent medicine changes, consultations, and interventions indicated pharmacy input was important for safe and effective care at home. Future expansion should consider dedicated pharmacy resourcing, service refinement, and increased home visits to support early identification and management of medicines-related issues.

Breaking Bottlenecks: Unlocking Earlier Discharge Through Pharmacist-Led Care Across the Patient Journey

Lynette Ear[1], Chanh Ong[1], James Wei[1], Nicholas Jones[1]

[1]*Peninsula University Hospital, Frankston, Vic*

EMAIL lear@phcn.vic.gov.au

Background Delays in medication reconciliation and discharge prescribing are a major contribute to patient flow bottlenecks, prolonged length of stay, and preventable medication harm. Traditional workflows position pharmacists late in the patient journey, limiting impact. Reframing practice to deliver early, continuous, and proactive care offers an opportunity to unlock more efficient, safer, and scalable models of care.

Objective(s) To evaluate the impact of a pharmacist-led, end-to-end model across admission and discharge on medication safety, discharge efficiency, and patient flow in general medicine.

Action (Method) A multi-phase service redesign was implemented over four months (October 2025-January 2026) on a general medicine ward. The model embedded pharmacists at key decision points: early admission medication reconciliation and partnered charting, and proactive discharge prescription preparation prior to the day of discharge. Patients likely for discharge were identified early and prioritised. Outcomes included discharge timing, time to accurate prescription, medication discrepancies, and length of stay. Data were collected from routine clinical workflows and analysed descriptively.

Evaluation A total of 228 patients were included, with pharmacist-led interventions delivering substantial improvements in safety and flow. The proportion of patients discharged before 10am increased six-fold (5% to 31%) when discharge prescriptions were prepared early. Time to accurate discharge prescription was reduced by 1.67 hours, and prescribing errors were markedly lower in pharmacist-led prescriptions (2.3% vs 80%). Medication errors were identified approximately 0.5 days earlier on admission. An observed reduction in length of stay of approximately one day was noted, recognising multifactorial contributors.

Discussion Embedding pharmacists across the patient journey demonstrates how working at top of scope can transform care delivery. This model reduces medication-related harm, removes discharge bottlenecks, and improves flow. It provides a scalable framework that challenges traditional boundaries and highlights the potential of pharmacist-led models to improve system performance and patient outcomes.

Enhancing Clarity Through Ward Type Stratification of Opioid Discharge Prescribing in Acute Care

Breanna Neary[1], Ms Nerida Jenkins[1], Kristen Thessman[1]

[1]*Slade Pharmacy Services, Brisbane, Qld,* [2]*Slade Pharmacy Wesley Hospital, Auchenflower, Qld*

EMAIL breanna.neary@sladepharmacy.com.au

Background Opioid-related harm represents a public health issue in Australia, and the Opioid Analgesic Stewardship (OAS) Clinical Care Standard (CCS) was developed to promote appropriate use of opioids in acute pain management. To support effective stewardship, a robust and comparable prescribing data set is required. A national pharmacy network developed a benchmarked report to analyse discharge opioid prescribing trends, but inter-hospital comparisons are limited by variation in ward naming and patient case-mix.

Objective To develop and evaluate a case-mix–adjusted, pharmacy-derived reporting approach to improve comparison of opioid prescribing patterns across hospitals and support targeted stewardship interventions.

Methods Sites were surveyed to determine primary ward patient case-mix, informing ward mapping. Patient-type descriptors were incorporated into Australian Institute of Health and Welfare peer group categories to enable case-mix adjustment. Opioid supply at discharge (April 2025–April 2026) was analysed across comparable ward groups, using oral morphine milligram equivalents (OMME) and modified-release ( ) opioid ratios. Daily OMME assumptions (7 days inpatient, 3 days emergency) followed OAS CCS guidance. Analyses included only patients prescribed opioids.

Results Data was collected from 46 acute care hospitals. Case-mix classification enabled comparison across orthopaedic (n=22), maternity/birthing (n=17), and emergency department (n=12) cohorts. Median OMME supplied per patient at discharge was 367 (52 OMME/day), 200 (29 OMME/day), and 186 (27 OMME/day), respectively. The national network average was 283 OMME per patient. At discharge, the mean proportion of opioid supply was 24% in orthopaedics, 7% in maternity/birthing, and 20% in emergency, compared with a network mean of 19%.

Discussion Case-mix adjustment improves the interpretability and comparability of opioid prescribing data across institutions. Standardised ward classification supports meaningful benchmarking and targeted stewardship, such as limiting opioid use in acute pain and applying additional precautions at doses >40 OMME/day. Challenges remain in classifying mixed-case wards, particularly in smaller hospitals.

Automated Digital Workflow to Improve Timeliness of Discharge Prescription Delivery

Rebecca Broom[1], Jane Moon[1], Karishma Deo[1], Samson Siu[1], Sharon Nicholson[1]

[1]*South Western Sydney Local Health District, Liverpool, NSW*

EMAIL rebecca.broom@health.nsw.gov.au

Background Delays in delivering discharge prescriptions to pharmacy contribute to prolonged patient discharge and reduced hospital flow. Planned downtime of a pneumatic tube system in a tertiary referral hospital exposed reliance on inefficient manual processes, with baseline delays of approximately 30 minutes from prescription generation to pharmacy receipt.

Objective(s) To implement a secure digital workflow to reduce time to pharmacy receipt of discharge prescriptions and improve discharge efficiency.

Action (Method) A digital workflow was designed using existing Microsoft 365 infrastructure. Prescriptions were transmitted via secure internal email to a dedicated account, triggering an automated process that archived attachments in a compliant repository and generated real-time notifications to pharmacy staff. Key stakeholders included prescribers, pharmacy, and administrative teams. Governance requirements relating to legal validity, privacy, and record retention were embedded in the design. Evaluation involved audit of system utilisation and comparison of timestamps for prescription generation and pharmacy receipt. Iterative refinements, informed by end-user feedback, improved accessibility and usability, supporting adoption.

Evaluation Utilisation increased progressively to over 50% of discharge prescriptions within 10 months. Mean time from prescription generation to pharmacy receipt decreased from 30 minutes to 9 minutes (70% reduction). This translated to a cumulative time saving exceeding 1700 hours for patients awaiting discharge medications. Targeted workflow enhancements, including integration into clinician orientation and optimisation of access via multifunction devices, were associated with sustained increases in utilisation over time.

Discussion This initiative demonstrates that a low-cost, locally developed digital solution can deliver substantial and sustained improvements in medication workflow efficiency and patient flow without additional resources or complex system integration. Leveraging existing digital infrastructure, this model is scalable and readily transferable, providing a practical approach to reducing discharge delays and optimising patient throughput across hospital settings.

Beyond the Hospital Walls: A Community Liaison Pharmacist Model for Safer Transitions of Care

Evelyn Touma[1]

[1]*The Sutherland Hospital, NSW Health, Miranda, NSW*

EMAIL evelyn.touma@health.nsw.gov.au

Background The 2025 Australian Commission on Safety and Quality in Health Care Medication Management at Transitions of Care Stewardship Framework highlights the need for safe medication management across care transitions. While medication reconciliation has traditionally focused on hospital admission, the post discharge period remains a high risk stage for medication related harm, particularly in older adults. A community liaison pharmacist service was established at a NSW public hospital to address this gap and support medication safety following discharge.

Objective(s) To evaluate the clinical activities and impact of a community liaison pharmacist service supporting older adults transitioning from hospital to community based care.

Action (Method) A retrospective service evaluation was conducted of patients referred to a community liaison pharmacist service between 1 October 2025 and 31 March 2026. Pharmacist interventions included post discharge medication reconciliation, clinical medication review, adherence assessment, patient and carer education, and liaison with general practitioners, community pharmacies, and multidisciplinary healthcare providers.

Evaluation Ninety-eight patients were reviewed during the evaluation period. Medication reconciliation and clinical review were completed in 98% of patients, while patient/carer education was provided in 87%. Immediate medication changes resulting from pharmacist review occurred in 54% of patients, highlighting the frequency of medication related issues following discharge. Liaison with other healthcare providers occurred in 53% of cases. Median time from referral to pharmacist contact was 2.5 days, supporting timely post discharge intervention.

Discussion Frequent medication related interventions identified following discharge reinforce the need for greater focus on medication management during transitions from hospital to community care. This evaluation highlights the evolving role of hospital pharmacists beyond traditional inpatient practice, with community liaison pharmacists supporting continuity of medication management, improving communication between hospital and community healthcare providers, and facilitating timely resolution of medication related issues.

C2

Friday 23 October 2026, 10:40 AM – 12:06 PM

Dancing with Dopamine: Navigating Medications in Psychosis, Catatonia and Parkinson's Disease Dementia

Verity Boustead[1], Dr Andrew Evans[1]

[1]*The Royal Melbourne Hospital, Parkville, Vic*

EMAIL verity.boustead@mh.org.au

Objective To present a case illustrating therapeutic challenges in Parkinson's Disease Dementia (PDD), including balancing psychotogenic effects of dopamine agonists against motor symptoms, and differentiation from catatonia using a lorazepam challenge.

Clinical features A 36-year-old female with early-onset Parkinson's Disease (PD) and acquired brain injury secondary to neonatal meningitis, on levodopa-carbidopa, quetiapine and rotigotine, was admitted following behavioural changes with psychotic features and new-onset hypersexuality.

Neuroimaging demonstrated progressive neurodegenerative changes with marked posterior cortical atrophy. Movement disorders review favoured PDD, with atypical catatonia as a differential diagnosis.

Literature review Dopamine agonists (DA), central to PD management, are associated with impulse control disorders (ICD) and psychosis.

DA use may cause persistent sensitisation of dopaminergic pathways, increasing vulnerability to behavioural adverse effects, even after cessation. Emergence of ICD may represent a red flag for underlying dementia. Although quetiapine is commonly used due to minimal motor impact, evidence is limited and it may exacerbate catatonia. A lorazepam challenge may assist with diagnosis and treatment amidst diagnostic uncertainty, with rapid reversal of catatonic symptoms confirming catatonia. Valproate may be used to treat catatonia while simultaneously augmenting antipsychotic effects.

Pharmacist Interventions, Case Progress and Outcomes Management of PDD requires a multidisciplinary, stepwise approach, with pharmacists playing a critical role in identifying medication-related adverse effects, recommending alternatives and optimising therapy. Following suspicion of levodopa contributing to psychosis, levodopa was down-titrated, valproate commenced, quetiapine continued and a lorazepam challenge initiated. Minimal response to lorazepam supported a PDD diagnosis, prompting medication optimisation aligned with disease progression.

Discussion This case highlights the importance of early recognition of medication-induced behavioural syndromes and withdrawal of causative agents. Pharmacists play a critical role in PD medication management – balancing neuropsychiatric adverse effects against motor function. Proactive pharmacist medication review supports optimisation of dopaminergic regimens in patients with evolving cognitive and behavioural symptoms.

Leading Through Crisis: Transforming Mental Health Pharmacy Services in Response to a Psychiatry Workforce Disruption

Seniha Kasif[1], Shivani Patel[1], Rosemary Burke[2], Sylvia Lim-Gibson[1], Steven Wood[1]

[1]*Mental Health Services, Sydney Local Health District, Sydney, NSW,* [2]*Sydney Local Health District, Sydney, NSW*

EMAIL seniha.kasif@health.nsw.gov.au

Background A sudden psychiatrist shortage in 2025 created significant clinical risk across a two-site mental health service already operating with limited pharmacy staffing. Reduced medical oversight and increasing consumer complexity required a rapid, coordinated response to maintain safe, high-quality medicines management.

Objective(s) To redesign and evaluate a district-wide mental health pharmacy service incorporating pharmacist-led models of care in response to a psychiatry workforce shortage.

Action (Method) Pharmacy governance was restructured from two separate hospital pharmacy departments into a single service led by a dedicated Mental Health Director of Pharmacy and supported by workforce expansion. A pharmacy leadership group coordinated staff engagement, implementation and consistent service delivery across sites. Innovative models of care included pharmacist participation in multidisciplinary case-reviews; pharmacist-led consumer medication groups; a weekend clinical pharmacy service and a Transition of Care Stewardship program.

Evaluation Pharmacist-led clinical activity increased nearly five-fold following service redesign, with over 7,000 documented pharmacist interventions in 2025 compared with 1,487 in 2024. Pharmacists contributed to 201 multidisciplinary case-reviews and delivered 64 consumer medication groups with 80% of participants reporting improved understanding of their medicines. The weekend clinical pharmacy service generated 849 pharmacist interventions and received 100% positive staff satisfaction feedback. In the first quarter of 2026, the Transition of Care Stewardship program facilitated 72 episodes of care, supporting safer medicines management across care settings.

Discussion The substantial increase in pharmacist interventions reflected enhanced identification and mitigation of medication-related risks, enabled by an expanded workforce that supported consistent medication reconciliation and deeper multidisciplinary integration. Strong consumer engagement with pharmacist-led medication groups demonstrated improved medicines literacy. Overall, the workforce crisis catalysed bold restructuring and rapid innovation, creating a more integrated, resilient pharmacy model uncommon in mental health services. A business case has been submitted to sustain the model with potential scalability across other mental health services.

Safer Prescribing Through System Design: Optimising Buprenorphine Sublingual Tablet Ordering in the ieMR

Anna Theodos[1], Kate Heit[1,2]

[1]*Office of the Chief Clinical Information Officer (OCCIO), eHealth Queensland, Queensland Health, Fortitude Valley, Qld,* [2]*Sunshine Coast Health (SCH), Queensland Health, Birtinya, Qld*

EMAIL anna.dimauro@health.qld.gov.au

Background Prescriber selection errors within the integrated electronic medical record (ie) between buprenorphine sublingual tablet products for pain management (Temgesic 200 microgram) and opioid dependence treatment (Subutex 0.4 mg, 2 mg, 8 mg) were identified as a significant issue. These errors, involving high risk, frequently prescribed opioids, created patient safety risks and highlighted the need for system-level changes.

Objective(s) The aim was to optimise the design of buprenorphine product orders in the ie to reduce selection errors. Adjustments to order design were implemented to improve clarity of on-screen display between pain management and opioid dependence products.

Action (Method) Three targeted digital interventions were implemented between June 2022 and December 2024:

- Adding a space to the Temgesic orders so they appear above the Subutex orders in the orders window
- Addition and clarification of indications within pre-built order sentences
- Standardisation of strength units (mg vs mcg) to align with product packaging and references
- These changes aimed to reduce inadvertent selection of Subutex for pain indications.

Evaluation Inpatient ordering data was analysed at baseline, between each change and following the final optimisation to review:

- ordering trends
- documented indication (pain or analgesia) and
- dose inconsistencies (e.g 200 microgram dose ordered against Subutex 2 mg formulation)

Following implementation of all interventions, potentially inappropriate Subutex inpatient prescribing reduced by 82.5% from baseline. The biggest impact on prescribing was standardisation of strength units to align with product packaging and references, with a 74.8% decrease in potentially inappropriate Subutex prescribing following this change when compared to the previous period.

Discussion The implemented changes reduced prescriber selection error leading to improvements in patient safety and prescribing accuracy. The outcomes highlight the importance of optimising system-level design alongside other risk mitigation strategies to promote safe and effective medications management in electronic ordering systems.

Slow and steady wins the race: The Vigilant Pharmacist's Role in Detecting Clozapine Induced Myocarditis

Helen Kalou[1]

[1]*St George Hospital, Kogarah, NSW*

EMAIL helen.kalou@health.nsw.gov.au

Objective To highlight the critical role of pharmacists in detecting clozapine-induced myocarditis through troponin monitoring and the importance of titration speed in clozapine-naive patients.

Clinical Features A 47-year-old male with treatment-resistant schizophrenia and no prior cardiac history was admitted for psychotic relapse. Clozapine was initiated at a dose of 25 mg/day on day 1–2, titrated to 50 mg on day 3 which deviated from protocol. Within two weeks, the patient developed a headache and generalised fatigue. During his routine week-two blood tests, C-Reactive Protein (CRP) had increased from 3 to 58, heart rate to 124 bpm and temperature to 39.5°C. Troponin was not collected.

Literature Review Clozapine-induced myocarditis is a rare but potentially fatal adverse reaction, with reported incidence in Australia as high as 3%. Onset typically occurs within the first four weeks of therapy, peaking between days 14–21, often linked to titration speed. Because symptoms are non-specific, active surveillance is critical. Standardised protocols recommend weekly monitoring of CRP, troponin and vital signs during initiation. Prompt cessation of clozapine upon troponin elevation generally yields full recovery, underscoring the necessity of screening.

Pharmacist Interventions, Case Progress and Outcomes The pharmacist identified troponin was missed from weekly bloods and flagged the medical team to urgently add troponin. Troponin had increased from 6 to 124; the patient was transferred to the cardiology ward, successfully treated, recovered and initiated on a zuclopenthixol depot for stabilisation in the community.

Discussion Due to the pharmacist's intervention, clozapine was promptly ceased and the patient recovered. This case highlights the importance of following monitoring requirements for high-risk medications like clozapine promoting early detection, preventing patient harm, and improving outcomes. This case reinforces the importance of slow clozapine titration in clozapine-naive patients and highlights the potential role of a clozapine blood ordering power-plan to reduce the incidence of missed clozapine bloods.

Addressing the gap in guidance supporting clinical decision-making on the reproductive risks with sodium valproate

Lisa Robertson[6], Viandro Borja[1], James Dwyer[2], Dr Alka Garg[3], Katie Ho[2], Tamara Lebedevs[4], Judy Longworth[5], Kate Luttrell[6], A/Prof Treasure McGuire[7,8,9], Suzanne Newman[10],

[1]Pharmacy Department, Alfred Health, Melbourne, Vic, [2]Pharmacy, Mercy Health Services, Melbourne, Vic, [3]Pharmacy, Womens and Childrens Health Network, Adelaide, SA, [4]Pharmacy Department, King Memorial Hospital, Perth, WA, [5]Psychological Medicine CHW, SCHN, Sydney, NSW, [6]Statewide Hospital Pharmacy – Tasmanian Health Service, Hobart, Tas, [7]Mater Pharmacy, Mater Health SEQ, South Brisbane, Qld, [8]Faculty of Health, Sciences and Medicine, Bond University Gold Coast, Robina, Qld, [9]School of Pharmacy and Pharmacy and Pharmaceutical Sciences, The University of Queensland, Brisbane, Qld, [10]Advanced Pharmacy Australia, Collingwood, Vic

EMAIL lisa.robertson@health.tas.gov.au

Background Sodium valproate is an approved treatment option for epilepsy and bipolar disorder, with widespread use for neuropathic pain and migraine prophylaxis, resulting in its use across diverse patient populations with different requirements.

Despite the well-established dose-related teratogenic and neurodevelopmental risks of maternal sodium valproate use, and some disputed evidence suggesting possible paternal-mediated effects, there is a lack of clear and consistent guidance in Australia to address and manage these risks and support clinical decision-making.

Objective To address the gap in guidance for managing reproductive risks of sodium valproate in women and men by developing an evidence-based document for Australian clinicians to support the provision of consistent, accurate, and patient-centred advice.

Action Pharmacists with relevant expertise (medication safety, mental health, newborn, women's health and paediatrics) formed a collaborative working party, to develop a guidance document by

- Conducting comprehensive literature review with retrieved citations and clinical practice guidelines screened for relevance by two independent reviewers
- Making preliminary recommendations using a modified NH C Grades of Recommendations
- Using Delphi method for consensus determination of recommendations, ranking as 'strong', 'weak' or 'good practice point'.

Stakeholder consultation was then undertaken with relevant pharmacy and medical organisations, to ensure guidance aligns with frontline practice, addresses current knowledge and policy gaps, and supports a standardised approach to risk mitigation.

Evaluation The final document highlights key practice points, outlines risks, provides consensus statements and recommendations covering: indications / contraindications, informed consent, counselling, contraception / pregnancy prevention, monitoring, review and action if pregnancy suspected or confirmed, paternal exposure and guidance implementation.

Discussion The national interdisciplinary initiative addressed a gap created by inconsistent external information sources. The collaborative approach ensured applicability across varied patient groups and indications. This work highlights the importance of pharmacist-led governance in harmonising practice, supporting safe medicines use and strengthening medication safety.

Rebuilding Medication Independence in Long-Term Mental Health Rehabilitation

Mahmoud Mohamed[1]

[1]WSLHD, Cumberland, Sydney, NSW

EMAIL ma7moud_rushdy@yahoo.com

Background Consumers transitioning from long-term inpatient mental health rehabilitation to community living or supported accommodation frequently experience reduced medication self-management capacity following prolonged institutional admission. Inability to safely manage medications may become a significant barrier to discharge, particularly for consumers requiring complex medication regimens. Structured medication rehabilitation models within mental health services remain limited.

Objective To implement and evaluate a pharmacist-led Self-Administration of Medication (SAM) program supporting medication rehabilitation and discharge readiness for consumers transitioning from long-term inpatient mental health rehabilitation to community-based care.

Action A multidisciplinary SAM framework was implemented using staged competency assessment, pharmacist-led medication education, supervised self-administration, structured discharge planning, and medication safety governance processes. Consumers frequently required intensive pharmacist support, including management of complex blister packs and transition planning. Eligibility criteria, nursing supervision requirements, and escalation pathways were standardised to support safe rehabilitation and continuity of care. Pharmacy coordinated structured handover to community pharmacies, including clozapine transition support.

Evaluation Consumers participated in the program for three to six weeks before successful transition to community-based or supported accommodation settings. For some consumers, inability to safely manage medications represented a major discharge barrier following admissions exceeding 20 years. Participation in the SAM program supported rebuilding of medication capability, familiarisation with community medication management models, and transition readiness. No medication incidents were identified during the evaluation period and missed doses were infrequent. The program strengthened continuity of care through structured discharge planning and community pharmacy handover.

Discussion The SAM program demonstrated that pharmacist-led medication rehabilitation can safely support recovery-oriented care and discharge readiness within long-term mental health settings. The intervention repositioned medication management as a rehabilitation domain rather than solely a discharge supply process. Despite significant pharmacy resource investment, the program provided meaningful practice change by integrating pharmacists into rehabilitation and transition pathways supporting community reintegration after prolonged hospitalisation.

Ocrelizumab Infusion – Microbubbles, Pump Alarms, and the Pharmacy Role

Louise Grannell[1], Carmela Corallo[1], Jenny Ly[1], Ginal Laxmidas[1], Rachael Beloe[1], Jeremy Tehan[1]

[1]*Bayside Health, Melbourne, Vic*

EMAIL l.grannell@alfred.org.au

Background Ocrelizumab is a monoclonal antibody for multiple sclerosis given by intravenous infusion over 2.5–3.5 hours. Following a change from same-day in-house preparation to outsourced manufacture, with prolonged refrigerated storage, frequent air-in-line (AIL) pump alarms occurred despite unchanged product concentration or volume. These interrupted infusions, increased nursing workload, and affected patient experience.

Objectives To determine the cause of recurrent AIL alarms during ocrelizumab infusions after refrigerated storage, assess safety implications, and identify a practical solution.

Methods Pharmacy reviewed preparation, storage, transport, and administration processes; consulted the manufacturer; inspected compounded bags and confirmed unchanged AIL detector settings. Literature was reviewed on venous air embolism risk, gas release during warming, microbubble persistence in protein solutions, and pump sensitivity.

Evaluation Over 5 days, 25 patients received ocrelizumab; 80–90% experienced significant AIL alarms. Each bag triggered 3–6 alarms during the infusion, requiring repeated nursing intervention. Visual inspection demonstrated 'champagne-like' microbubbles in the infusion bags.

These findings were consistent with dissolved gases coming out of solution as refrigerated ocrelizumab warmed towards room temperature, producing microbubbles that triggered AIL detectors. This may reflect a class effect of refrigerated monoclonal antibody infusions, rather than being specific to ocrelizumab. Published literature suggests that cumulative exposure to small bubble volumes (<0.05 mL) are clinically insignificant, while hazardous venous air embolism is associated with substantially larger volumes (≥5 mL/kg). Trialling a one-way (anti-reflux) valve prevented bubbles reaching the pump sensor, stopping alarms and allowing uninterrupted infusions.

Discussion AIL alarms are an important safety feature, but frequent false alarms disrupt therapy, workflow, and patient comfort. This investigation suggests refrigerated storage contributed to microbubble formation without compromising product quality and may apply to other monoclonal antibody infusions. A pharmacy-led review and line modification resolved the problem without changing product preparation or pump settings

Use of Dalbavancin to facilitate discharge of a patient with bacteraemia to a remote community

Caitlin Chisholm[1], Jennifer Collins[1], Dr Sonja Janson[2,3]

[1]*Pharmacy Department, Royal Darwin Hospital, Darwin, NT,* [2]*Department of Infectious Diseases, Division of Medicine, Royal Darwin Hospital, Darwin, NT,* [3]*Global & Tropical Health Division, Menzies School of Health Research and Charles Darwin University, Darwin, NT*

EMAIL caitlin.isabel@gmail.com

Objective To describe a case in which dalbavancin, a long-acting lipoglycopeptide, was utilised in a remote community to reduce hospital length of stay.

Clinical Features 28-year-old woman with hip pain was diagnosed with acute osteomyelitis and bacteraemia secondary to methicillin susceptible Staphylococcus aureus (MSSA) cellulitis. She lived over 200 km from the nearest hospital. Standard management required 6 weeks of intravenous antibiotics, necessitating an extended stay away from home. The patient declined this approach due to family responsibilities and had self-discharged twice during her admission. A decision was made to trial a two-dose course of dalbavancin (1500 mg on day 1 and day 8). The first dose was administered prior to discharge, with the second planned via patient's regular remote clinic.

Literature review Recent literature supports the use of dalbavancin for Staphylococcus aureus bacteraemia demonstrating non-inferiority to standard therapy. Several small studies have also shown successful off-label treatment of gram-positive osteomyelitis, including MSSA, with dalbavancin.

Pharmacist Interventions, Case Progress and Outcomes The pharmacist facilitated access to dalbavancin through the health organisation and the Special Access Scheme, and coordinated education to the remote clinic on administration and monitoring. Despite logistical challenges caused by regional flooding, the second dose was successfully sent via plane. The patient successfully received her second dose and has not required readmission for 4 months.

Discussion This case highlights the substantial benefit of pragmatic, unconventional treatments for patients living in remote communities. Despite the logistical difficulties getting the high-cost medication to the clinic it was more practical than giving daily intravenous medications or elastomeric infusors. In the future dalbavancin could be offered to more patients to facilitate healthcare at home. In addition to the psychosocial benefits, this reduces inpatient costs and the risk of complications such as a peripherally inserted central catheter line infection.

When Low Isn't Low: Preventing Harm from Amphotericin-Associated Pseudo-Hypophosphataemia

Jane Lee[1], Dr Alistair Abbott[1,3], Professor Graham Jones[1,2]

[1]St Vincent's Hospital, Darlinghurst, NSW, [2]SydPath, Sydney, NSW, [3]Lung Transplant Unit at St Vincent's Hospital, Darlinghurst, NSW

EMAIL jane.h.lee@svha.org.au

Objective To describe an uncommon case of pseudo-hypophosphataemia associated with liposomal amphotericin B therapy and highlight pharmacist's role in recognising laboratory interference, identifying ongoing medication-related risk, and preventing patient harm.

Clinical features A 45-year-old female lung transplant inpatient receiving intravenous (IV) high-dose liposomal amphotericin B demonstrated progressive declining serum phosphate concentrations over days, culminating in undetectable phosphate concentration. The pathology laboratory investigated possible assay interference and identified likely pseudo-hypophosphataemia due to assay interference in Beckman-Coulter AU analyser. Prior to recognition of assay interference, IV phosphate replacement therapy had been commenced in response to reported hypophosphataemia.

Literature Review Liposomal amphotericin B is an uncommon but recognised cause of phosphate assay interference. Published literature predominantly describe spurious hyperphosphataemia with amphotericin therapy, with only one case of hypophosphataemia described. Failure to recognise analytical interference may lead to inappropriate treatment, unnecessary monitoring and medication-related harm.

Pharmacist Intervention, Case Progress and Outcomes Following confirmation of assay interference and use of a dilution protocol in the laboratory to avoid the effect, IV phosphate replacement therapy was ceased. During subsequent medical team changeover, IV phosphate replacement therapy was re-charted after review of falsely low pathology results. Prior awareness of the assay interference enabled pharmacist to identify the error prior to administration and intervene before IV phosphate was given. The pharmacist coordinated communication with the treating team and pathology department, to facilitate repeat dilution of phosphate testing which confirmed normal phosphate concentrations. Unnecessary phosphate replacement therapy was avoided and ongoing monitoring processes were reinforced for the remainder of amphotericin therapy.

Discussion This case highlights the critical role of pharmacists in recognising medication-related laboratory interference and preventing downstream prescribing errors and the importance of communication between pharmacist, clinical team and laboratory. Pharmacist involvement was essential in identifying recurrent risk during transitions of care and preventing inappropriate treatment.

Beyond the Label: Ciclosporin Monitoring in Steroid-Refractory Ocrelizumab-Induced Colitis

Stephanie Dimovski[1]

[1]The Royal Melbourne Hospital, Parkville, Vic

EMAIL stephanie.dimovski@mh.org.au

Objective To describe a case of steroid-refractory ocrelizumab-induced colitis and highlight the pharmacist's role in adapting ciclosporin therapeutic drug monitoring (TDM) from inflammatory bowel disease (IBD) guidelines to optimise safety and efficacy in a novel indication.

Clinical features A woman in her 40s with relapsing-remitting multiple sclerosis, stable on ocrelizumab, presented with 8 weeks of severe diarrhoea, haematochezia, abdominal pain and fevers. Investigations demonstrated elevated C-reactive protein and faecal calprotectin. Infectious causes were excluded. Endoscopic and histological findings showed acute colitis without chronicity, consistent with drug-induced colitis rather than de novo IBD.

Literature Review Ocrelizumab-induced colitis is a rare immune-mediated adverse event with limited evidence to guide management. Corticosteroids are commonly used first-line; however, steroid-refractory cases require prompt escalation to avoid complications such as toxic megacolon. Reported therapies include vedolizumab and ustekinumab, though these have slow-onset and limited evidence in acute severe presentations.

Ciclosporin is an established salvage therapy in acute severe ulcerative colitis, with defined TDM targets, though its role in drug-induced colitis isn't established.

Pharmacist Interventions, Case Progress and Outcomes Following corticosteroid failure, ciclosporin was selected as salvage therapy due to its rapid onset. The pharmacist provided advice regarding IBD-based TDM targets (150–350 micrograms/L) and coordinated level monitoring. Supratherapeutic levels (768 micrograms/L) associated with neurotoxicity were identified, prompting cessation, washout and dose-adjusted oral conversion. Clinical improvement occurred within 3 days, with resolution of bleeding, reduced stool frequency and down-trending inflammatory markers. The patient was discharged on oral ciclosporin, with planned multidisciplinary outpatient follow-up involving pharmacist-led TDM monitoring alongside review by IBD consultants to guide treatment optimisation and long-term management.

Discussion Ciclosporin may be an effective salvage therapy in steroid-refractory ocrelizumab-induced colitis. This case demonstrates how pharmacist expertise in therapeutic drug monitoring can support multidisciplinary decision-making, enabling safe and effective use of high-risk therapies where evidence is limited.

Clinical effectiveness of carbetocin versus oxytocin for prevention of postpartum haemorrhage following normal vaginal birth

Joyce Chen[1], Dr Wirawan Jeong[1], Dr Smita Bhattacharjee[1], Dr Louisa Maney[1], Rebecca Cleall[1], Laura Leung[1], A/Prof Julia Unterscheider[1]

[1]*The Royal Women's Hospital, Parkville, Vic*

EMAIL joyce.chen@thewomens.org.au

Background Post-partum haemorrhage (PPH), defined as blood loss ≥500 mL within 24 hours of birth, remains a significant cause of maternal morbidity and mortality. To help prevent PPH, uterotonic (including oxytocin) is administered immediately after the birth of the infant at our institution. Due to critical shortage, oxytocin was replaced by carbetocin at our institution in May 2025. Carbetocin is a long-acting uterotonic which has been shown to significantly reduce the rate of PPH following caesarean delivery when compared to oxytocin. However, evidence describing the use of carbetocin to prevent PPH following normal vaginal birth (NVB) is lacking.

Aim/Objective(s) To evaluate the effectiveness and safety of carbetocin and oxytocin in preventing PPH post-NVB.

Methods Medical records of patients receiving carbetocin (between 01/05/2025 and 31/10/2025) or oxytocin (between 01/05/2023 and 31/10/2023) for PPH prophylaxis post-NVB were reviewed.

Results The current interim analysis included 332 patients: 249 received carbetocin and 83 received oxytocin. The median (interquartile range) of estimated blood loss (EBL) amongst patients receiving carbetocin and oxytocin was 304 (188 to 510) mL and 313 (208 to 530) mL; p=0.294, respectively. Overall, there was no statistical difference in the rate of PPH amongst patients receiving carbetocin or oxytocin (67/249, 27% versus 23/83, 28%; p=0.887). However, the rate of severe PPH (EBL ≥1000 mL) was lower in patients receiving carbetocin (8/332, 3% versus 8/83, 10%; p=0.033). Two patients receiving oxytocin had EBL ≥2000 mL and required blood transfusion. There were no documentations of adverse reactions attributed to carbetocin or oxytocin.

Discussion Our interim findings suggested that whilst the use of prophylactic carbetocin was not associated with a reduction in overall PPH rate post-NVB, it significantly reduced the rate of severe PPH. Carbetocin may be considered as an alternative to oxytocin for PPH prophylaxis post-NVB especially in patients at high risk of developing severe PPH.

Postnatal Venous Thromboembolism Prophylaxis: Assessing Compliance with Local Risk Assessment Guidelines

Rita Wardan[1], Charis Lau, Dr Briony Cutts, Philippa Bywaters, Priscilla Rose Tran, Irene Mach, Massara Shmoae

[1]*Western Hospital, St Albans, Vic*

EMAIL rita.wardan@wh.org.au

Background Venous thromboembolism (VTE) remains a leading cause of preventable maternal morbidity and mortality in the postnatal period. Accurate identification of at-risk women and timely initiation of thromboprophylaxis are essential to reducing adverse outcomes. Local guidelines support clinicians in risk stratification and prescribing; however, compliance can vary.

Aim To review postnatal VTE risk assessment and management and evaluate compliance with local guidelines.

Methods A retrospective audit was conducted on all patients who gave birth at an obstetric hospital in January 2025. Patient demographics such as age, parity, weight and medical history were collected from electronic medical records. Risk of VTE was assessed using local guidelines, and prescriber compliance evaluated. Non-compliance circumstances were documented.

Results A total of 556 patients were included. Of these, 389 did not require extended postnatal thromboprophylaxis on discharge. The remaining 167 met criteria for extended six-week thromboprophylaxis. Among them, 63% (105/167) were prescribed thromboprophylaxis as per guidelines by prescribers. Pharmacists identified and intervened in 25% (42/167) of cases where thromboprophylaxis was initially omitted on discharge but subsequently prescribed following intervention. After-hours discharges without thromboprophylaxis occurred in 11% (19/167) of patients. Only 0.6% (1/167) of eligible patients did not receive thromboprophylaxis despite prescriber and pharmacist review.

Discussion This audit revealed variable compliance with postnatal VTE guidelines, with over one-third of eligible patients not prescribed thromboprophylaxis as per guidelines. Pharmacist involvement significantly contributed to identifying and correcting missed prescribing opportunities. However, after-hours discharges accounted for most missed cases, indicating a gap in continuity of care. Expanding pharmacy services to weekends and after-hours, alongside collaborative prescribing models such as pharmacist-generated discharge prescriptions, and reinforcing prescriber adherence to local guidelines may enhance VTE prevention and improve maternal safety. Ongoing multidisciplinary education and integration of risk assessment tools into the electronic medical record could further support consistent, guideline-based care.

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Friday 23 October 2026, 10:40 AM – 12:06 PM

A Virtual Reality: Insights into a Virtual Hospital Cardiology Ward

Alison Tyedin[1], Emily Russo[1], Rachel Goodman[1], Monica Tran[1], Sarah Noori[1], Danielle Panaccio[1], Angela Sullivan[1]

[1]*Austin Health, Heidelberg, Vic*

EMAIL alison.tyedin@austin.org.au

Background A multi-disciplinary virtual cardiology ward was piloted to facilitate at-home care, ease physical bed pressures and extend specialty care to regional areas. Cardiac observations were remotely monitored, and goal directed medication therapies optimised for cardiac conditions, as guided by patient symptomology and pathology results.

Objective To describe the virtual cardiology ward service, the pharmacist's role, and evaluation data.

Action (Method) Referrals from hospital inpatients, metropolitan and regional cardiology and heart failure outpatient clinics were screened by a cardiology doctor for suitability, and a nurse case manager for remote monitoring education. Pharmacists completed medication histories for direct outpatient admissions and maintained accurate electronic medication lists as changes occurred throughout the admission. Patients were clinically reviewed via daily video ward rounds, or face-to-face assessments if needed, by medical, nursing, and pharmacy staff until discharged.

Evaluation Between December 2025 and May 2026, 200 patients were admitted to the virtual cardiology ward for an average of 7.3 days to manage heart failure (90%), arrhythmias (7.5%), myocarditis/pericarditis (2%), or other cardiac conditions (1%). Of these, 32 patients (16%) were re-admitted to hospital, and 5 patients (2.5%) were transferred to alternate hospital-in-the-home services. Pharmacists facilitated 219 prescriptions, educated patients/carers about 587 medication changes, provided 68 new or updated patient friendly medication lists and liaised with 32 webster packing community pharmacies upon virtual ward discharge.

Discussion The virtual cardiology ward service enabled remotely optimised medication regimens and delivered specialist care to regional areas with limited access. Pharmacists played a key role in medication management, providing dosing advice and communicating medication changes to patients, carers, and community pharmacies. Limitations included technological issues, pathology delays, and patient/carer responsiveness to phone calls following the ward round. Learnings from this pilot program will guide future expansion of virtual hospital services.

The Propafenone Puzzle: Tackling Multiple Drug Interactions in Atrial Fibrillation management

Belinda Chappell[1]

[1]*Caboolture Kilcoy Woodford Clinical Directorate, Caboolture, Qld*

Objective To describe the complexity of navigating multiple drug interactions restricting atrial fibrillation (AF) management options in a patient that has failed propafenone

Clinical Features A 64-year-old male visiting from Russia with a history of AF presented to the Emergency department (ED) experiencing tachycardia with a heart rate consistently above 150 beats per minute. ECG confirmed AF with rapid ventricular response. He had remained symptom-free for seven years post ablation until the week prior and was referred to the ED by a GP after failing to respond to his 'pill in the pocket' dose of propafenone.

Literature review Propafenone, a class 1C antiarrhythmic agent, is metabolised by CYP2D6, CYP3A4 and CYP1A2, and inhibits CYP2D6 and P-glycoprotein (P-gp). It also has two active metabolites. A literature search identified 236 potential drug-drug interactions including increased cardiotoxicity risk with pharmacological cardioversion agents (flecainide, amiodarone) and increased exposure when combined with common rate-control medicines (beta blockers, digoxin). A pharmacokinetic study showed that co-administration with metoprolol increased metoprolol exposure 2 to 5 fold at steady state.

Pharmacist Interventions, Case Progress and Outcomes A senior medical officer referred the patient to the ED pharmacist for input on treatment options. As propafenone is not registered for use in Australia, the pharmacist utilised MicroMedex to conduct a comprehensive review. A non-dihydropyridine calcium channel blocker was identified as an appropriate rate control option. After discussion with the patient, intravenous verapamil was administered and he was discharged six hours later on oral immediate release verapamil.

Discussion This case highlighted the importance of a structured, evidenced-based approach when managing medicines not registered in Australia, with extensive interaction profiles. In navigating a medicine with complex pharmacokinetics and limited local familiarity, the pharmacist expanded the therapeutic possibilities, reflecting a limitless approach to optimising patient care even when standard pathways appear restricted.

Evaluation of cholesterol optimisation practice in established coronary artery disease patients: A cross-sectional study

Xin Yin[1], Aaron Noble[1]

[1]*Gold Coast Health, Gold Coast, Qld*

EMAIL xin.yin@health.qld.gov.au

Background Patients diagnosed with coronary artery disease (CAD) are at very high risks of future major adverse cardiovascular events which could be prevented by reductions in low-density lipoprotein cholesterol (LDL-C) level.

Objectives To evaluate the compliance of cholesterol optimisation in patients with previously diagnosed CAD against guideline recommendation and identify factors associated with suboptimal anti-lipid medication intensification practice during cardiology admission.

Methods A retrospective audit was conducted on adult patients with medical history of CAD but LDL-C result ≥ 1.4 mmol/L who were admitted to cardiology unit in a Queensland tertiary centre from January to December 2024. Patient data, lipid profiles and lipid-lowering agents were obtained from electronic health record database. Patient characteristics associated with suboptimal cholesterol management were analysed in a multivariable logistic regression model.

Results A total of 141 patients were included in the study. It showed 39% (55/141) of established CAD patients who had LDL-C level above target but did not have lipid-lowering therapy intensified during cardiology admission. Amongst patients received no cholesterol optimisation, only 18.2% (10/55) were on maximum dose of statin plus ezetimibe. Taking any dose of statin prior to admission was associated with no cholesterol optimisation, OR=3.79, 95% CI [1.57–9.14]. Female sex was also associated with a greater likelihood of no cholesterol optimisation, OR=2.52, 95% CI [1.05–6.05]. Despite its non-statistical significance, patients with LDL-C between 1.4–1.8 mmol/L tended to be more likely to receive no cholesterol optimisation, OR=2.31, 95% CI [0.97–5.50].

Discussion This study demonstrated there is room for improvement in cholesterol medication intensification practice. Multifaceted strategies, including prescriber education, pharmacist-led interventions and collaborative pharmacist medication prescribing, may increase LDL-C target attainment. Future qualitative studies exploring prescribers' perspectives on lipid optimisation amongst women might assist in closing the gender gap in secondary CAD prevention.

Impact of Pharmacist-Generated Lipid Optimisation Plan and Follow-Up in Patients After Acute Coronary Syndrome

Grace Nguyen[1], Viviane Khalil, Samanta Wood, Emily Hoac, Judy Duong

[1]*Monash Health, Clayton, Melbourne, Vic*

EMAIL graceatwork44@gmail.com

Background Current guidelines recommend intensified lipid-lowering therapy to achieve and maintain target low-density lipoprotein cholesterol (LDL-C) levels <1.4 mmol/L following acute coronary syndrome (ACS). However, translation of these recommendations into routine practice remains inconsistent.

Objective To evaluate the impact of pharmacist–generated lipid optimisation plan and follow-up in lipid management in post ACS patients.

Methods A pre- and post-interventional study was conducted at an Australian tertiary hospital. Demographic data, baseline characteristics, lipid profiles, and lipid-lowering therapies were collected for a pre-intervention cohort comprising post-ACS patients who attended routine cardiology outpatient follow-up from January-December 2023. These were compared with a post-intervention cohort who were admitted post-ACS diagnosis between October 2024 and June 2025. A customised lipid optimisation plan developed by pharmacists was communicated to each patient's general practitioner upon discharge. Pharmacists conducted follow-up phone call(s) to patients at 6 weeks and/or 3 months post-discharge (based on lipid levels) to assess lipid-lowering therapy, and medication adherence using MARS-5 (Medication Adherence Report Scale). Data was analysed using descriptive statistics and univariate analysis.

Results There were 108 patients in the pre-intervention group and 74 patients in the post-intervention group. More patients in the post-intervention cohort achieved LDL-C <1.4 mmol/L compared to the pre-intervention cohort (24.3% vs 13.0%, p=0.048) despite higher baseline levels on admission to hospital (3.21± 1.02 mol/L vs 2.92±1.04 mol/L, p=0.043). The mean LDL-C reduction was significantly greater (-1.71±1.30 mol/L vs -1.23±1.40, p= 0.013). Patients who received pharmacist follow-up demonstrated improved adherence to lipid-lowering therapy with a higher MARS-5 score at 3 months compared to baseline (24.48±3.18 vs 23.24±3.4, p<0.001).

Discussion Pharmacist-led lipid optimisation plan and follow-up resulted in greater LDL-C reduction compared with usual hospital care. Pharmacist involvement also improved medication adherence. These findings support pharmacists' involvement in post-ACS care to promote early and sustained achievement of LDL-C targets.

Expanding Credentialled Technician Scope to Optimise Cardiology Pharmacy Services

Nadin Kbar[1], Violeta Vasilevska, Ibrahim Hamad, Wassi Hossain, Geoff Wills, Helen Kalou, Holly McCaw

[1]*St George Hospital, Sydney, NSW*

EMAIL nadinekbar7@gmail.com

Background Cardiology is a high-acuity specialty with rapid turnover and complex medication management, placing significant demand on pharmacy services. Evidence suggests that integrating pharmacy technicians into ward-based care can improve efficiency. Medication reconciliation, discharge medication lists, and medication requests are essential tasks that can be supported by technicians, redirecting pharmacist workload and supporting earlier discharges.

Objective(s) To implement and evaluate a credentialled pharmacy technician role within a cardiology service, with a focus on improving workflow and efficiency.

Action (Method) A quality improvement project using Plan–Do–Study–Act (PDSA) cycles was conducted from February to May 2026, excluding April due to reduced service capacity. Following training and competency-based assessment using Entrustable Professional Activities (EPA), a pharmacy technician undertook medication request screening, medication list preparation, and proactive discharge dispensing. Outcomes included screened and declined requests, medication lists prepared, discharge completion time, and staff time redirected.

Evaluation During the evaluation period, the pharmacy technician screened 144 medication requests in February, 122 in March and 112 in May, declining 51, 73 and 44 requests respectively. Based on estimated processing and checking times, technician screening redirected approximately 19.5 hours of dispensary workload. Medication list preparation increased from 6 in February to 14 in March and was sustained at 10 in May, withstanding pharmacist rotations. Implementation of proactive discharge dispensing was associated with a mean reduction of 48 minutes from script received to discharge medications completed.

Discussion Implementation of a credentialled pharmacy technician role within a cardiology service improved efficiency through task redistribution. Technician involvement in medication request screening, medication list preparation, and proactive discharge dispensing streamlined workflows, redirected pharmacist time, and supported timely discharge. These findings support the feasibility and operational benefits of expanding technician scope through structured training and EPA-based credentialling. Future initiatives will explore technician-led medication history taking and medication counselling.

Evaluation of Clinic Pharmacist Interventions in Ambulatory Heart Failure Patients: A Retrospective Analysis

Alexander Caird[1], Beryl Lai[1], Pavithra Jayadeva[1]

[1]*The Royal Melbourne Hospital, North Melbourne, Vic*

EMAIL amcaird@outlook.com

Background International guidelines recommend a multidisciplinary approach to heart failure (HF) management. Given the complex disease state and medication burden, our institution implemented a Pharmacist consult service from November 2022 to May 2024 as part of the established ambulatory HF team. This initiative aimed to support medication optimisation and continuity of care for HF patients.

Aim To evaluate interventions made by the Clinic Pharmacist (CP) in ambulatory HF patients and their uptake by physicians.

Methods Retrospective analysis of CP interventions at an ambulatory HF clinic in an adult quaternary-referral hospital in Australia between June 2023 and May 2024. Medication-related problems (P) / interventions were extracted from the CP consultation notes in the electronic medical record. A multidisciplinary panel (one cardiology pharmacist, one CP, and one cardiologist) evaluated the P / interventions using a risk assessment tool based on the Standards of Practice for Clinical Pharmacy Services. Physician acceptance of interventions was evaluated.

Results Among the 100 patients included, the CP performed 341 interventions. The most common categories were medicine information consults or education (55%, n=188), change of therapy (33%, n=111) and monitoring (9%, n=29). The potential harm avoided by these interventions was rated: extreme (0.3%, n=1), high (13%, n=43), moderate (38%, n=130), and low (49%, n=167). Of the 314 interventions with known outcomes, 87%, n=274 were accepted by physicians. Outcomes for 27 interventions could not be determined due to pending community follow-up. The most common Ps involved sodium-glucose cotransporter 2 inhibitors.

Discussion CPs play a valuable role in ambulatory HF clinics, with good physician acceptance of interventions. These findings support the continued integration of pharmacists into multidisciplinary HF management teams.

Redesigning research education for the real world: Designing a flexible microcredential for practising pharmacists

Louise Lord[1,2], Kate Petrie[1], Steven Walker[1], A/Prof John Coutsouvelis[1,3]

[1]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Melbourne, Vic, [2]Pharmacy Department, Royal Melbourne Hospital, Melbourne, Vic, [3]Pharmacy Department, Alfred Health, Melbourne, Vic

EMAIL louise.lord@monash.edu

Background Demand for research capability in pharmacy practice is increasing with research skills required not only for pharmacists undertaking structured training pathways, but also for those supervising, mentoring, and assessing research. However, many pharmacy professionals report limited confidence in designing and supporting research. Traditional research education can be time-intensive, theoretical, and poorly aligned with practice, limiting accessibility and impact. Innovative, flexible educational models are needed to support pharmacy workforce research capability.

Objective To develop, deliver and evaluate an innovative postgraduate microcredential designed to build research capability in pharmacy professionals.

Action A 'Developing a Research Protocol' microcredential was designed using a three-step approach. Flexible online material included practical and real-life worked examples. Learners then applied this learning while developing their own projects, both in facilitated workshops and then as assessments. Workshops were delivered online or in-person by experienced practising pharmacist-researchers. Course development was informed by common research activities in pharmacy practice and underpinned by active, applied learning principles. Activities emphasised authentic workplace-based tasks, with participants developing an individual, workplace-relevant, ethics-ready research protocol. An initial pilot evaluation used a pre–post survey design, to assess participant self-rated confidence across eight research domains using a five-point Likert scale.

Evaluation Initial evaluation from one, six-participant cohort, demonstrated pre-course confidence as largely neutral or low across most domains. Post-course confidence improved across all domains, notably in defining research aims, identifying outcomes and data collection tools, and constructing study protocols (somewhat or strongly agree pre-course n=2/6 and post-course n=6/6).

Discussion This microcredential represents an innovative, practice-anchored approach to research education, offering flexibility and tangible outputs aligned with workplace priorities. Flexible learning options offer opportunities to services that have limited access to within-department resources. Initial evaluation suggests improved confidence in core research capabilities. Ongoing evaluation within and between cohorts over time will assess sustained impact.

Using artificial intelligence to detect look-alike sound-alike risks

Martin Canning[1], Andrew Munns[2]

[1]Metro North Health, Herston, Qld, [2]The Prince Charles Hospital, Chermside, Qld

EMAIL Martin.Canning@health.qld.gov.au

Background Look-alike, sound-alike (LASA) medicines remain a persistent contributor to medication error and patient harm. Current identification methods are largely reactive, relying on incident reporting and static LASA lists, with limited capacity to proactively detect emerging risks associated with new products, generic substitution, and packaging variation.

Objective To develop and evaluate a proof-of-concept artificial intelligence (AI) tool to proactively identify LASA risks using visual and phonetic similarity.

Action Microsoft Copilot supported rapid prototyping of a LASA detection application. A reference dataset of approximately 3,000 medicine images was curated. Visual similarity was assessed using image embedding techniques derived from convolutional neural networks, enabling comparison of packaging attributes such as colour, layout, typography, and form factor. Text-based similarity methods incorporating phonetic encoding and string matching were also implemented. A composite similarity score was generated to rank potential LASA matches.

Evaluation The application was tested using real-world LASA pairs. When pregabalin 25 mg capsules were indexed and levothyroxine 75 microgram tablets (from the same generic manufacturer) queried, the system returned a high similarity score (0.825), with the pair ranked within the top 10 results. Testing of Transiderm-Nitro and Trileptal produced a similarity score of 0.748, demonstrating detection of clinically relevant similarities. Visual similarity detection performed strongly; however, the phonetic/text-based component did not perform as intended and requires refinement.

Discussion This proof-of-concept demonstrates a scalable approach to proactively identifying LASA risks using computer vision. The tool has practical application in procurement, formulary review, and medicine onboarding, enabling earlier risk identification before clinical use. At a national level, this approach could support dynamic LASA surveillance, inform medication safety strategies, and influence policy and regulatory expectations for medicine packaging differentiation. Further work will focus on formal development of a reference dataset, algorithm refinement and testing, and pilot implementation within pharmacy workflows.

Advancing professional standards of Pharmacy Assistants through implementation of Entrustable Professional Activities

Vanessa Onah[1], Mariel Bulan[1], Sarah Lucas[1], Chen Foo[1]

[1]*Metro South Health Logan Hospital Pharmacy, Meadowbrook, Qld*

EMAIL vanessa.onah@health.qld.gov.au

Background Pharmacy assistants play a critical role in medication supply and patient care, yet structured assessment tools for this workforce are limited. Pharmacy assistants/technician gain qualifications under a traditional competency based Certificate III/IV, there is no ongoing requirements. Inconsistency across training highlighted the need for a framework to support capability development, promote safe practices and professional development within the pharmacy assistant/technician workforce.

Objective(s) To implement an Entrustable Professional Activity (EPA) framework for pharmacy assistant/technician to improve training consistency, support safe practices and clarify expectations for role development. While strengthening and increasing the confidence in our workforce. This framework has the potential to improve pharmacy efficiency and patient outcomes.

Action (Method) The Pharmacy Assistant Educators and Team Leaders collaborated with Pharmacist Clinical Educators and the Assistant Director of Pharmacy to develop assistant/technician specific EPAs. Existing pharmacist and pharmacy intern EPA templates were modified where possible or new EPAs were developed to align with the pharmacy assistant/technician scope of practice. Pharmacy Assistant evaluators completed formal EPA and supervision training and education sessions for the pharmacy assistant team were conducted to support implementation and change management.

Evaluation In October 2025, 3 dispensary EPAs were introduced – Inpatient Medication Supply, Discharge Prescription Dispensing and Outpatient Prescription Dispensing. In March 2026, Ward Medication Imprest Management EPA and Patient Prescription Handout EPA were introduced. Currently, 39 EPAs have been completed across 36 pharmacy assistants. Outcomes included structured onboarding and role expectations, targeted training through action plans and identification of workforce development needs. Implementing these EPAs across different sites and health services will ultimately test of the framework's adaptability.

Discussion The EPA framework provides a scalable approach to assessment and workforce development. Future expansion to additional assistant roles and activities will support ongoing professional development, educator capability, succession planning and a sustainable, future ready pharmacy assistant workforce.

Evaluation of implementation of a pharmacist-centred Morbidity, Mortality and Peer Review Meeting

Danielle Ironside[1], Jessica Toleman[1,2], Dr Carla Scuderi[1,2,3], Kristy Underwood[1], Dr Shane Townsend[1]

[1]*Royal Brisbane & Women's Hospital, Herston, Qld,* [2]*University of Queensland – School of Pharmacy , St Lucia, Qld,* [3]*James Cook University – School of Pharmacy, Douglas, Qld*

EMAIL danielle.ironside@health.qld.gov.au

Background Morbidity, Mortality, and Peer Review (MMPR) meetings are designed to improve clinical quality and patient safety. Many exist in clinical sub-specialties, however to date there is limited published data on pharmacy-specific MMPR meetings.

Objective To evaluate the impact of the newly implemented Pharmacy Department MMPR, in facilitating medication safety improvements and promoting a patient safety and reporting culture.

Action A quarterly one-hour multidisciplinary MMPR was established. In each session three pharmacists presented, and each presentation was followed by a discussion to identify learning opportunities and areas for improvement. Members of the multidisciplinary team involved in each case were invited to the meeting. Pharmacists were surveyed 12-months after implementation to evaluate the impact of meetings on practice. The survey included 20 questions and was a mix of open and closed questions.

Evaluation A total of 15 medication incidents were discussed across six MMPR with 10 process improvement interventions identified and actioned. Improvements included: clinical process (n=3), documentation (n=2), guideline updates (n=1), IT system update (n=1), education (n=1), staffing (n=1) and consumer resources (n=1). A total of 20 pharmacists responded to the survey with 100% reporting that they felt more confident in reporting and discussing medication errors. All pharmacists reported that attending the MMPR had a positive impact on their practice. One pharmacist summed up the meetings, stating that MMPR made them feel 'more confident in addressing and reporting errors and less blame'. Overall, 80% (16/20) reported attending 3+ meetings, demonstrating a sustainable process.

Discussion Implementation of a pharmacy-specific MMPR has led to improved reporting culture and generation of system-level improvement interventions. These findings highlight the value of MMPR for identification of quality improvement initiatives and support the role of pharmacists in leading and supporting safe medication practice. Broader adoption of pharmacy-led MMPR may strengthen safety culture and drive further improvements.

Development and Pilot of ASCEND-H: A Regional Mentorship Program Building Confidence in Early-Career Hospital Pharmacists

Zeeshan Naseer[1], Alice McKellar[1]

[1]*Southern NSWLHD, NSW*

EMAIL Zeeshan.Naseer@health.nsw.gov.au

Background In regional hospital settings, early-career pharmacists often face a gap between orientation and developing confident clinical practice, compounded by limited resources and support. This can lead to variability in clinical reasoning, communication, and confidence, potentially impacting medication safety and patient care, highlighting the need for structured, longitudinal support.

Objective(s) To develop and pilot a structured mentorship and clinical development program to support progression to confident hospital pharmacy practice among early-career hospital pharmacists.

Action (Method) A structured program (ASCEND-H: Advancing Skills & Confidence for Early-career Hospital Pharmacists) was designed for pharmacists within their first two years of hospital practice or transitioning from community settings. The program was designed for delivery over 6–9 months and included four components: foundational system knowledge, clinical skills development, professional practice and communication, and mentorship with supported practice.

Key strategies included weekly case-based discussions, supervised chart review, structured clinical documentation training, and regular mentor check-ins. A pilot cohort completed mid-program self-assessment and mentor feedback at three months to inform refinement.

Evaluation Pilot evaluation at three months utilised self-assessment tools and mentor feedback. All participants reported improved confidence and consistent improvement in their practice, including clinical documentation, medication review, and application of clinical guidelines. Communication within the multidisciplinary team also improved.

Challenges remained in complex case management, interpretation of laboratory data, antimicrobial reviews, and time management. Feedback identified the need for more case-based learning and targeted feedback.

Discussion This program supports progression towards confident, safe hospital pharmacy practice through structured mentorship and workplace-based learning. Embedding mentorship and reflective practice promotes development of core competencies aligned with safe medication use.

Findings informed refinements to program structure and content. The program has since expanded across the district via expression of interest for mentors and mentees, supporting scalability and enhancing workforce capability, confidence, and retention in regional health services.

Bridging Academia and Clinical Practice: A Pre–Post Study of Pharmacy Practitioner Impact on Institutional KPIs

Dr Arwa Abu Sardaneh[1,2], Melissa Tao[2], Anthony Lamproglou[2], Prof Jan-Willem Alffenaar[1,2]

[1]*University of Sydney, Sydney, NSW,* [2]*Westmead Hospital, Sydney, NSW*

EMAIL Arwa.abusardaneh@sydney.edu.au

Background There is limited capacity for hospitals to facilitate hospital placements for growing pharmacy student cohorts. This limits student understanding of hospital pharmacy and may negatively impact future career prospects and workforce capacity. To address this gap, a university established a 0.6 FTE Pharmacy Practitioner (PP) role based at a tertiary-care hospital.

Objective To determine the effect of a 0.6 FTE PP role on university and hospital pharmacy placement key performance indicators (KPIs).

Methods A retrospective comparative study was conducted at a tertiary-care hospital in Australia. Student placement data was compared pre-(April 2022 – April 2024) and post-(May 2024 – May 2026) PP role implementation. University placement KPIs included the number of placements and number of students on placement. Hospital pharmacy placement KPIs included number of student-led admission medication reconciliation, number of student-led quality improvement (QI) projects, and number of student-led QI project conference presentations.

Results The total number of placements was 5 and 15, pre- and post-PP role implementation ($p=0.03$). The total number of students on placement was 56 and 119 students pre- and post-PP role implementation ($p=0.03$). The total number of student-led admission medication reconciliation was 0 and 138 pre- and post-PP role implementation ($p<0.01$). The total number of student-led QI projects was 2 and 7 projects pre- and post-PP role implementation ($p=0.92$). The total number of QI project conference presentations was 0 and 6 pre- and post-PP role implementation ($p=0.29$).

Discussion University and hospital pharmacy placement KPIs including number of placements, students on placement, and student-led admission medication reconciliation increased post-PP role implementation. The PP embedded a new student-led admission medication reconciliation program within existing hospital workflows thus contributing to the National Safety and Quality Health Service Medication Safety Standard, without additional hospital pharmacist FTE, further bridging the gap between academia and clinical practice.

C6

Friday 23 October 2026, 10:40 AM – 12:06 PM

Grow, Evolve and Thrive: A Limitless Workforce Model for Regional Pharmacy

Katie Thomas[1], Angela Tarn[1], Alan Tuxford[1]

[1]*Albury Wodonga Health, Albury, NSW*

EMAIL Katie.Thomas@awh.org.au

Background Increasing service demand and finite resources placed sustained pressure on a regional hospital pharmacy. A flat leadership model constrained governance, timely decision-making, leadership access and supervision. Gaps in onboarding, training, and credentialing limited workforce capability to deliver optimal patient care and pharmacy service excellence.

Objective Redesign and implement a contemporary pharmacy organisational structure within budget that strengthens leadership access. Create protected non-operational capacity, guarantee internal opportunities, no job losses and ensure staff and union acceptance.

Action A comprehensive organisational redesign was undertaken across a 58 staff member pharmacy service. A baseline survey assessed gaps across onboarding, training, supervision, leadership access and career progression. Benchmark comparison with contemporary pharmacy services informed alignment with best practice. Roles were restructured to create 11 positions (19% of staff) across pharmacist and technician leadership, education, informatics and intern preceptor. A budget forecast model was developed and utilised to maintain fiscal neutrality. A Change Impact Statement (CIS), stakeholder and union engagement guided transparent consultation.

Evaluation High staff engagement, executive and union approval and successful CIS completion delivered implementation readiness. The redesign achieved a contemporary organisational structure, with no job losses and all positions recruited internally. Leadership capacity expanded from 2 to 13 roles; access increased from 3.4% to 22.4% and 0.2 FTE protected non-operational capacity was achieved for six roles. Budget neutrality was maintained within a 0.05% variance.

Discussion This redesign demonstrates that contemporary organisational change can be achieved within existing resources with enthusiastic staff support and industrial endorsement. This model strengthens leadership access and establishes clear career pathways to support workforce capability and sustainability. Phase 2 will focus on the roll-out of the new structure and post-implementation evaluation. This scalable approach highlights how regional pharmacy services can unlock workforce potential and achieve sustainable transformation within existing resources.

Advancing Good Clinical Practice in Clinical Trial Pharmacy Services: Findings from a Multi-Site Gap Analysis

Priya Iyer[1], Sarah Giannasi[1]

[1]*Slade Pharmacy, Brisbane, Qld*

EMAIL priya.iyer@sladepharmacy.com.au

Background The revised International Council for Harmonisation (ICH) E6(R3) guideline for Good Clinical Practice introduces a modernised approach to clinical trial conduct, emphasising risk-proportionate quality management, strengthened data governance, and flexible oversight. These changes have important implications for pharmacy services responsible for investigational product management and regulatory compliance. Understanding organisational readiness is critical to support implementation.

Objective(s) To evaluate pharmacy readiness for implementation of ICH E6(R3) across multiple sites and to develop a framework to support operational alignment.

Action (Method) A multi-site regulatory gap analysis was conducted across 18 pharmacy sites providing clinical trial services. 126 standard operating procedures (SOPs), investigational product management workflows, and training frameworks were reviewed against key ICH E6(R3) principles. Domains assessed included quality management systems, risk-based oversight, investigational product accountability, documentation practices, and data governance. Identified gaps were categorised according to regulatory risk and operational impact. Findings were synthesised to identify common themes and inform development of a shared implementation framework.

Evaluation Review of pharmacy SOPs, workflows and training processes identified several consistent gaps across sites. Key findings included limited formalisation of risk-based decision-making in investigational product management, variability in documentation practices, gaps in data governance guidelines, and inconsistencies in role-specific training aligned with ICH E6(R3) responsibilities. In response, a standardised implementation framework was developed incorporating SOP revision, a pharmacy risk assessment tool for investigational product management, harmonised documentation expectations and targeted workforce training. Cross-site collaboration enabled development of consistent approaches to support regulatory readiness.

Discussion Implementation of ICH E6(R3) presents both challenges and opportunities for clinical trial pharmacy services. A structured gap analysis identified common areas requiring enhancement and informed development of a practical implementation framework. This approach may assist pharmacy services in achieving regulatory readiness and supporting consistent adoption of evolving Good Clinical Practice standards.

Optimising Trial Readiness: Pharmacist-Led Medication Reviews in Clinical Trial Screening

Renee Ioppolo[1], Ashleigh DeMarie[1]

[1]*St John Of God Subiaco Hospital, Subiaco, WA*

EMAIL renee.ioppolo@sjog.org.au

Background Clinical Trial Pharmacists (CTPs) are often underutilised in the screening phase of clinical trials, despite their expertise in medication safety, pharmacology, patient care, and protocol compliance. Involving CTPs early may improve the identification of medication-related issues, ensure protocol adherence, and support safer initiation of investigational products (IPs).

Objective To evaluate the role of CTPs in identifying medication-related problems by conducting Best Possible Medication Histories (BPMHs) using the WA Medication History and Management Plan form prior to IP initiation.

Action (Method) Between July 2024 and May 2025, CTPs conducted BPMHs for newly consented participants, reviewing all concurrent medications against trial protocols. Identified issues were escalated to delegated investigators prior to IP randomisation and treatment commencement. Data were categorised by type of intervention using the Pharmaceutical Society of Australia 'DOCUMENT' system for classifying medication-related problems and pharmacist recommendations. All Clinical Trial Unit (CTU) staff then completed an anonymous survey to assess service impact.

Evaluation Of 41 BPMHs, 32 (78%) required CTP intervention. The most common category was drug interactions (75%), followed by undertreated conditions (16%), and contraindications (12%). Nine BPMHs required no CTP intervention. Seven participants were taking prohibited medications, and three were deemed ineligible for the trial following CTP review. Key recommendations included increased monitoring (laboratory and non-laboratory) (78%), therapy or drug changes (53%), and dose or formulation adjustments (15%). A post-implementation survey (response rate 50%) indicated CTU staff believed the CTPs involvement significantly improved screening efficiency, safety, and protocol compliance.

Discussion Pharmacist-led BPMH reviews, at the clinical trial screening stage, identify critical medication-related risks, prevent protocol deviations, and support patient safety. Integrating Clinical Trial Pharmacists in this phase should be considered standard practice and aligns with National Clinical Trials Governance Framework promoting patient safety and quality improvement systems.

A Dispensary in Motion Tends to Stay in Motion – A Continuous Quality Improvement Framework

Christopher Macintyre[1]

[1]*Statewide Hospital Pharmacy, Hobart, Tas*

EMAIL christopher.a.macintyre@gmail.com

Background In 2019, an external audit of pharmacy dispensaries at four acute hospitals identified a lack of structure in practice including staff training, processes and a lack of staff feedback pathways. Previous projects to address these issues had either been incomplete or deteriorated after completion.

Objective To develop and implement continuous quality improvement across four hospital dispensaries.

Action An annual three-phase improvement project cycle was established for use at all sites;

- 'Inputs' focused on training of dispensary staff.
- 'Processes' focused on standard operating procedures.
- 'Feedback' consisted of converting structured feedback into quality improvement for the entire cycle, with annual project's building on each previous year.

Evaluation The framework developed in 2021 has now completed five full quality improvement project cycles and has seen ongoing, sustained improvement in dispensary practice.

'Inputs' have seen the transformation of a site-based orientation manual into a statewide manual, with embedded training checklists being reworked into Entrustable Professional Activities for use by interns and new to hospital pharmacists.

'Processes' have led to informal procedures with limited oversight becoming standardised, indexed and version controlled, with access to these documents being significantly improved through the use of SharePoint.

'Feedback' has seen ad hoc feedback from managers transition to more structured feedback channels incorporating a variety of staff to ensure that diverse experiences and viewpoints are considered. This feedback in turn informs the subsequent annual quality improvement projects.

Each cycle has seen annual projects maintain and build upon outcomes from previous year's projects.

Discussion The continuous quality improvement framework has resulted in annual projects which have improved dispensary practice and serve as a basis for ongoing improvement. Further cyclical improvements will include expanding EPA usage to pharmacy technicians and developing quantitative audit tools to assess dispensary outputs for feedback into the cycle.

Improving Medication Fridge Safety Using Customised 3D-Printed Storage Solutions

Stewart Cockram[1]

[1]*St Vincent's Hospital Melbourne, Fitzroy, Vic*

EMAIL stewart.cockram@svha.org.au

Background Medication safety principles emphasise clear segregation to minimise selection errors and ensure visibility of all products. These principles apply equally to refrigerated medicines, however the storage environment introduces additional challenges such as dependence on adequate airflow and variable shelf dimensions. At our institution, a medication fridge developed significant condensation resulting in mould formation. Concurrently, non-standardised storage practices were observed across multiple fridges, including poor segregation and co-location of look-alike sound-alike medicines. A need for a safer, standardised solution was identified.

Objective To review and improve medication fridge storage systems to better support medication safety principles, airflow, visibility and stock management.

Method Commercial storage options were evaluated and found to have limitations including poor space utilisation, inadequate airflow, lack of customisation and/or high cost. An alternative approach was undertaken in collaboration with an engineer to develop 3D-printed baskets. Iterative prototypes incorporated open hexagonal mesh to optimise strength and airflow, elongated rectangular designs to maximise depth utilisation, and flat fronts for labelling. Multiple sizes were produced to suit varying fridge dimensions, with red baskets created to differentiate high-risk neuromuscular blockers. The solution was piloted before implementation in a high-risk Emergency Department fridge.

Evaluation Baseline review identified 41 medication lines stored in heterogeneous containers with poor segregation, limited visibility, and expired and excess stock. Post-implementation, medications were clearly separated with improved airflow and visibility. Expired stock was removed and approximately $300 in excess stock returned. Pharmacy technicians reported improved efficiency. Pharmacy leadership were highly supportive, with the medication safety pharmacist highlighting in particular the value of red baskets for neuromuscular blockers.

Discussion This initiative demonstrates that tailored 3D-printed storage design can address key medication safety risks in refrigerated environments. The approach improved safety, workflow efficiency and stock control, with strong potential for broader application in hospital practice.

Accurate and Efficient Medication Histories: Powered by Pharmacy Technicians

Michelle Hayman[1], Erin Dunn[1], Andrew Munns[1]

[1]*The Prince Charles Hospital, Chermside, Qld*

EMAIL michelle.hayman@health.qld.gov.au

Background Queensland healthcare systems face unprecedented clinical demand and workforce shortages. Care models that support staff to work at top of scope have been proposed as strategies for maintaining business continuity in resource constrained environments.

Best Possible Medication History (BPMH) yields shorter length of stay for patients in acute care. This task can be completed by pharmacy technicians to release pharmacist time for other activities.

Objectives To implement and evaluate BPMH completion by pharmacy technicians and undergraduate pharmacy students (clinical support staff) at a metropolitan tertiary referral hospital.

Method A competency-based framework was developed to facilitate BPMH skills acquisition by clinical support staff. Training included a combination of didactic content and entrustable professional activity assessments. Accuracy of BPMH performed by clinical support staff was evaluated via observational assessment. Pharmacist time saved was measured via a time and motion study. The results were analysed via simple statistics.

Evaluation Six pharmacy technicians and four pharmacy students completed the competency framework and demonstrated ten consecutive BPMH completion with zero errors, before progressing to independent practice.

Between 16 December 2025 and 10 May 2026, clinical support staff completed an average of eight BPMH per day. This translated to 3.55 hours of pharmacist time saved per day as evidenced by local time and motion data. There were no documentation errors reported during the audit period.

Discussion As clinical demand increases and workforce challenges persist, healthcare systems will need to identify novel approaches to care delivery. This study demonstrates that clinical support staff can accurately and efficiently deliver medicines management services traditionally performed by pharmacists, such as BPMH. Further opportunities exist for task delegation, including medication counselling and antimicrobial stewardship referrals.

C7

Saturday 24 October 2026, 11:40 AM – 1:06 PM

Implementing Aged Care On-site Pharmacists: Barriers and Enablers in a Regional and Rural Area

Laura Kavanagh[1], Meg Murray[2], Assoc Prof Kevin McNamara[2], Prof Elizabeth Manias[3], Dr Greg Weeks[1,4]

[1]Barwon Health, Geelong, Vic, [2]Deakin University, School of Medicine, Waurn Ponds, Vic, [3]Monash University, Monash Nursing and Midwifery, Clayton, Vic, [4]Monash University, Facility of Pharmacy and Pharmaceutical Sciences, Parkville, Vic

EMAIL laura.kavanagh@barwonhealth.org.au

Background The Australian Royal Commission into Aged Care Quality and Safety identified medicines management and safety as an essential area for improvement in residential aged care homes (RACHs). In response, the Australian Government funded credentialed pharmacists to work on-site in RACHs in a clinical role. Despite funding, the uptake of Aged Care On-Site Pharmacists (ACOP) has remained limited across regional and rural areas.

Aim/Objective(s) To identify the barriers and enablers to implementing the ACOP program in a regional and rural area.

Methods Administrators and clinicians providing services in or to RACHs in the area were invited to participate in the qualitative study via email. After obtaining consent, one-on-one semi-structured individual interviews were conducted online or in person using an approved interview guide, audio-recorded and transcribed. Transcripts were analysed deductively by two independent researchers using the Consolidated Framework for Implementation Research (CFIR) and manually coded.

Results Twelve interviews were conducted with senior aged care managers (n=3), medical practitioners (n=3), nursing staff (n=2) and pharmacists (n=4), across ten RACHs. Seven participants had first-hand exposure or were involved in an ACOP program. Initial findings highlighted strong perceived benefits to implementing ACOP, aligned with the CFIR constructs 'Innovation Relative Advantage', 'Relational Connections' and 'Recipient Centredness'. Improved communication and strong interprofessional collaboration, emerged as key implementation enablers, reflecting shared values related to patient welfare and quality of care. Workforce shortages and resource constraints were consistently identified as barriers to ACOP implementation.

Discussion These findings identify the key determinants shaping ACOP uptake in regional and rural areas. Targeted strategies addressing workforce shortages, alongside capitalising the perceived benefit of ACOP are needed to improve uptake of the program. These findings are among the first to examine ACOP implementation and offer a foundation for developing strategies to enhance medicines safety in aged care.

Embedding Pharmacist-Led Quality Improvement in Remote MMM7 Aged Care

Helen Bowden[1]

[1]Choice Aged Care, Wurrumiyanga, NT

EMAIL helen@choiceagedcare.com.au

Background Residents of remote aged care facilities often experience multimorbidity, high medicine burden, and limited access to specialist review, increasing the risk of medicine-related harm. In remote Aboriginal communities, culturally safe, person-centred medication review is essential to support quality use of medicines, yet access to consistent pharmacist input is often limited.

Objective(s) To implement a pharmacist-led quality improvement initiative to identify potentially inappropriate polypharmacy (9 or more medications) and antipsychotic prescribing and support deprescribing where clinically appropriate.

Action (Method) A 12-month quality improvement project was undertaken, commencing with a retrospective baseline audit of medication use to identify residents with potentially inappropriate polypharmacy and antipsychotic prescribing. Targeted pharmacist-led medication reviews were then conducted, with interventions implemented in collaboration with the multidisciplinary healthcare team. These included identifying medicines without a current indication, reviewing dose and duration, supporting staged deprescribing where clinically appropriate, promoting non-pharmacological strategies, and providing staff education to strengthen medication governance. Deprescribing approaches were person-centred and culturally informed, taking into account residents' preferences, care needs, and clinical context. Outcomes were monitored prospectively over the 12-month period.

Evaluation Polypharmacy decreased from 52.4% to 29.4% of residents (−23.0 percentage points), and antipsychotic use decreased from 28.6% to 5.9% of residents (−22.7 percentage points). Review uptake, implementation of recommendations, and clinical follow-up were monitored to ensure deprescribing remained safe and aligned with individual care needs.

Discussion This project demonstrates the value of the Aged Care Onsite Pharmacist (ACOP) model in remote aged care. Structured reviews, interdisciplinary collaboration, and culturally informed, person-centred deprescribing reduced medicine burden and psychotropic use, improving medication safety. However, the funding model, ongoing challenges in recruiting and retaining pharmacists in remote areas may limit sustainability and broader implementation despite clear benefits.

Appropriate prescribing in a rural First Nations aged care home: a convergent mixed-methods study

Nicola Franks[1,2], A/Prof Karen Carlisle[1], Prof Sarah Russell[1], Valda Wallace[1], Prof Edward Strivens[1,2]

[1]James Cook University, Cairns, Qld, [2]Cairns and Hinterland Hospital and Health Service, Queensland Health, Cairns, Qld

EMAIL franklin_115@outlook.com

Background Medicines management in older First Nations populations is complex due to multimorbidity, polypharmacy and intersecting cultural and organisational factors. Explicit prescribing tools identify potentially inappropriate medicines but do not capture the impact of communication, trust, continuity of care, or culturally safe practice on medication acceptance and adherence.

Aim/Objective(s) To evaluate prescribing appropriateness using validated tools and explore resident, substitute decision maker (SDM) and healthcare worker perceptions on medication use in a rural First Nations aged care home.

Methods A pragmatic convergent mixed-methods study was conducted in a rural First Nations aged care home. Quantitative prescribing appropriateness was assessed using a cross-sectional design with STOPP/START and Beers criteria. Qualitative data were collected through semi-structured interviews with residents, SDMs and healthcare workers and analysed using reflexive thematic analysis. Findings were integrated to assess concordance between prescribing appropriateness and lived experience.

Results All eligible residents participated (n=7, mean age 82 years) and exhibited substantial multimorbidity and frailty. Polypharmacy was common (71%). Most prescribed medicines were considered appropriate (83–90%); however, indicators of overprescribing were identified in 86% of residents and 22% of prescribed medicines, primarily due to absent indication documentation. Eighteen interviews generated five key themes: practices, risks and cultural perceptions of medicines; continuity of care; trust and relationships; communication; and knowledge. Medication acceptance and adherence were influenced by culturally safe communication and trust in familiar healthcare providers. Disruptions to this continuity contributed to poor documentation, fragmented communication and missed optimisation opportunities.

Discussion Prescribing quality was generally high; however, 'appropriate prescribing on paper' did not ensure safe or accepted medicines use. Medicines management was influenced by relational and system factors, particularly continuity, communication and trust. Pharmacist led support for improving documentation, handover processes and culturally safe communication may enhance medication safety, adherence and person-centred care in rural First Nations aged care settings.

Unpacking Polypharmacy: Insights into Risk Factors Among Palliative Care Patients

Bessie Wong[1], Sam Maleki[1], Dr Grace Walpole[2], Dr Yok-Yin Lee[2], Emily Schembri[3], Kaitlin Boc[4], Thu-Anh Luu[4], Jasmine Moustafa[4], Rachel Nakamura[4], Dr. Vivek Nooney[4]

[1]Pharmacy Department, Eastern Health, Melbourne, Vic, [2]Department of Supportive and Palliative Care, Eastern Health, Melbourne, Vic, [3]Eastern Health Clinical School, Monash University, Melbourne, Vic, [4]Discipline of Pharmacy, School of Health and Biomedical Sciences, RMIT University, Melbourne, Vic

EMAIL bessie.wong@easternhealth.org.au

Background Polypharmacy is common in palliative care and is associated with increased risk of adverse effects, drug interactions, and reduced quality of life. Understanding factors that contribute to polypharmacy can guide safer and more individualised approaches to medication management.

Aim/Objective(s) To examine risk factors associated with polypharmacy in a metropolitan palliative care unit (PCU).

Methods This retrospective study included adult patients admitted to a PCU in 2023, with a minimum three-day stay, excluding those admitted in terminal phase. Data on demographics, clinical characteristics, and polypharmacy were collected during admission. Multivariate logistic regression assessed associations between polypharmacy and age, gender, malignancy, comorbidities, admission reason, length of stay (LOS) and illness phase.

Results Among 386 patients, median age was 78 years (range: 33–101); 45.8% were female, 82.4% were 65 years or older and median LOS was 11 days (IQR: 6–22). Over half (56.2%) were admitted for end-of-life care. Malignant diagnoses were present in 68.1%, and patients had a median of four comorbidities (IQR: 3–7).

Polypharmacy decreased from 74% at admission to 42% at discharge or death. Patients admitted with symptom management goals (aOR 4.07; 95%CI 2.51–6.59; p<0.001), and presence of endocrine conditions (aOR 1.73; 95%CI 1.10–2.72; p=0.018) were significantly associated with increased odds of polypharmacy, while patients aged >80 years (aOR 0.34; 95%CI 0.18–0.66), deteriorating (aOR 0.31; 95%CI 0.18–0.53) and terminal illness phases (aOR 0.06; 95%CI 0.03–0.11); all p<0.01, were significantly associated with decreased odds of polypharmacy.

Discussion The rise in polypharmacy for symptom management likely reflects appropriate prescribing, while its association with endocrine conditions identifies a target for medication review. Older patients (>80 years) were less likely to experience polypharmacy, suggesting younger patients have greater medication burden, possibly due to treatment differences. Recognising these associations may help mitigate medication-related risks and optimise patient outcomes.

Prescriber Acceptance of Pharmacist Medication Recommendations within an Aged Care Facility

Penny Lee[1]

[1]*Wellness Partners Foundation, Sydney, NSW*

EMAIL penny@choiceagedcare.com.au

Background The role of the Aged Care Onsite Pharmacist (ACOP) in Australia is still evolving, with medication reviews forming a core responsibility. However, variability in how these reviews are communicated, documented, and actioned across facilities means there is limited evidence on how prescribers engage with and implement ACOP-recommended interventions.

Objectives To describe medication recommendations provided to prescribers, with a secondary focus to determine if the interventions were reviewed, considered and actioned.

Action Twelve months of data from February 2025 was used to perform a retrospective review of written ACOP medication recommendations. The recommendations and subsequent outcomes were analysed to determine if the prescriber reviewed and or actioned the recommendations.

Evaluation 465 individual medication recommendations were documented for 89 residents.

The top three types of interventions were: 103 (22%) recommended to decrease a dose of medication; 92 (20%) recommended to cease a medication and 82 (18%) recommended monitoring.

Further intervention types included: 55 documented quality improvement activities; 51 recommended labs; 34 recommended to commence a medication; 28 recommended changing administration; 17 recommended increasing the dose of a medication and 3 recommended changing medications.

Of the 465 recommendations 214 (46%) resulted in no change. In 151 of these interventions, it is unclear if the prescriber read the report.

Discussion Prescribers were confirmed to have read 314 of the 465 written ACOP recommendations. Further research is needed to identify effective strategies for pharmacists to communicate recommendations and improve this rate toward 100%. It should be noted that verbal recommendations were not captured in this study.

ACOPs are well positioned to regularly review residents' medications in alignment with the new aged care standards and to provide recommendations to prescribers that support improved health outcomes. However, the responsibility remains with prescribers to review and act on these recommendations.

Implementing a hospital-led aged care onsite pharmacist (ACOP) model in rural residential care

Scott Savage[1]

[1]*Western District Health Service, Hamilton, Vic*

EMAIL scott.savage@wdhs.net

Background The Aged Care On-site Pharmacist (ACOP) Measure was introduced to improve medication safety and quality use of medicines in residential aged care facilities (RACFs). Rural services face significant workforce limitations. Access to community pharmacy-led ACOP services can be inconsistent. This rural health service implemented a hospital-led ACOP model across multiple RACFs following unsuccessful community pharmacy recruitment.

Objective(s) To describe the implementation of a hospital-led ACOP model in RACFs and outline early measures used to evaluate its impact on medication safety and continuity of care.

Method A credentialed pharmacist was employed and integrated into five RACFs supported by a rural hospital. Structured onboarding was undertaken, including stakeholder engagement, workflow mapping, and training in electronic medication management systems. Standardised tools were developed to support medication reviews, communication with prescribers, and documentation of recommendations. Priority residents were identified based on polypharmacy, high-risk medicines, recent hospitalisation, and clinical concerns raised by nursing staff. A transitions-of-care-process was established linking hospital and RACF medication management. Key performance indicators were defined: number of medication reviews; recommendation acceptance rates; time to post-discharge reconciliation; identification of medication-related issues. A mixed-methods evaluation framework was developed incorporating quantitative metrics and facility satisfaction surveys at baseline and ongoing intervals.

Evaluation Initial implementation demonstrated feasibility of a hospital-led ACOP model. Early activity data showing consistent medication review throughput and identification of clinically significant medication-related issues. Stakeholder engagement facilitated integration into existing care processes and improved communication pathways between hospital, aged care, and general practice.

Discussion This model demonstrates a novel approach to delivering ACOP services in rural settings where traditional models are not sustainable. Early findings suggest benefits in coordination of care and medication safety, particularly between acute and residential transitions of care. Ongoing evaluation will determine the impact on clinical outcomes and inform scalability of hospital-led models in similar rural contexts.

C8

Saturday 24 October 2026, 11:40 AM – 1:06 PM

Breaking the Mould: Intrapleural Liposomal Amphotericin B for Refractory Pleural Aspergillosis Treatment

Tony Pavia[1], Tai Duc Nguyen[1], Charlie Lao[1], Tulita Liyadipitiya[1]

[1]*Liverpool Hospital, SWSLHD, Liverpool, NSW*

EMAIL Tony.Pavia@health.nsw.gov.au

Objective To evaluate the safety and feasibility of off-label intrapleural (IP) administration of liposomal amphotericin B (LAmB) and highlight the pharmacist's role in antimicrobial optimisation, medication safety, and monitoring.

Clinical features A 56-year-old man presented with a spontaneous pneumothorax secondary to a bronchopleural fistula and invasive Aspergillus fumigatus infection with upper-lobe cavitation. Initial treatment with posaconazole and anidulafungin was unsuccessful due to pan-azole resistance and poor pleural penetration, respectively. Given limited therapeutic options, a multidisciplinary team comprising respiratory, infectious diseases, cardiothoracics, and pharmacy reached consensus to trial IP LAmB as salvage therapy.

Literature Review The rationale for IP amphotericin B administration arises from the limited pleural penetration of systemic antifungal therapy. Published evidence describing IP LAmB remains scarce and is restricted to case reports and small cases. Available reports suggest it is generally well tolerated and may achieve higher local drug concentrations while minimising systemic exposure. However, dosing regimens remain non-standardised and are typically used alongside systemic antifungals, pleural drainage, and surgical debridement.

Pharmacist Intervention, Case Progress and Outcomes Pharmacists evaluated the suitability of IP LAmB, developed the dosing strategy, and coordinated efficacy and safety monitoring. LAmB was administered via an intercostal catheter with a two-hour clamp period using a dose-escalation regimen of 10 mg (Day 1), 20 mg (Day 2), 30 mg (Day 3), 40 mg (Day 4), then 50 mg daily from Day 5 for 3.5 months. Subsequent dose adjustments were guided by pleural cultures, imaging, serology, and clinical response. Treatment was well tolerated with no significant adverse events. The patient achieved clinical and radiological remission within four months and remains relapse-free.

Discussion This case demonstrates that IP LAmB may be a feasible salvage therapy for complex pleural aspergillosis when conventional treatment options are limited. Pharmacist involvement was critical in supporting evidence-based decision-making, safe administration, and monitoring.

A preventable risk: association between suboptimal valganciclovir dosing and CMV infection after kidney transplantation

Kiyana Hasanjanzadeh[1], Ruby Wilson[1], Jeffrey Van[1], Dr Darren Lee[1]

[1]*Eastern Health, Melbourne, Vic*

Background Cytomegalovirus (CMV) infection is a leading cause of graft-related complications following kidney transplantation. Valganciclovir is first-line prophylaxis for CMV in this population; dosing is individualised and adjusted according to renal function. Despite guideline recommendations, adherence to dose optimisation in practice remains inconsistent in transplant settings, representing a potentially modifiable gap in care.

Aim To evaluate valganciclovir prescribing patterns and association of suboptimal dosing and CMV infection within 12 months post kidney transplantation.

Methods This retrospective audit included recipients (≥18 years) who received a transplant between June 2018 and June 2024 and were monitored for at least 12 months post-transplant. Valganciclovir dosing at 1, 2, 3, 6, and 12 months post-transplant was assessed against The Third International Consensus Guidelines on the Management of Cytomegalovirus in Solid-organ Transplantation. Suboptimal dosing was defined as failure to appropriately titrate dosing for fluctuating creatinine clearance (CrCl) and/or recommended prophylaxis duration. The primary outcome was the proportion of suboptimal dosing instances. Secondary outcomes included CMV infection incidence and its association with suboptimal dosing.

Results A total of 122 recipients (29% female) were included with a median age of 54 years (range: 27–81). Two recipients were excluded due to death within 12 months post-transplant. Audited timepoints totaled 610 instances. Valganciclovir prophylaxis was prescribed in 302 (49.5%) instances, of which 102 (33.8%) were suboptimally dosed. CMV infection occurred in 14 (11.5%) recipients within 12 months of transplantation. Of those who had suboptimal prophylaxis, 10 (71%) patients had cases of CMV.

Discussion These findings indicate that one-third of prophylaxis opportunities were not optimally titrated. Suboptimal valganciclovir dosing was common and associated with higher CMV infection rates. This highlights the importance of ongoing renal dose reassessment during CMV prophylaxis. Integration of a renal pharmacist and implementation of local dosing protocols are practical strategies to improve adherence and patient outcomes.

Single-Dose Aminoglycoside in Emergency Departments Among Patients with Chronic Kidney Disease: A Retrospective Cohort Study

Grace Lau[1], Roy Kadira[1,2], Charles Xin[1], Sylvia Andrew[1,3], Iouri Banakh[1]

[1]Monash Health, Melbourne, Vic, [2]Western Health, Melbourne, Vic, [3]Epworth HealthCare, Melbourne, Vic

EMAIL grace.lau@monashhealth.org

Background Nephrotoxicity has been described with prolonged aminoglycoside use but is considered low-risk with single-dose empirical therapy. However, limited data exists in patients with chronic kidney disease (CKD).

Aim To determine the renal safety of single-dose aminoglycosides (SDA) in Emergency Departments (ED) in patients with and without CKD.

Methods A retrospective cohort study was performed in four tertiary hospitals within an Australian metropolitan network. Electronic medical records of all adult patients who presented to ED and received SDA between August 2019-July 2024 were screened for inclusion. The primary outcome was acute kidney injury (AKI) (creatinine increase by 26.5 micromol/L from baseline) incidence within one week of SDA. CKD was defined as glomerular filtration rate <60 mL/minute.

Results Overall, 6636 aminoglycoside administrations were identified and 1835 screened. In total, 660 patients were included, receiving gentamicin (74.1%), tobramycin (25.6%), or amikacin (0.3%). Patients with CKD were older (81.3 vs 64.1 years old, p<0.001) and had more comorbidities. AKI incidence within one week of hospitalisation was higher in patients with vs without CKD (30.9% vs 13.4%, p<0.001). CKD was associated with higher likelihood of AKI incidence (OR 2.88, 95% CI 1.76–4.71, p<0.001). Patients with CKD had more severe AKI (stage 2: 10.1% vs 2.6%, p<0.001) and a trend to higher mortality (7.6% vs 4.4%, p=0.082) and intensive care unit admissions (12.9% vs 9.9%, p=0.222) compared to patients without CKD.

Discussion Patients with CKD who received single-dose aminoglycosides were more likely to have AKI compared to patients without CKD. Clinicians should consider reserving use in patients with CKD only if the benefit outweighs risk, such as in cases of septic shock or for patients with high risk of multidrug resistant pathogens. Potential confounders (comorbidities and concomitant nephrotoxins) were assessed using logistic regression. However, severity of acute illness and the contribution of underlying sepsis was not quantified.

Long-term renal outcomes, rituximab exposure and infection burden in lupus nephritis from remote Australia

Stephanie Giles[1], Dr Sajan Thomas[1], Dr David Townsend[1,2,3]

[1]NT Health, Alice Springs, NT, [2]School of Clinical Medicine, University of New South Wales, Sydney, NSW, [3]SydPath, St Vincent's Hospital, Sydney, NSW

EMAIL stephanie.giles@nt.gov.au

Background Lupus nephritis is a major cause of kidney failure and premature mortality in Systemic Lupus Erythematosus (SLE). Data from remote Australian and First Nations populations are limited regarding rituximab exposure, infections and long-term renal outcomes.

Aim To evaluate rituximab exposure, infection burden, long-term renal outcomes and survival in adults with biopsy-proven lupus nephritis managed in remote Australia.

Method We performed a retrospective cohort study of adults with biopsy-proven lupus nephritis managed between 2000 and 2025. Clinical, histological, treatment, infection, hospitalisation, dialysis and mortality data were extracted. Primary outcomes were patient and renal survival. Secondary outcomes included proteinuria response, partial remission, infection burden and renal function trajectories. Kaplan–Meier methods, Poisson regression, Wilcoxon signed-rank testing and mixed-effects models were used.

Results Forty-four patients were included; most were female and First Nations peoples. Rituximab was administered to 24 patients, who had markers of more active disease including higher proteinuria and more frequent hypocomplementemia. Patient survival was 92.3% at 5 years and 85.2% at 10 years. Renal survival was 77% at 5 years and 67% at 10 years, with median renal survival of 11–12 years. Among rituximab-treated patients with paired data, proteinuria fell significantly in 76% of patients at 12 months, with a median reduction of 55.2%. Rituximab was associated with non-significant higher infection and hospitalisation rates. Partial remission associated with improved renal survival. Outcomes varied across levels of remoteness.

Discussion Lupus nephritis in a specific remote Australia location affects a young, predominantly First Nations population and is associated with substantial long-term renal risk. Partial remission appears strongly linked to Renal survival. Rituximab was associated with significant proteinuria reduction, with no statistically significant increase in infection or hospitalisation rates. This study supports rituximab as an effective adjunctive therapy for severe or refractory lupus nephritis, with an acceptable safety profile.

Proactive IV to Oral antimicrobial Transition (PIVOT): Pharmacists Promoting the Switch

Debbie Barry[1,2], Jessica Bui[1], Adriana Chubaty[1], Fiona Doukas[3], Savannah Reali[4,5], Dr Melanie Figtree[6]

[1]Pharmacy Department, Royal North Shore Hospital, St Leonards, NSW, [2]Pharmacy Department, Hornsby Hospital, Hornsby, NSW, [3]Australian Commission on Safety and Quality in Healthcare, Sydney, NSW, [4]School of Pharmacy, The University of Sydney, Camperdown, NSW, [5]The University of Sydney Institute for Infectious Diseases (Sydney ID), The University of Sydney, Westmead, NSW, [6]Infectious Diseases and Microbiology Department, Royal North Shore Hospital, St Leonards, NSW

EMAIL debbie.barry@health.nsw.gov.au

Background Inappropriately prolonged intravenous (IV) antimicrobial therapy contributes to antimicrobial resistance, increased costs, longer hospital stays and patient harm including catheter-related complications and reduced mobility. A snapshot audit at a tertiary referral hospital identified that 32% of IV antimicrobial prescriptions met criteria for IV to oral switch, representing a significant opportunity to improve antimicrobial stewardship (AMS).

Objective To implement and evaluate a pharmacist-led, proactive IV to oral antimicrobial transition (PIVOT) program to reduce unnecessary IV therapy.

Methods A multidisciplinary, pharmacist-led quality improvement project was implemented across adult inpatient wards. A dedicated AMS pharmacist (1.0 FTE) and infectious diseases physician (0.2 FTE) performed daily prospective review of IV antimicrobial prescriptions using standardised switch criteria. Interventions included real-time AMS recommendations, clinician education, ward-based discussions, and decision-support tools (lanyards, posters). Recommendations were documented in the electronic medical record to improve visibility, uptake and accountability.

Evaluation Over July to December 2025, the PIVOT project team made 1162 recommendations to cease or change route for 1014 patients, effectively doubling the recommendations compared to the months prior, from 22 to 44 per week, with 81% actioned within 24 hours. Antimicrobial expenditure decreased by 22% (AUD $14.6k to $11.4k per 1000 occupied bed days). Additional system benefits included approximately 378 nursing hours saved, and avoidance of approximately 1.8 tonnes CO_2-equivalent emissions over six months. A reduction in Clostridioides difficile cases was also observed.

Discussion PIVOT project demonstrated that proactive pharmacist-led interventions were successful in identifying eligible patients, standardising decision-making and facilitating timely optimisation of antimicrobial prescribing. This scalable approach improves medication safety, strengthens multidisciplinary collaboration, and reduces healthcare waste. In the current era of increasing antimicrobial resistance and sustainability pressures on healthcare, our project demonstrated how pharmacists driving simple targeted route switch interventions can result in meaningful improvements across patient, workforce, and environmental outcomes.

Nasogastric Administration and Therapeutic Drug Monitoring of Fosmanogepix in a Child with Fusariosis

Mohammad Irfan Azeem[1], Angus Barnes[1], Tony Lai[1,2], Sophie Brown[1]

[1]Pharmacy Department, The Children's Hospital at Westmead, Westmead, NSW, [2]University of Sydney, School of Pharmacy, Camperdown, NSW

EMAIL mohammadirfan.azeem@health.nsw.gov.au

Objective To describe the world's first crushed fosmanogepix administered via nasogastric (NG) tube in a child with invasive fusariosis and the use of therapeutic drug monitoring (TDM) to verify exposure for a non-standard administration route.

Clinical Features A 4-year-old boy receiving induction chemotherapy for T-cell acute lymphoblastic leukaemia was on posaconazole prophylaxis. Two months into therapy, he developed leg pain, reduced willingness to walk, and multiple non-tender erythematous nodules over the right calf, ankle, and knee. Blood cultures and a right thigh skin biopsy grew Fusarium fujikuroi complex, which was pan-resistant to all TGA-approved antifungals with susceptibilities to fosmanogepix (MIC=0.015 mg/L). Chemotherapy was withheld, and fosmanogepix via NG was started. Twelve months into therapy, the patient has shown clinical improvements and a reduction of lesions on imaging.

Literature review Fosmanogepix is a first-in-class Gwt1 inhibitor with activity against rare moulds, including Fusarium spp. Adult studies report high oral bioavailability (>90%) and provide median pharmacokinetic parameters (Day 14: Cmax 9.57 µg/mL; Cmin 5.53 µg/mL). Paediatric evidence is limited, and published data confirming systemic exposure after NG administration of crushed tablets are lacking, creating a clinically significant risk of underexposure.

Pharmacist Interventions, Case Progress and Outcomes Only oral tablets were available via compassionate access within the required timeframe, necessitating crushed-tablet NG administration. Pharmacists led the medication-use risk assessment, developed an NG administration protocol and implemented TDM with pre-specified interpretive benchmarks anchored to adult PK data. Measured fosmanogepix concentrations (Day 14:Cmax 8.62µg/mL; Cmin 5.45 µg/mL) supported adequate exposure. Clinical and imaging follow-up demonstrated improvement over the course of prolonged therapy, with no adverse effects or tolerability issues. Informed consent was obtained.

Discussion This case demonstrates a pharmacist-led approach to de-risking NG administration of fosmanogepix using TDM to confirm exposure and guide dosing when formulation constraints require off-label enteral delivery.

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Saturday 24 October 2026, 11:40 AM – 1:06 PM

Strengthening Hospital Decision-Making for Use of Complex or High Cost Medicines Across Australia

Dr Alexandra Bennett[1,6], Michele Arcidiacono[2], Peter Samios[2], Sabrina Jiayi Wu[7], A/Prof Bridin Murnion[1,2,4,5], Professor Andrew Dawson[3], Professor Sarah Hilmer[1,4,6]

[1]NSW Therapeutic Advisory Group, Sydney, NSW, [2]St Vincent's Hospital, Darlinghurst, NSW, [3]Royal Prince Alfred Hospital, Camperdown, NSW, [4]Royal North Shore Hospital, St Leonards, NSW, [5]University of NSW, Kensington, NSW, [6]University of Sydney, Camperdown, NSW, [7]Sydney Local Health District, Camperdown, NSW

EMAIL sasha.bennett@svha.org.au

Background Medicine and Therapeutic Committees (MTCs) receive individual patient use/approval (IPU/As) applications for non-formulary medicines from hospital/health district prescribers caring for inpatients or outpatients. The decision-making process is complex due to high costs and/or limited supporting evidence for the indication. Many jurisdictions now use online IPU/A application portals that enable shared visibility of IPU/A decisions.

Objective(s) To understand the current patterns and challenges in IPU/A decision-making facing MTCs and to determine potential solutions.

Action A 7-member expert advisory committee of NSW IPU/A decision-makers was convened to discuss current challenges and IPU/A decision-making patterns and propose steps to improve consistency and robustness in MTC decision-making. A 1-day hybrid workshop involving 47 national IPU decision-makers and facilitators was held in February 2026. The first session (23 NSW hospital attendees only) discussed hospital IPU/A management processes. The other sessions for all attendees discussed collection, sharing and escalation of IPU/A data for better decision-making nationally, national collaboration to reduce unwarranted variability and funding, equity and ethics. A post-workshop survey identified priority actions.

Evaluation IPU/A decision-making processes and resources vary within and between jurisdictions. Participants agreed that improved data quality, particularly application content, supporting information, rationale for decisions and outcome reporting, would enhance IPU/A decision-making and health technology assessments. Gaps were identified in access to expertise in clinical pharmacology, subspecialty therapeutics, medicines information, evidence evaluation, health economics and clinical ethics. Additional training for MTC members was identified as a key need. Ethical frameworks and national collaboration can inform complex IPU/A decisions.

Discussion There was strong consensus to reduce inequity of IPU/A medicine access with use of reproducible frameworks, peer support, outcome monitoring and national collaboration. Next steps include advocating for inter-jurisdictional collaboration to create and support a national IPU/A data repository and a national on-demand MTC training program and embedding ethical frameworks in IPU/A decision-making.

Developing the First Australian Guidance Framework for Environmentally Sustainable Medicine Consumable Waste Solutions

Lisa Ho[1], Prof. Simone Taylor[1], Dr Phung To[1], Anna Brady, Derek Chai, Nicole Dirnbauer, Cynthia Donarelli, Gavin Fleet, Aleksandra Florian, Tam Huynh, Scott Jones, Laura Kavanagh, Romana Kristelly, Elfie Leung, Travis Phelan, Diana Sandulache, Lucinda Woodward, Grace Wong

[1]Austin Health, Melbourne, Vic

Background Medicine consumable waste is a substantial contributor to healthcare-related carbon emissions, landfill burden, resource consumption and environmental harm. Although sustainable healthcare initiatives are expanding across Australian health services, efforts to reduce medicine consumable waste remain variable, fragmented and often locally driven. This gap highlighted the need for a practical statewide framework to guide implementation of evidence-based, sustainable strategies to reduce medicine consumable waste across healthcare settings.

Objective To develop a consensus framework outlining practical, environmentally sustainable and cost-effective approaches for reducing medicine consumable waste across health services statewide, with potential for broader national application.

Action Framework development was informed by a literature review, environmental sustainability principles and expert consultation. An Expert Advisory Group (comprising 15 pharmacy representatives, and representatives from Climate Health Victoria, Environmental Protection Authority, and the Australian Midwifery and Nursing Federation) convened fortnightly over six months to provide expert feedback and ensure relevance to the statewide healthcare context. The framework is underpinned by waste hierarchy and circular economy principles and focuses on five priority areas: respiratory inhalers; blister pack recycling; parenteral-to-non-parenteral switch for non-antimicrobials and intravenous fluids; single-use plastics; and single-patient-use medicines, including eye drops and topical formulations. Each chapter incorporates practical implementation strategies, case studies, and sustainability tools. Expert clinicians reviewed draft sections to ensure relevance.

Evaluation Framework chapters were reviewed extensively through multidisciplinary Expert Advisory Group discussions. Feedback informed refinement of content accuracy, implementation considerations, and real-world applicability.

Discussion This framework represents one of the first collaborative statewide initiatives focused on reducing medicine consumable waste across healthcare environments. By integrating evidence-based recommendations with practical implementation tools and real-world examples, it supports healthcare services to adopt sustainable practices and embed environmental sustainability into routine care across diverse settings. The framework provides a foundation for statewide consistency and offers a scalable model for national sustainable healthcare efforts.

More flex, less stress – Creating a Limitless Workforce Through Roster Redesign

Nicola Harper[1], Anna Hendy[1], Leah Wirth[1], Benita Suckling[1], Kristiana McFarlane[1], Amy Le[1]

[1]*Surgical, Treatment and Rehabilitation Service (STARS), Brisbane, Qld*

EMAIL nicola.harper@health.qld.gov.au

Background Implementing flexible work arrangements for frontline clinical staff requires balancing operational demands with workforce expectations and staff wellbeing. Inspired by presentations at previous Medicines Management Conferences, our department trialled a nine-day fortnight (9DF) roster. Previously, staff had one half-day off weekly and worked one weekend in four with a day-off-in-lieu (DOIL). Challenges included increased clinical handovers, significant rostering burden, inconsistent weekday staffing levels, and a growing DOIL deficit within an increasingly part-time workforce.

Objective To undertake data-driven roster redesign that better aligned workforce capability with service demand while supporting staff wellbeing and sustainable service delivery.

Action Pharmacy Leadership undertook individual consultation with staff to discuss proposed roster changes, determine interest in participation, and identify preferences regarding weekend shifts as either overtime or rostered shifts with a DOIL. Participation was voluntary, and a roster incorporating a nine-day fortnight was implemented as a six-month trial.

Evaluation Eighteen of 20 full-time pharmacists (90%) initially elected to participate in the 9DF roster, increasing to 19 staff (95%) by the end of the trial. Two staff later withdrew due to preferring shorter daily shifts, while one additional staff member subsequently joined. Staff feedback strongly supported the redesign, which has since become permanent. Full days off were perceived as more beneficial than the previous half-day arrangement. Despite weekend shifts transitioning from rostered hours to overtime, overall staffing costs remained within budget during workforce shortages, while service capacity improved. Average weekday staffing increased modestly by 3% (approximately 0.6 FTE); however, day-to-day staffing variation improved substantially, from a fluctuating 15–21 FTE pre-trial to a more consistent 18–20 FTE post-trial.

Discussion The roster redesign reduced staffing variability while improving workforce flexibility, wellbeing, and staff satisfaction. While the specific model may not suit all settings, the collaborative and flexible approach encourages limitless thinking for workforce innovation across other facilities

Medicine Access Programs: a Time In Motion Evaluation (MAPs TIME)

Helen Paralejas[1], Helen Allsep[1], Dr Phung To[1], Lisa Ho[1], Huda Elmi[1]

[1]*Austin Health, Melbourne, Vic*

EMAIL helen.paralejas@austin.org.au

Background Medication Access Programs (MAPs) enable access to essential medicines that may otherwise be unavailable or unaffordable. Despite their clinical value, there is limited literature quantifying the pharmacy workload required to establish and manage MAPs in tertiary hospitals.

Aim To quantify the time, tasks and resources required to establish and manage MAPs and identify inefficiencies and opportunities for improvement.

Methods This ethics-approved study at a tertiary-referral hospital used prospective time-in-motion data collection and retrospective audits. From 15/10/2025 to 30/04/2026, pharmacy staff recorded MAP-related tasks for new programs, and for existing or reactivated programs where a new patient was commenced. Time taken (nearest 5 minutes), task type and contextual details were captured via an online survey. MAP characteristics were also recorded. Retrospective audits of pharmacy dispensing records and MAPs Teams channel (01/07/2022 to 30/06/2025) examined dispensing activity and cost avoidance for all MAPs.

Results Prospective data identified 51 new patients across 39 programs, involving 17 pharmacy staff (2 to 5 staff per program). MAPs required substantial time (mean 139 minutes per new patient). New MAPs (n=9) required longer time (mean 330 minutes per patient). Complexity was greater for non-TGA registered medicines and clinical trial labelled stock. Workflow inefficiencies were identified, especially dependency on stock arrival delaying progression of certain tasks. Retrospective data showed increasing MAP activity, from 77 programs in financial year (FY) 2022/2023 to 88 in FY 2024/2025, with a reduction in patients per program (7.1 to 6.3) and cost avoidance ($8.4 million to $6.2 million).

Discussion This study quantified MAPs-related workload, likely underestimated due to interruptions, stop–start workflows and quieter months. Increasing program numbers, fewer patients per program and lower cost avoidance suggest a shift towards more resource-intensive delivery, although cost avoidance remains substantial. These findings support improved process visibility, role clarity and increased resourcing to sustain MAP delivery.

Pharmacy Technicians Unlocking Limitless Savings! Reducing Costs Through Generic Alternatives

Akiyo Keehne[1]

[1]*NT Health Gove District Hospital Pharmacy, Nhulunbuy, NT*

EMAIL daleandakiyo@gmail.com

Background Utilising generic brand medications and sourcing alternative suppliers for non-contracted items are effective strategies for reducing costs. As the purchasing officer, the pharmacy technician is ideally positioned to identify best-value items in accordance with procurement policy. The market often offers multiple brands of the same medication from different suppliers at varying prices, with costs fluctuating frequently, necessitating ongoing review.

Objective To evaluate cost-saving opportunities through sourcing from different suppliers, use of generic brands, and selection of more economical alternatives for both scheduled and non-scheduled items.

Action Purchasing technician audited products available for substitution between 2020 and 2025. During the audit period regular price comparisons across supplier websites were performed to identify lower-cost alternatives. Where a more economical option was identified, details were recorded in a cost analysis spreadsheet. Details included monthly usage data across all affiliated hospital pharmacy sites and the unit price variation between products. This information was used to calculate potential monthly savings. Project limitations included exclusion of contracted medications, changes from room-temperature to refrigerated items, delivery timeframe constraints, and potential operational impacts associated with pack size changes.

Evaluation 147 items were identified as suitable candidates for substitution with lower-cost alternatives. Transitioning to identified products had potential to reduce medication expenditure by more than $115,900 per month.

Discussion Technicians in purchasing roles at individual sites are well positioned to identify suitable products and cost-saving opportunities locally. The savings identified in this audit support consideration of a centralised purchasing technician to oversee purchasing across the service and highlight the expanding contribution of pharmacy technicians to leadership, procurement and service improvement.

Breaking Boundaries in HIV Care: Community Pharmacy Uptake of the Queensland s100 HIV Co-payment Program

Vera Nordh[1], Neelam Mehta[1], Alistair Meldrum[1]

[1]*Princess Alexandra Hospital, Brisbane, Qld*

EMAIL Vera.Nordh@health.qld.gov.au

Background Australia's commitment to eliminating HIV transmission by 2030 relies on sustained, widespread, and equitable access to antiretroviral therapy (ART). The Queensland Government provides patients with access to fully subsidised ART through all public hospitals and registered community pharmacies. Limited awareness and participation among community pharmacies may restrict the program's reach and lead to overreliance on public hospitals for routine Pharmaceutical Benefits Scheme medication supply.

Objectives To evaluate community pharmacy awareness, uptake, and participation in the Queensland s100 HIV Co-payment Program and identify opportunities to expand community pharmacy involvement in ART provision.

Action A cross-sectional survey was conducted in April 2026 across 20 community pharmacies within a 15–20 km radius of a metropolitan hospital. The survey assessed program awareness, registration status, and barriers to participation. Pharmacies that were unaware of the program or requesting further clarification regarding operational processes were provided with targeted information.

Evaluation Of the 20 pharmacies surveyed, 12 (60%) were registered with the Queensland s100 HIV Co-payment Program. Among the eight unregistered pharmacies, six (75%) were unaware of the program and requested further information. Among registered pharmacies, seven (58%) identified a need for improved operational understanding. Only six registered pharmacies (50%) routinely stocked ART. These findings demonstrate gaps in both program awareness and potential operational readiness that directly limit timely and equitable access to ART in the community setting.

Discussion This evaluation identified an opportunity to expand community pharmacy involvement in HIV care by increasing participation in the Queensland s100 HIV Co-payment Program. Improving pharmacist knowledge of registration, medicine supply pathways, and operational processes can increase program uptake and improve timely access to ART. Establishing a network of participating community pharmacies can improve patient access to ART while reducing workload on public hospital pharmacies. This low-cost, scalable intervention can accelerate progress toward Australia's HIV elimination target.

C10

Saturday 24 October 2026, 11:40 AM – 1:06 PM

Comparative accuracy and safety of two vancomycin area-under-the-curve calculators against reference standards

John Shanks[1]

[1]*Kraken Coding, Halliday's Point, NSW*

EMAIL john@krakencoding.com

Background Australian guidelines now recommend area under the concentration–time curve (AUC)-guided vancomycin dosing, yet no AUC calculator is appropriately registered on the Australian Register of Therapeutic Goods (ARTG): available tools are unregistered or Class I (no-risk) devices. TDMx, a freely available tool that displays an on-startup disclaimer stating it is for educational and personal use only and not a substitute for clinical judgement, is anecdotally becoming a default in Australian hospitals. The accuracy and safety of these unregistered tools have not been independently compared.

Aim To compare a locally developed, regulatory-compliant vancomycin AUC calculator against TDMx for predictive accuracy and generation of physically implausible pharmacokinetic estimates.

Methods Both calculators (Goti model) were evaluated across three datasets. Phase 1 compared single-level AUC estimates against multi-level Sawchuk-Zaske reference AUCs (published Turner dataset; 76 paired levels). Phase 2 compared next-level prediction against observed concentrations (ethics-approved cohort; 110 patients). A synthetic grid of 768 steady-state profiles probed whether either tool produced physically implausible pharmacokinetic parameters. Absolute percentage variance was compared using paired t-tests.

Results For AUC estimation (Phase 1), the evaluated calculator was significantly more accurate (mean absolute variance 12.4% vs 21.5%; $p<0.001$), falling within ±20% of reference on 86.8% of cases versus 48.7%. Next-level prediction (Phase 2) was statistically equivalent (18.8% vs 18.9%; $p=0.96$). On synthetic profiles, TDMx produced physically implausible estimates in 57/768 cases (7.4%; central volume up to 1,108 L) with no warning, whereas the evaluated calculator flagged its single borderline case.

Discussion An unregistered tool in routine clinical use was at least as accurate at forecasting, less accurate at AUC estimation, and silently generated implausible pharmacokinetic values that a calculator with built-in safety controls detected. These findings highlight a regulatory and safety gap in current Australian practice and support the need for an appropriately classified, ARTG-registered AUC calculator.

Double Trouble: Pharmacist-Led Prevention of Duplicate Anticoagulant Prescribing Using a Digital Dashboard

Namita Warrior[1], Lisa Tran[1], Jonathan Shi-Jian Soon[1]

[1]*Western Health, Melbourne, Vic*

EMAIL Namita.Warrior@wh.org.au

Background Anticoagulants are high risk medications associated with significant adverse outcomes including bleeding and thrombotic complications. Duplicate anticoagulant prescribing is a critical and preventable patient safety issue. Although digital dashboards (PowerBI) enable real time detection, there is limited literature describing system level issues contributing to duplicate prescribing and the role of pharmacist-led review in preventing harm.

Objective(s) To screen for duplicate anticoagulant prescribing using digital dashboards, identify contributing workflows, and assess the impact of pharmacist intervention in preventing medication related harm.

Action (Method) A retrospective audit was conducted on adult inpatients flagged for duplicate anticoagulant prescribing through digital dashboard review from January to December 2025. Medication orders, administration times, and clinical documentation were reviewed. Duplicate therapy was defined as more than one anticoagulant that was concurrently prescribed. Cases were categorised as appropriate or inappropriate and independently reviewed by two pharmacists to minimise classification bias. Contributing factors, pharmacist interventions and outcomes were evaluated. Limitations included retrospective design, potential documentation bias, and inability to infer causality.

Evaluation In the 12-month period, forty-three patients were prescribed duplicate anticoagulants, of which thirty-seven cases were inappropriately prescribed. 19 of 37 (51.4%) inappropriate cases occurred during the transition between routes of prescribed anticoagulants. 8 of 37 (21.6%) inappropriate cases occurred when a secondary prescriber failed to recognise existing therapy when prescribing venous thromboembolism prophylaxis.

Pharmacist interventions prevented inappropriate duplicate anticoagulation being administered in 25 of 37 (67.7%) cases. Pharmacist interventions included communication to prescribers and nurses, and completing intervention notes. This demonstrates the high rate of preventable errors averted through pharmacist intervention through real time mitigation.

Discussion This audit highlights key prescribing and workflow issues contributing to duplicate anticoagulant prescribing. Findings demonstrate that pharmacist-led surveillance using digital dashboards represent a high impact medication safety strategy that can reduce anticoagulant duplication and improve patient safety.

Breaking barriers to anticoagulation stewardship in private hospitals: a novel centralised pharmacy support model

Bettina Kirk[1]

[1]*Slade Pharmacy Services, Brisbane, Qld*

EMAIL bettina.kirk@sladepharmacy.com.au

Background Anticoagulants are widely-used high-risk medicines associated with significant harm due to supra- or subtherapeutic anticoagulation. Internationally, anticoagulation stewardship (ACS) programs have improved appropriateness and decreased bleeding and thrombotic events. ACS is not yet mandated in Australia and remains variable, with implementation challenges particularly in smaller, private and regional hospitals. Barriers include restricted data access for third-party pharmacy providers, limited governance influence, and constrained dedicated resources.

Objective To establish a scalable, centralised ACS model deliverable by a private pharmacy provider across hospitals with varying case-mix and resources.

Action Following appointment of a centralised pharmacist, national and international guidance was reviewed, focussing on activities achievable by pharmacy providers. Consultation with ACS Networks and Specialty Practice Groups occurred, alongside targeted upskilling in anticoagulant pharmacology, disease states, accreditation requirements and stewardship strategies. Pharmacy-accessible data sources were assessed, and Anatomical Therapeutic Chemical (ATC) codes mapped to drugs within the inventory system.

Evaluation A three-phase program plan was developed. Phase 1 included automated Power BI reports utilising ATC mapping to identify potential duplication, prioritise clinical review and trend usage of reversal agents. An ACS Framework and intranet repository of guidelines, education and references were established. Anticoagulant intervention documentation and incident review processes were outlined, enabling cross-site trend analysis. A standardised baseline audit tool was developed, aligned to the Venous Thromboembolism (VTE) Prevention Clinical Care Standard, assessing VTE risk assessment, anticoagulation management, documentation and measurement, identifying gaps and improvement opportunities. Targeted education was prepared to support ACS integration into clinical practice.

Discussion This centralised model provides scalable ACS support for private hospitals of varying size and location. Recognising challenges of third party provider arrangements, a collaborative, supportive approach underpinned program design. Future phases include enhanced benchmarking reports, targeted education and guideline development informed by audit outcomes, and establishment of an ACS Network across the pharmacy group.

When Bleeding Meets Thrombosis: Onyx Migration After Middle Meningeal Artery Embolisation

Suzanne Olding[1], Dr Alice Ma[2]

[1]*Royal North Shore Hospital, Pharmacy Department, St Leonards, NSW,* [2]*Royal North Shore Hospital, Interventional Neuroradiology, St Leonards, NSW*

EMAIL suzanne.olding@health.nsw.gov.au

Objective Middle meningeal artery embolisation (MMAe) is increasingly utilised for chronic subdural haematoma (cSDH), where endovascular administration of Onyx (a liquid embolic agent) minimises haematoma perfusion. We report a rare case of Onyx migration into collateral vasculature and describe antithrombotic management balancing thrombotic and bleeding risk.

Clinical Features An 83-year-old male presented following a fall with multicompartmental intracranial haemorrhage [acute and chronic subdural haematoma (cSDH), subarachnoid and intraventricular haemorrhage]. Background included type 2 diabetes mellitus and hypertension. Admission was complicated by anterior ST-elevation myocardial infarction on day 9, medically managed with aspirin due to anaesthetic and bleeding risks. MMAe was performed on day 21, complicated by inadvertent migration of Onyx into the transverse venous sinus.

Literature review Cases of central venous sinus thrombosis (CVST) have been reported following Onyx migration into venous sinuses during MMAe. Standard CVST management involves anticoagulation; however, benefit is uncertain in recent intracranial haemorrhage and optimal agent and duration remain unclear.

Pharmacist Interventions, Case Progress and Outcomes Multidisciplinary risk–benefit assessment, incorporating clinical pharmacist input, informed antithrombotic strategy given high CVST risk, requirement for dual antiplatelet therapy, and cSDH rebleeding risk. Dabigatran (110 mg twice daily) was selected for predictable pharmacokinetics and reversibility. With Drug Committee approval and patient consent, dabigatran was commenced (with aspirin) on day 21, with duration guided by interval neuroimaging. CT venogram on day 28 showed patent venous sinuses without thrombosis, allowing stepdown to enoxaparin (40 mg daily). Clopidogrel was introduced after bleeding risk stabilised. No haemorrhagic progression occurred and the patient was discharged to rehabilitation.

Discussion This case highlights Onyx migration as a complication of MMAe and adds to limited evidence guiding antithrombotic management. Short-term anticoagulation guided by neuroimaging and staged antiplatelet introduction enabled balancing of thrombotic and haemorrhagic risk, highlighting the pharmacist's role in therapeutic decision-making when deviating from guideline-based care.

Timely, not time-based, updates to Therapeutic Guidelines: Diabetes; piloting a signal-driven guideline update model

Brad Eaden

[1]*Therapeutic Guidelines Limited, Melbourne, Vic*

EMAIL beaden@tg.org.au

Background Therapeutic Guidelines (TG) has long updated its guidelines on a time-based schedule (approximately every 4 years); however, there have been increasing challenges with this model from a relevance and sustainability perspective. In 2025, TG undertook research using product-led thinking to design a new signal-driven updating model that would better meet the needs of users. The Diabetes guidelines were identified as suitable for piloting the new model due to the rapid pace of evidence and practice change in this area.

Objective To implement and evaluate a signal-driven guideline update model for the Diabetes guidelines that delivers timely, clinically relevant updates earlier than the traditional publishing model.

Action Signals for change were identified with active and passive monitoring, including expert review, updates to drug subsidy and regulatory listings, safety alerts, revisions to national diabetes guidelines and user feedback. Signals were prioritised based on impact on clinical practice, relevance to TG's target audience, and topic usage data. Higher-priority signals progressed earlier in the project. Digital content delivery supported granular updates, with a new user interface to communicate guideline changes at the point of care.

Discussion Signals progressed for publication within 6 to 12 months of project commencement include periprocedural management of incretin-based therapy, kidney function thresholds for diabetes drugs, drug availability changes, and type 2 diabetes management in adults. These examples demonstrate how continual signal monitoring with dynamic prioritisation supports more responsive updates to clinically significant, practice-changing content relevant to pharmacist decision-making.

Evaluation The signal-driven publishing model is enabling delivery of priority updates to the Diabetes guidelines within 12 months of project commencement, representing a time gain of at least 12 months compared with the traditional publishing pipeline. This improvement demonstrates enhanced timeliness and efficiency in updating high-impact clinical content. User value will be evaluated through engagement with a Customer Advisory Group.

When less isn't more: A multi-site retrospective analysis of reduced-dose apixaban prescribing

Kaitlyn Campbell[1], Ashleigh Lawrence[1], Grace Lenaghan[2], Aaron Stockwell[2], Matthew Schmidt[2], Dr Jasmine Singh[3], Dr Andrew Stafford[4], Dr Katherine Creeper[5,6]

[1]*Pharmacy Department, Fiona Stanley Hospital, Murdoch, WA,* [2]*Pharmacy Department, Sir Charles Gairdner Hospital, Nedlands, WA,* [3]*Haematology Department, Fiona Stanley Hospital, Murdoch, WA,* [4]*Curtin School of Diagnostic and Therapeutic Sciences, Curtin University, Bentley, WA,* [5]*Haematology Department, Sir Charles Gairdner Hospital, Nedlands, WA,* [6]*Haematology Department, PathWest Laboratory Medicine, Nedlands, WA*

EMAIL he237721@health.wa.gov.au

Background Inappropriate apixaban dosing is linked to unfavourable outcomes, but its prevalence remains poorly understood. While reduced-dose apixaban is intended for patients meeting specific dose-reduction criteria, real-world prescribing suggests the distinction between appropriate and potentially inappropriate dosing is often unclear in complex populations.

Objective To evaluate the prevalence of potentially inappropriate apixaban 2.5 mg prescribing across two Australian tertiary hospitals.

Method A multi-site retrospective audit was conducted at two metropolitan tertiary hospitals in Western Australia. Adult inpatients dispensed 2.5 mg apixaban between January 2023 and December 2024 were identified via pharmacy records. Patient demographics, anticoagulation indication, body weight, bleeding history and laboratory results were extracted from medical records. Prescribing appropriateness was assessed against guideline criteria, with statistical analysis performed.

Results Across both hospitals, 555 patients were dispensed apixaban 2.5 mg, with comparable demographics between sites (mean age 79 years, standard deviation [SD] 12.6) at Site 1 vs 75 years [SD 13.0] at Site 2; females 49.2% vs 41.6%).

Among 195 patients newly initiated for non-valvular atrial fibrillation (AF), mean CHA_2DS_2-VA and HAS-BLED scores were 3.8 (SD 1.5) and 2.6 (SD 1.2), respectively. Site 1 accounted for 128 patients (66.0% of the cohort) and had higher mean risk scores (CHA_2DS_2-VA 4.0 vs 3.4, p=0.004, and HAS-BLED 2.7 vs 2.5, p<0.040).

Overall, 77 patients (39.5%) received a potentially inappropriate reduced dose, with similar rates between sites (41.4% vs 35.8%, p=0.54). Potentially inappropriate dosing was also observed in acute venous thromboembolism (VTE) treatment (19 and 28 patients at Sites 1 and 2).

Discussion More than one third of patients initiated on apixaban 2.5 mg received potentially inappropriate doses. Rates were similar across both hospitals, suggesting consistent prescribing patterns. These findings highlight the need for enhanced clinician education and targeted stewardship interventions to optimise patient safety, as well as further research into factors influencing prescribing decisions.

Methoxyflurane use in the emergency department: a more environmentally friendly alternative to nitrous oxide

Gabrielle Stanley[1], Dina Azeez[2], Georgia Buckle[2], Dominic Tsui[2], Hao Yi (Kelly) Wong[2], Sihan (Hanna) Zhou[2], Zulal Uzunbay[1], Ruth Colley[1], Andrew Harding[1,3], Prof. Simone Taylor[1,3]

[1]Austin Health, Heidelberg, Vic, [2]Monash University, Parkville, Vic, [3]University of Melbourne, Parkville, Vic

EMAIL Gabrielle.STANLEY@austin.org.au

Background Nitrous oxide (N_2O) has been widely used in emergency departments (EDs) but contributes significantly to healthcare-related global warming emissions. Leakage from ageing reticulated pipes is well-documented. Methoxyflurane (Penthrox®), a fast-acting, patient-controlled inhaled analgesic may be an alternative to N_2O with reduced environmental impact.

Aim To describe methoxyflurane use following implementation of an ED guideline and quantify the environmental impact for indications where N_2O would have been used previously.

Methods A 12-month retrospective, observational study of methoxyflurane use was undertaken in an adult/paediatric ED. Patients were included if they received at least one methoxyflurane dose. Data were extracted from electronic medical records. Environmental impacts of methoxyflurane and N_2O were estimated using published carbon dioxide equivalent (CO_2e) emissions estimates.

Results A total of 508 methoxyflurane doses were administered to 497 patients. The most common methoxyflurane indications were reduction and relocation of limb fractures (276, 55.5%), splint application (72, 14.5%), and wound management (54, 10.9%). Patient ages were 2–95 years (20.9% were <18 years). Methoxyflurane was an effective analgesic (11 (2.2%) patients needed 'rescue' N_2O) and was well tolerated (15 (3.0%) patients had self-limiting adverse effects documented). Methoxyflurane was associated with a reduction of 48.7 tonnes of CO_2e compared to equivalent doses of N_2O, which is comparable to driving a petrol car 2.0×10^5km or circumnavigating Australia over 13 times.

Discussion Methoxyflurane is an effective, well-tolerated, environmentally friendly alternative to N_2O for acute and procedural analgesia in the ED. It is suitable across a wide age range; however patients need to be able to inhale from the device, limiting use in very young or elderly patients and those with cognitive impairment. Retaining the leaking piped N_2O systems may offset potential environmental benefits from switching to methoxyflurane. For patients unable to use methoxyflurane, decommissioning piped N_2O in favour of portable cylinders should be considered.

Economic Impact of Pharmacist-Led Clinical Interventions in a Cardiac Intensive Care Unit

Meng Lim[1], Viviane Khalil[1]

[1]Monash Health, Melbourne, Vic

EMAIL lmcmel@gmail.com

Background Pharmacists play a crucial role in optimizing medication therapy and reducing adverse drug events (ADEs) in the intensive care unit(ICU). Despite their recognized clinical contributions, there is limited evidence on the economic impact of their interventions, particularly in Australian healthcare settings.

Aim/Objective(s) The study aimed to assess the economic impact of pharmacist-led clinical interventions in a cardiac ICU, focusing on physician acceptance rates, cost savings, cost avoidance, and the overall financial benefit.

Methods A retrospective analysis was conducted in a 16-bed cardiac ICU over a 10-month period (March–December 2023). Pharmacist interventions were extracted from the electronic medication record, including all accepted interventions and excluding those proposed but not accepted interventions. Cost savings were calculated by comparing the wholesale cost of prescribed medications with pharmacist-recommended alternatives. Cost avoidance was estimated using the Nesbitt method, assuming each prevented ADE would extend ICU stay by two days. The benefit-to-cost ratio (BCR) was calculated by comparing total economic benefits with the annual salary of a clinical pharmacist. Ethics approval was obtained.

Results A total of 3,316 interventions were recorded, with a physician acceptance rate of 94%. Annual cost savings amounted to AU$26,273, while cost avoidance from prevented ADEs was AU$13,507,740. The total economic benefit was AU$13,534,013, yielding a BCR of 50:1, meaning every AU$1 invested in a clinical pharmacist generated AU$50 in economic benefit.

Discussion Pharmacist-led clinical interventions in the cardiac ICU contribute significantly to cost containment and patient safety. The high acceptance rate, substantial cost avoidance, and favourable BCR emphasize the value of integrating pharmacists into ICU care. These findings support continued investment in clinical pharmacy services in critical care.

Are decision support tools enough? Evaluating the accuracy of gentamicin dosing in the Emergency Department

Yuzhou Ma[1], Ian Fong[1], Daniel Chieng[1]

[1]*Pharmacy Department, Prince of Wales Hospital, Sydney, NSW*

EMAIL yuzhou.ma@health.nsw.gov.au

Background Gentamicin is an antibiotic with a narrow therapeutic index, requiring accurate dosing to minimise treatment failure, toxicity, and antimicrobial resistance. The Gentamicin Dose Advisor (GDA) is a validated decision-support tool integrated in Cerner PowerChart to support gentamicin prescribing, updated in 2025 to align with the Therapeutic Guidelines practice changes. Doses are based on lean body weight and allow prescribers to select one of the following options: 7 mg/kg if CrCl>60 mL/min, (patient has septic shock or requiring ICU support); 5 mg/kg if CrCl 40–60 ml/min and 4 mg/kg if CrCl<40 mL/min.

Objective(s) To evaluate concordance between prescribed gentamicin doses and GDA recommended doses in the Emergency Department (ED) of a tertiary metropolitan hospital.

Action (Method) A retrospective audit of adult ED presentations was undertaken in December 2025. GDA doses (rounded down to the nearest 20 mg) were assessed against the prescribed dose and considered inappropriate if differing by >20 mg. Discrepancy error types were investigated.

Evaluation The GDA was used in 98% (n=106/108) of cases. Gentamicin was appropriately dosed in 55% (n=59/108) of cases. 35% (n=38/108) were underdosed with a median deviation of 26% (IQR 22–33%) while 10% (n=11/108) were overdosed with median deviation of 41% (IQR 31–44%).

The most common source of error was incorrect dose option selected, accounting for 84% (n=41/49) of inappropriate cases. Breaking this down, this accounts for 92% (n=35/38) of inappropriately underdosed patients and 55% (n=6/11) of inappropriately overdosed patients. 12% (n=6/49) of cases had selected the correct dosing option in the GDA yet were inappropriately dosed with no documented rationale.

Discussion Despite the regular use of GDA, 45% were still inappropriate predominantly due to incorrect dosing option selection. This highlights the need to better understand prescribers' behaviours and how they use the GDA. Targeted prescriber education and optimising the design of decision support tools may improve dosing accuracy.

Pharmacist-Led Interventions and Clinical Outcomes in Adult ECMO Patients: A Retrospective Cohort Study

Dr Farzaneh Dastan[1], Dr Brendan Murfin[2], Viviane Khalil[1]

[1]*Pharmacy Department, Victorian Heart Hospital, Monash Health, Melbourne, Vic, Australia,* [2]*Intensive Care Unit, Victorian Heart Hospital, Monash Health, Melbourne, Vic, Australia,* [3]*Pharmacy Department, Victorian Heart Hospital, Monash Health, Melbourne, Vic*

EMAIL farzaneh.dastan@monashhealth.org

Background Extracorporeal membrane oxygenation (ECMO) is a life-saving therapy associated with complex pharmacokinetic changes and increased risk of adverse events. Quantitative evidence describing the impact of pharmacist-led interventions in ECMO patients remains limited.

Aim To characterise pharmacist-led interventions and evaluate their association with clinical outcomes in adult intensive care unit (ICU) patients receiving ECMO.

Methods This multi-centre retrospective cohort study included adult ICU patients supported with venoarterial (VA) ECMO between March 2023 and May 2025 with documented pharmacist-led interventions. Patients with ECMO duration <24 hours or incomplete records were excluded. The primary outcome was the frequency and acceptance of pharmacist-led interventions. Intervention intensity was defined as interventions per ECMO day and within the first 72 hours. Descriptive statistics summarised patient characteristics and intervention data. Associations between intervention intensity and clinical outcomes were explored using risk ratios (RR) with 95% confidence intervals (CI) and Fisher's exact test. Limitations related to retrospective design and documentation variability were acknowledged.

Results A total of 39 patients were included. Overall, 364 pharmacist-led interventions were recorded, with a median of 7 per patient (interquartile range [IQR] 2–14); 65.7% were accepted. Common interventions included medication optimisation, anticoagulation management, antimicrobial stewardship, and therapeutic drug monitoring. Median intervention intensity was 3 per ECMO day. Higher intervention intensity (>3.0 interventions per ECMO day) was associated with lower ICU mortality (15.4% vs 37.5%; RR 0.41, 95% CI 0.10–1.70; p=0.238), although not statistically significant. No clear associations were observed with other clinical outcomes, including bleeding, thrombosis, acute kidney injury, hepatic injury, or ventilator-associated pneumonia.

Discussion Pharmacists delivered frequent, commonly accepted interventions in ECMO patients. Higher intervention intensity showed a potential association with reduced ICU mortality, although not statistically significant. These findings provide multi-centre evidence supporting pharmacist integration into ECMO multidisciplinary teams and highlight the need for prospective studies.

Improving medication safety at critical care transitions through a novel ICU outreach pharmacist service

Allie Yang[1], Namita Warrior[1], Ashlei Mornement[1]

[1]*Western Health, St Albans, Vic*

EMAIL allie.yang@wh.org.au

Background Transitions from intensive care units (ICUs) to wards are high risk for medication related harm due to complex therapy changes and care handover. Common issues include failure to restart home medications, discontinue ICU only therapies and optimise treatment following clinical change. Ward pharmacist review of these patients is often delayed due to competing clinical priorities. An ICU outreach pharmacist service may improve medication safety by facilitating earlier identification and resolution of medication related problems (Ps)

Aim/Objective(s) To evaluate the impact of an ICU outreach pharmacist on timeliness of medication chart review and identification and resolution of Ps following ICU discharge.

Methods A prospective audit was conducted over 6 months. Patients discharged from ICU and listed for ICU liaison nurse review were reviewed by an ICU outreach pharmacist on the ward. Data collected included time to first medication chart review, Ps identified, pharmacist recommendations and medical acceptance of recommendations. Time to first chart review was compared before (n=40 patients) and after service implementation (n= 45 patients, 60 reviews). Recommendations were independently classified by two pharmacists for clinical significance using the Alderman tool.

Results Median time to first chart review post ICU discharge decreased from 119.1 hours (IQR 44.5–198.7) to 20.7 hours (IQR 15.1–24.8; $p < 0.05$). A total of 156 Ps identified, with 46.8% categorised as moderate or major clinical significance. Common themes included antimicrobial optimisation, anticoagulation management and antihypertensive review. Medical acceptance and implementation of recommendations within one business day was 82.5%.

Discussion The ICU outreach pharmacist service enabled earlier medication review and resolution of clinically significant Ps. High acceptance of recommendations demonstrates the value of ICU outreach pharmacist collaboration during transitions of care and its potential to reduce medication related harm after ICU discharge.

Navigating TPN Dead Ends: Omegaven® Monotherapy for an Adult with Soy Allergy

Kirsten McAtamney[1], Komal Lodhia[1], John Lu[1]

[1]*Prince Of Wales Hospital, Randwick, NSW*

EMAIL kirsten.mcatamney@health.nsw.gov.au

Objective To describe pure fish oil lipid emulsion (Omegaven®) as lipid monotherapy in an adult patient with soy allergy requiring extended parental nutrition (PN) and highlight the pharmacist's role in facilitating safe administration.

Clinical Features A 36-year-old female with malnutrition and gastroparesis of unknown cause was admitted for weight optimisation with PN via a double-lumen central catheter to enable further medical therapies. Her baseline weight was 43 kg, and she had multiple allergies including dairy, soy, and gluten. Her soy allergy precluded use of standard lipids in PN solutions.

Literature Review Soy-based intravenous lipid emulsions (ILE) (Intralipid®, ClinOleic®, SMOFlipid®) are dense PN energy sources. Pure fish oil ILE (Omegaven®) was identified as the only soy-free option, available via Special Access Scheme. Omegaven® New Zealand Product Information (PI) indicates combination use with other ILE for up to 4 weeks, while USA PI has no use data for adults.

Pharmacist Interventions, Case Progress and Outcomes The pharmacist collaborated with gastroenterology and dietetics to structure therapy. The patient commenced a lipid-free PN solution, with Omegaven® administered separately via the second lumen due to insufficient evidence to support admixture. Omegaven® was initiated at the PI-recommended maximum of 2 mL/kg and titrated as weight increased. The pharmacist sourced 1.2-micron filtered lines, advised prescribing, provided education to staff and patient, and coordinated supply and transition to Home PN. Over six months on Home PN, the patient's weight increased to 51.8 kg with normal hepatic and lipid profiles. Mild pancytopenia from folate and B12 deficiencies was managed by sourcing a soy-free multivitamin.

Discussion This case demonstrates Omegaven® monotherapy may be a viable alternative for adults with soy allergies requiring long-term PN. Pharmacists are vital in managing off-label use, navigating data gaps, and ensuring safe prescribing and administration. Developing local allergy-specific PN protocols with Dietetics input will support safer future practice.

A Perfect Storm: Management of severe hyperinflammation and microangiopathy in dermatomyositis through coordinated immunomodulation

Anna Mejia[1], Ngoc Hoan Dang[1], A/Prof Stephen Ting[2], Dr Tamara Marconi[2,3], Dr Zachray Wei[2]

[1]Eastern Health Pharmacy Program, Melbourne, Vic, [2]Eastern Health Cancer Services, Melbourne, Vic, [3]Alfred Health Haematology, Melbourne, Vic

EMAIL Anna.Mejia@easternhealth.org.au

Objective Secondary haemophagocytic lymphohistiocytosis (HLH) is a life-threatening hyperinflammatory syndrome that may progress to multiorgan failure. This case will highlight the therapeutic challenges of concurrent HLH and complement-mediated thrombotic microangiopathy (TMA) in dermatomyositis, and the role of coordinated immunomodulatory therapy.

Clinical Features A 33-year-old female presented to the intensive care unit with fevers, rash and myalgia. She then rapidly developed pancytopenia and hyperferritinaemia (14,600µg/L). HLH was diagnosed secondary to melanoma differentiation-associated gene 5 (MDA5) dermatomyositis, a rare autoimmune condition. The condition progressed into shock and altered consciousness, requiring mechanical ventilation. A second complication, complement-mediated TMA with anaemia, thrombocytopaenia and acute kidney failure, emerged by week two.

Literature review Evidence guiding immunosuppressive sequencing in overlapping HLH and TMA remains limited to case reports, particularly with concurrent severe infection. Described treatments include IL-1 blockade, JAK inhibition, interferon-gamma neutralisation and complement inhibition, with ferritin and soluble CD25 used as biomarkers to guide escalation and response.

Pharmacist Interventions, Case Progress and Outcomes Eculizumab (complement inhibitor) was initiated for TMA, escalated to 900 mg twice weekly, then transitioned to the maintenance regimen. For refractory HLH, the pharmacist recommended switching anakinra (IL-1 blocker) from subcutaneous to intravenous administration to optimise bioavailability in critical illness, with dose escalation from 100 mg to 300 mg twice daily. Renal dose adjustments were guided by pharmacists, including cyclophosphamide and ruxolitinib (JAK inhibitor) on continuous renal replacement therapy. Additionally, the pharmacist coordinated compassionate access to emapalumab (interferon-gamma inhibitor), providing literature support for dose escalation and advising plasmapheresis effects on drug clearance. Subsequently, ferritin improved from 14,600 to 7,267 µg/L over 11 weeks, enabling repatriation to her home country for ongoing care.

Discussion This case demonstrates the pharmacist role in rare, high-acuity disease: optimising pharmacokinetics in critical illness, navigating compassionate access, adjusting for organ impairment and synthesising evidence to enable safe delivery of complex off-label treatments.

Optimising Activity Based Funding Through Reclassification of Cancer Pharmacy Services

Ivan Lai[1]

[1]Prince of Wales Hospital, Randwick, NSW

EMAIL teckvuilai@gmail.com

Background Cancer pharmacy services at a tertiary metropolitan hospital were historically captured under Tier 2 40.52 Oncology for Activity Based Funding (ABF). This classification did not adequately reflect pharmacist-led activities, including medication review, counselling, interventions and medicines information. As a result, cancer pharmacy activity was under-represented, limiting funding optimisation, service visibility and workforce planning.

Objective To reclassify non-admitted cancer pharmacy activity to Tier 2 40.04 Clinical Pharmacy to optimise ABF, improve visibility of clinical activity and generate data to support workforce planning.

Action Following review of the Tier 2 definitions and an audit of activity captured in MOSAIQ (oncology E), pharmacy partnered with performance unit data analysts and the data manager to review coding. A multidisciplinary working group identified that a new Health Establishment Registration Online identifier mapped to Tier 2 40.04 Clinical Pharmacy was required. MOSAIQ documentation workflows were revised and standardised to capture medication review, counselling, interventions and medicines information. Standardised coding guidance and staff training were implemented to improve consistency of data capture.

Evaluation Following reclassification in April 2026, activities previously unable to be captured under 40.52 Oncology, including medication review, counselling, clinical interventions and medicines information, were routinely recorded, with medication review accounting for approximately 80% of activity. Under 40.52 Oncology, activity increased from 10.3 NWAU ($53,632) in FY2023/24 to 36.0 NWAU ($204,300) in FY2024/25. Following implementation of 40.04 Clinical Pharmacy, 34.2 NWAU ($208,145) were generated in the first month alone.

Discussion Reclassification from Tier 2 40.52 Oncology to 40.04 Clinical Pharmacy decisively improved ABF and visibility of pharmacist activity. This reclassification, together with capturing additional activities in MOSAIQ, provides an accurate representation of cancer pharmacy services and directly strengthens workforce planning. The initiative is reproducible across services with targeted system configuration, disciplined workflow redesign, performance unit leadership and tight multidisciplinary collaboration.

Developing a Cancer Clinical Educator Model: A Multi-Site Initiative

Paul Firman[1,2,3], Kate Ross[1,2], Sophie Alexander[4]

[1]Royal Brisbane and Women's Hospital Pharmacy Department, Brisbane, Qld, [2]Cancer Care Services, Metro North Health, Brisbane, Qld, [3]University of Queensland, School of Pharmacy, Brisbane, Qld, [4]Princess Alexandra Hospital Pharmacy Department, Brisbane, Qld

EMAIL paul.firman@health.qld.gov.au

Background Cancer pharmacy services in hospital and health services are increasingly complex, driven by rapidly evolving systemic therapies and high-risk treatment pathways. Without a dedicated cancer-specific clinical educator, services commonly face inconsistent onboarding, fragmented education delivery, and incomplete alignment with Advanced Pharmacy Australia (AdPha) training frameworks. A formal re-scoping process identified a need for clearer governance, defined role boundaries, and coordinated workforce capability development.

Objectives To further develop and implement a cancer clinical educator role delivering structured onboarding, coordinated education, and competency-based training across a multi-site health service, while establishing foundations for a collaborative cancer pharmacy education network.

Method A structured needs assessment defined role priorities across four domains: (1) standardised cancer-specific onboarding and competency assessment; (2) coordinated education across all pharmacist career stages; (3) integration with quality, digital, and medication safety initiatives; and (4) professional development. Stakeholder mapping clarified roles and minimised duplication. A centralised education portfolio and training calendar enabled equitable, site-agnostic access. Initiatives included structured mentorship; targeted clinical and operational oncology education; competency assessment using nationally recognised tools; and research involvement to support undergraduate pharmacists and those undertaking AdPha credentialing. A collaborative pharmacy cancer education network was also initiated to support future statewide alignment.

Evaluation Early evaluation encompassed onboarding consistency, competency attainment, residency engagement, and stakeholder feedback. Early outcomes demonstrated improved baseline capability across sites, reduced onboarding variability, and strengthened support for complex oncology practice.

Discussion This initiative addresses a critical gap in specialised oncology pharmacy education across health services. By embedding governance, standardisation, and cross-site collaboration, the model supports sustainable workforce development, enhances medication safety, and provides a scalable framework applicable to cancer pharmacy services more broadly.

Case Report: A rare case of Triple M syndrome following an Immune Check Point Inhibitor

Helena Vomvellis[1], Geoff Wills[1], Rayan Nahas[1], Sara Guirguis[1], Kim Teh[1], Prof Winston Liauw[1]

[1]St George Hospital, Sydney, NSW

Objective To describe an early-onset severe case of pembrolizumab-induced Triple M syndrome (myocarditis, myositis, and myasthenia gravis-like disease). This case emphasises the complexity of managing this rare immune-related adverse event, including aggressive immunosuppression, and highlights the clinical pharmacist's role in optimising care.

Clinical Features A 77-year-old male with metastatic colorectal adenocarcinoma presented with blurred vision, neck pain, and myalgia four weeks after a single dose of pembrolizumab. Examination revealed bilateral ptosis, diplopia, head-drop neck weakness, proximal limb weakness, and exertion dyspnoea. ECG abnormalities with troponin >1000 ng/L and creatine kinase >4000 U/L raised suspicion for pembrolizumab-induced Triple M syndrome.

Literature review Only five cases of Triple M syndrome have been reported in the Database of Adverse Events Notifications, supporting that it is a rare life-threatening condition and carries an in-hospital mortality approaching 40%. Evidence supports high-dose corticosteroids for myocarditis, with intravenous immunoglobulin and pyridostigmine for myasthenia gravis. In corticosteroid-refractory disease, second-line immunosuppression may be required, with reports describing abatacept and ruxolitinib use.

Pharmacist Interventions, Case Progress and Outcomes Initial management included high-dose methylprednisolone pulses followed by oral prednisolone. Intravenous immunoglobulin and mycophenolate were added for clinical deterioration despite biochemical improvement. Escalation to abatacept and ruxolitinib was required via compassionate-access pathways. Pyridostigmine was introduced for persistent ocular symptoms. The pharmacist facilitated medication access via individual patient use pathways, performed dose calculations, ensured infusion safety, screened interactions, monitored for toxicity, recommended antimicrobial prophylaxis, reported the rare adverse event to the Therapeutic Goods Administration, and provided patient education. The patient stabilised and was discharged with a tapering immunosuppression plan.

Discussion This case highlights Triple M syndrome as a rare but high-risk immune-related adverse event requiring dynamic, individualised management. Pharmacist contributions are integral in bridging these gaps, particularly in facilitating access to emerging therapies and supporting safe immunosuppressive use.

Pharmacist-Led Clinic: Impact on Medication Safety and Transitions of Care in Bone Marrow Transplant Patients

Dr Karim Ibrahim[1,2,3], Peter Samios[1,2], Dr Barbara Withers[1,3], Annabel Horne[1], Simone Jensen[1], Phoebe Jeffery[1], Nabin Karki[1,3], Mao-Mao Yu[1,2], Amit Sen[1], Dr Bashar Alani[1,3], Dr Krista Appadoo[1], Ellie Payne[1,2], Alexander Capraro[4], Dominic Roue[1,2], Juliet Ho[2], Sandunika Warnakulasuriya[2], Dr Geeta Sandhu[2,5], Zainab Reslan[2], Doha Elgundi[2]

[1]*The Kinghorn Cancer Centre, St Vincent's Hospital Sydney, Darlinghurst, NSW,* [2]*Pharmacy Department, St Vincent's Hospital Sydney, Darlinghurst, NSW,* [3]*School of Medicine and Health, University of New South Wales, Kensington, NSW,* [4]*Quality, Performance and Improvement Directorate, St Vincent's Health Network Sydney, Darlinghurst, NSW,* [5]*School of Pharmacy, Faculty of Medicine and Health, The University of Sydney, Camperdown, NSW*

EMAIL karim.ibrahim@svha.org.au

Background Medication-related problems are common in blood and marrow transplantation (BMT) due to complex polypharmacy, frequent dose changes, and multiple transitions of care. To improve medication safety, a pharmacist-led outpatient clinic was established in May 2025.

Objectives To describe services delivered by the outpatient pharmacy clinic, quantify pharmacist interventions, and evaluate early service outcomes.

Method A prospective service evaluation was conducted for all patients attending the BMT outpatient pharmacy clinic between 30 May 2025 and 30 May 2026. Data collected included clinic activity, medication reconciliation, allergy documentation, and pharmacist interventions. Interventions were categorised as medication optimisation, protocol-directed therapy additions, therapeutic drug monitoring (TDM) guided dose adjustments, and chemotherapy dose optimisation. A pre-post service analysis was conducted to evaluate whether the introduction of the BMT pharmacy clinic was associated with changes in length of stay (LOS) and clinical incidents among BMT patients.

Evaluation Ninety seven patients attended 153 outpatient visits, including 28 autologous transplant recipients, 67 allogeneic transplant recipients, and 2 CAR T-cell recipients. Medication reconciliation and allergy documentation were completed for 100% of visits. A total of 183 pharmacist interventions were recorded, of which 161 (88%) were accepted by the treating team.

In the pre-post analysis of BMT admissions over a 10-month period, BMT pharmacy clinic implementation was associated with a reduction in mean LOS from 27.7 to 25.3 days (-2.4 days), equating to an estimated 252 bed days saved. Harm incidents decreased from 557 to 417 per 1,000 separations. Falls accounted for the largest reduction among incident types (15 vs 8 incidents). However, these differences were not statistically significant.

Discussion The pharmacist-led outpatient BMT clinic enhanced medication safety, supported medication optimisation and transitions of care. Early findings suggest potential benefits in reducing LOS and patient safety incidents, supporting ongoing integration of outpatient clinical pharmacy services within the transplant service.

Expanding Transplant Access: Daratumumab Desensitisation in a Paediatric Cardiac Patient

Annamika Aswani[1]

[1]*The Royal Children's Hospital, Melbourne, Vic*

EMAIL annamika.aswani@rch.org.au

Objective To evaluate daratumumab for desensitisation in a highly sensitised paediatric cardiac transplant candidate and its implications for pharmacist-led protocol development.

Clinical Features A 7-year-old female with complex congenital heart disease was referred for cardiac transplant assessment following deterioration and limited surgical options. Workup identified sensitisation, with panel reactive antibody (PRA) 89% and multiple class I and II human leukocyte antigen antibodies, limiting donor compatibility and necessitating desensitisation.

Literature review Daratumumab, an anti-CD38 monoclonal antibody, is increasingly used for transplant desensitisation via plasma cell-depleting effects. Paediatric evidence remains limited, with practice extrapolated from small studies and adult protocols. Emerging data suggest promising outcomes compared with traditional strategies.

Pharmacist Interventions, Case Progress and Outcomes A pharmacist co-developed a desensitisation protocol incorporating daratumumab, intravenous immunoglobulin, and rituximab, guided by literature and external experience, supporting development of a protocol to support future patients. Rituximab was ceased early due to an adverse reaction.

Contributions included dose verification, dilution, and sterile manufacturing processes. Due to fluid restriction and infusion reaction risk, a split-dose strategy of two consecutive 500 mL infusions was implemented. Infusion rates, monitoring, and diuretic timing were established.

Premedication and post-infusion corticosteroid strategies were implemented, alongside prolonged antimicrobial, antiviral, and antifungal prophylaxis. Nursing education supported early recognition and escalation of infusion reactions.

Following three cycles of three doses (nine total doses), treatment was well tolerated. PRA decreased from 89% to 70.5%, improving donor compatibility and expanding access.

Discussion This case highlights challenges in highly sensitised paediatric transplant candidates and limitations of conventional desensitisation strategies. Daratumumab represents an emerging option with growing evidence supporting its role as a key component of desensitisation protocols.

Pharmacist involvement was critical to safe implementation, protocol development, and prevention of complications. This case demonstrates the feasibility of pharmacist-led desensitisation protocols and their potential application in broader paediatric transplant populations.

Consumer-Led Medication Safety Champion Program to Improve Incident Reporting Culture

Ashleigh Lawrence[1], Angela Cheaib[1], Robyn Wright[2]

[1]Pharmacy Department, Murdoch, WA, [2]Consumer Advisory Council, Murdoch, WA

EMAIL ashleigh.lawrence@health.wa.gov.au

Background Medication incident reviews are essential for improving patient safety; however, traditional approaches often emphasise errors rather than recognising high-quality reporting. This can contribute to a reactive or blame-focused culture and limit engagement from frontline staff. A need was identified to enhance reporting culture through positive reinforcement and meaningful consumer involvement.

Objective(s) To implement and evaluate a consumer-led recognition initiative aimed at improving medication incident reporting culture, increasing staff engagement, and strengthening consumer participation in medication safety governance.

Action (Method) A quality improvement initiative was implemented over six months using a Plan–Do–Study–Act approach. A consumer representative was partnered with a medication safety committee to review high-risk medication incidents monthly. One to two exemplary incident reports were identified based on predefined criteria. Personalised commendation emails were sent to reporting staff and their managers to acknowledge high-quality reporting. Feedback was collected from committee members via survey to assess cultural impact, consumer involvement, and perceived value of the initiative.

Evaluation Survey responses (n=11) indicated unanimous agreement that the initiative improved the incident review culture and enhanced the visibility and empowerment of the consumer representative. Participants reported stronger collaboration between consumers and clinicians. Qualitative feedback suggested that recognition improved staff morale, engagement, and motivation to report incidents. All respondents supported continuation or expansion of the program.

Discussion A consumer-led recognition model can positively shift incident reporting culture from reactive to supportive by reinforcing learning and acknowledging excellence. This initiative demonstrates the value of consumer partnerships in medication safety governance and highlights a scalable approach to improving engagement and transparency. Future directions include formalising selection criteria, expanding the program to other committees, and collecting structured outcome data to support sustainability.

Patient self-recorded medication histories at hospital admission

Silvia Chan[1], Karly Forster[1], Brooke Bullock[1], Adj A/Prof Laetitia Hattingh[1], Sarah Stewart[1], Corrine Steadman[1]

[1]Gold Coast Health and Hospital Service, Qld

EMAIL silvia.chan@health.qld.gov.au

Background Accurate medication histories at hospital admission are essential for patient safety. Best Possible Medication Histories (BPMHs) are traditionally obtained through verbal patient interviews conducted by pharmacists and, in some hospitals, trained pharmacy assistants under supervision. However, this process can be time-consuming for pharmacy staff, and strategies to improve efficiency are needed. Studies from Australia and overseas have suggested that patient-recorded medication history tools may support this process, but evidence is limited outside emergency settings, and few tools have been co-designed with consumers.

Aim To develop and evaluate a Patient Recorded Medication List at Admission (PRMLA) form that enables patients and carers to self-record medicines and supports the medication reconciliation process.

Methods A cross-sectional pilot study was conducted in general medical and surgical wards. The PRMLA was co-designed using evidence from published studies, an existing pre-operative assessment questionnaire, and consumer feedback. Eligible patients were identified using a pre-screening tool. Patients completed the PRMLA before a pharmacy staff conducted a BPMH. Discrepancies between the PRMLA and pharmacy-led BPMH were analysed. Patient and staff feedback surveys were used to evaluate the usability of the form and gather feedback on its use.

Results Fifteen eligible patients were recruited using a pre-screening tool, with 11 completing the PRMLA and seven providing feedback. Comparison with pharmacy-led BPMHs identified at least one discrepancy per patient, most commonly omissions of non-prescription and as-needed medicines. Patients and staff stated that the PRMLA was easy to use, suitable for hospital use, and improved patient engagement. Staff reported potential time savings and workflow benefits, although pharmacy verification remained essential.

Discussion The PRMLA was feasible and well accepted, demonstrating potential to support pharmacy assistants and pharmacists while complementing existing BPMH processes. Future research should evaluate its impact on efficiency and usability in larger studies and explore digital adaptation for broader implementation.

First Nations patient medication-related transitions of care: qualitative study of patient and health professional perspectives

Prof. Simone Taylor[2,5], Bryony Forrest[1], Theresa Pham[1], Maddison Hands[1], Yasmin Fadavi Firooz[1], Wendy Brooke[2], Danella Webb[2,3], Dr Celene Yap[4,5], Susan Bury[2], Parna Khuon[2], Dr Vincent Chan[1],

[1]RMIT University, Bundoora, Vic, [2]Austin Health, Heidelberg, Vic, [3]Northern Health, Mernda, Vic, [4]National Ageing Research Insitute, Parkville, Vic, [5]University of Melbourne, Parkville, Vic

EMAIL simone.taylor@austin.org.au

Background First Nations peoples in Australia experience significant health inequities, exacerbated during care transitions. The Closing the Gap (CTG) Pharmaceutical Benefits Scheme co-payment program aims to improve medication access.

Aim/Objectives To explore First Nations peoples' experiences during hospital-community care transitions, examining medication management, self-identification, and CTG co-payment program utilisation, and triangulate these experiences with those of hospital-based health professionals.

Methods A qualitative study using Aboriginal-led yarning circles was conducted at a metropolitan hospital between September 2025 and April 2026. First Nations participants were included if they had been hospitalised within the past five years and discharged with medications. Interviews followed a semi-structured yarning guide, were recorded using an analogue voice recorder and transcribed using a blended intelligent and edited approach. Qualitative comments from a national survey of hospital-based health professionals were also evaluated. Thematic analysis followed Braun and Clarke's framework.

Results Thematic saturation was reached after twelve patient yarning interviews. Qualitative comments from 43 health professionals were included. Overall, five key themes were identified within the patient interviews, that triangulated well with health professional comments. The 'Structural context' (subthemes: system fragmentation, policy inconsistencies, health professional knowledge gaps) and 'Care experience' (subthemes: feeling unsafe, cultural disconnect, poor communication) leads to 'Critical pressure points during discharge and transition' resulting in 'Poor outcomes' (subthemes: anxiety, unmet needs, reduced trust, avoidance of care), but moderators of these outcomes are 'Protective factors' (subthemes: Aboriginal Hospital Liaison Officer (AHLO) involvement in care, patient and carer resilience, workflow work arounds).

Discussion Significant gaps exist between CTG policy intent and implementation. Discriminatory practices, provider knowledge deficits, and systemic barriers perpetuated inequities. Strengthening Aboriginal-led healthcare, embedding AHLOs in discharge planning, and addressing discriminatory verification practices are essential to achieving equitable medication-related care transitions for First Nations peoples.

Addressing Rural Inequity in Renal Pharmacy Services Through a Hybrid Model of Care

Kate Jennar[1], Karen Macolino[1], Dr Ivanka Koeper[1], Professor Stephen McDonald[2,3,4], Dr Lachlan McMichael[2,3], Melissa Ward[1], Christopher Kelly[4], Professor Janet Kelly[5], Jo Beermann[6], Caroline Rees[6], Hazvinei Mato[6], Jo-Lee Scharber[7], Sally Marotti[1,8]

[1]SA Pharmacy, SA Health, Adelaide, SA, [2]Central and Northern Adelaide Renal and Transplantation Service, Royal Adelaide Hospital, Adelaide, SA, [3]School of Medicine, College of Health, Adelaide University, Adelaide, SA, [4]SA Rural Support Service, SA Health, Adelaide, SA, [5]School of Nursing and Midwifery, Adelaide University, Adelaide, SA, [6]Mount Barker DSM Hospital, Barossa Hills Fleurieu Local Health Network, Mount Barker, SA, [7]Whyalla Hospital & Health Services, Flinders Upper North Local Health Network, Whyalla, SA, [8]College of Health, Adelaide University, Adelaide, SA

EMAIL kate.jennar@sa.gov.au

Background Haemodialysis patients are at high risk of medication related problems due to polypharmacy, multiple co-morbidities and involvement of multiple medical specialists. People living in remote areas are three times more likely to be hospitalised for chronic kidney disease (CKD) than those living in major cities. Despite renal pharmacy being recognised as an advanced area of clinical pharmacy practice by Advanced Pharmacy Australia (AdPha), access to specialist renal pharmacy services regionally has historically been limited. This has created inequity in access to renal pharmacy expertise for patients receiving haemodialysis across geographically dispersed dialysis units.

Objectives To develop, implement and evaluate a scalable hybrid pharmacy service model of care for regional haemodialysis units.

Action The model of care was co-designed with key stakeholders and piloted across two regional haemodialysis units over a 10-week period. The Pharmacist provided a clinical service at 0.2 full-time equivalent staffing which included completing clinical pharmacy tasks both on-site and via a telehealth utilising telephone calls and videoconferencing.

Evaluation Semi-structured interviews with consumers and healthcare professionals were undertaken to gain input into the design of the service. Implementation and evaluation was underpinned by the RE-AIM (Reach, Effectiveness, Adoption, Implementation and Maintenance) framework. Over the pilot period a total of 93 clinical activities were completed. 201 medication discrepancies were identified and 56 clinical recommendations made. An average of 17 medications were documented per medication history. Stakeholder feedback was obtained via evaluation surveys which demonstrated agreement that the new service improved patient care, workflow and team communication.

Discussion This pilot demonstrates that a hybrid pharmacy model is feasible in regional haemodialysis units. The model is scalable and could extend to broader renal services including CKD and transplant populations. It supports medication safety, multidisciplinary care and equity of access to pharmacy expertise across regional settings.

Can patient education drive deprescribing? A systematic review of 30 trials

Joanna Benedict[1], Ella Ryan[1], Dr Sweekriti Sharma[2], Dr Aili Langford[1]

[1]Sydney Pharmacy School, Faculty of Medicine and Health, The University of Sydney, Camperdown, NSW, [2]The Institute for Musculoskeletal Health, Camperdown, NSW

EMAIL joannabenedict890@gmail.com

Background Polypharmacy is increasingly prevalent among ageing populations and is associated with substantial medication-related harm, including adverse drug events, hospitalisations and reduced medication adherence. Deprescribing – the planned reduction/cessation of potentially inappropriate medications, is an important strategy to optimise therapeutic outcomes, yet implementation remains limited. Direct-to-patient educational interventions represent a scalable approach to promote patient engagement in deprescribing, though effectiveness remains inconsistent across medication classes and clinical contexts.

Aim/Objective(s) To synthesise evidence evaluating the effectiveness of direct-to-patient educational interventions on medication cessation and dose reduction of potentially inappropriate medications in adults.

Methods A systematic review was conducted in accordance with PRISMA 2020 guidelines. Five electronic databases were searched from inception to January 2026. Controlled studies evaluating direct-to-patient deprescribing education in adults were eligible. Risk of bias was assessed using the Cochrane Risk of Bias 2 (RoB 2) tool for randomised trials and the Risk Of Bias In Non-randomised Studies of Interventions (ROBINS-I) tool for non-randomised studies.

Results Thirty studies were included (19 randomised controlled trials (RCTs), six non-randomised controlled trials, four historically controlled studies, one quasi-RCT) across 10 countries and five medication classes. Most studies (77%) reported statistically significant improvements in at least one deprescribing outcome. The largest effects were observed for sedative hypnotics and proton pump inhibitors (PPIs), with odds ratios up to 4.10 for benzodiazepine cessation and risk differences up to 0.46 for PPI cessation/dose reduction. Two large pragmatic trials targeting opioids and mixed high-risk medications in people living with dementia reported null results.

Discussion Patient-directed educational interventions show promise for promoting deprescribing, particularly for sedative hypnotics and PPIs. Effectiveness was greater when interventions incorporated personalised materials and active clinician engagement. Studies combining patient education with clinician-directed components consistently outperformed patient-only approaches. Outcome standardisation, longer follow-up, and integration within broader, clinician-supported deprescribing programs remain priorities for future research.

Charting a Better Experience: Consumer Views on Collaborative Pharmacist Prescribing

Erin Dunn[1], Timothy Dunn[2], Martin Canning[3], Hannah Knowles[4]

[1]The Prince Charles Hospital, Chermside, Qld, [2]Caboolture Kilcoy Woodford Directorate, Caboolture, Qld, [3]Metro North Clinical Governance, Herston, Qld, [4]Royal Brisbane & Women's Hospital, Herston, Qld

EMAIL erin.dunn@health.qld.gov.au

Background Following public consultation, Collaborative Pharmacist Medication Prescribing (CPMP) was legislated for use in Queensland hospitals in 2025, to enhance medication safety and improve flow through acute care facilities. CPMP is a medication management model that facilitates collaborative development of a medication management plan between an authorised pharmacist and a medical officer or nurse practitioner. The authorised pharmacist can prescribe medicines for hospital inpatients according to the medication management plan.

Objectives To evaluate consumer perceptions of CPMP following admission to general medical units via the emergency department.

Method Following implementation of CPMP, a consumer survey was commissioned across two tertiary referral hospitals, amongst patients who received either CPMP or standard care. Consumers were asked to rate their experience using a five-point Likert scale. t-tests and descriptive statistics were used to compare results amongst the two groups. Patients were also invited to submit qualitative feedback to describe their experience.

Evaluation Fifty-eight patients responded to the survey, with an even split between CPMP and non-CPMP cohorts. Patients who received CPMP were more likely to report that they would be comfortable with a pharmacist prescribing their medicines together with a doctor during future hospital visits (100% agree compared with 89%, p=0.04). A greater proportion of patients who received CPMP agreed that staff explained any changes to their medicines in a way they could understand (87% vs 48%) and that their medicines were administered on time (77% vs 73%). Qualitative feedback from patients who received CPMP was overwhelmingly positive and aligned with themes of effective problem-solving, improved understanding of medicines and high levels of trust and confidence in the prescribing pharmacist.

Discussion CPMP was well-accepted by patients, with demonstrable improvements in consumer confidence, trust and perceived explanations of medicine changes.

Poster Abstracts

001

Administration differences and infusion burden with iron polymaltose versus rapid intravenous iron preparations

Dr Adam Livori[1,2], Sean Abel[3], Richard Pollock[4]

[1]Grampians Health, Ballarat, Vic, [2]Baker Heart and Diabetes Institute, Melbourne, Vic, [3]A. Menarini Australia Pty Ltd, Sydney, NSW, [4]Covalence Research Ltd, Harpenden, United Kingdom

Background While iron polymaltose (IPM) is established for intravenous iron therapy in Australian inpatients, opportunities exist to optimise administration workflows for pharmacists and nursing staff. Rapid intravenous irons – ferric derisomaltose (FDI) and ferric carboxymaltose (FCM) – reduce administration burden but differ in recommended maximum single doses (1.5g versus 1.0g) and differ from IPM in dilution recommendations and tolerability, which can impact costs and use.

Aims/Objective(s) To estimate the impact of using FDI and FCM versus IPM in inpatients, focusing on infusions per patient, nurse and pharmacy time, and costs.

Methods A 10,000-patient simulation model was developed in R. Bodyweight and haemoglobin were sampled from a large Australian study (n=5,531). Based on the respective Product Information, iron requirements (Ganzoni method), treatment-specific dosing and infusion assumptions were applied to estimate ampoules/vials, infusions, and infusion preparation and observation time. Nurse and pharmacy times and cost were informed by data from the NSW Ministry of Health award.

Results Mean iron need was 1.35 g. On average, IPM required 1.0 infusion/patient (14.0 ampoules) versus 1.53 for FDI and 1.88 for FCM. FDI yielded the shortest average preparation and observation time at 46 minutes, followed by FCM (56 minutes) and IPM (106 minutes). In patients requiring 1.0–1.5 g of iron, FDI reduced preparation and observation time the most to 30 minutes (1-infusion) versus FCM (60 minutes; 2-infusions) and IPM (105 minutes; 1-infusion). Despite higher published acquisition costs, reducing nurse and pharmacist time generated cost savings. All three IV-irons may serve different clinical purposes. Although the three agents differed in their risk of hypophosphataemia, the cost savings for its treatment and monitoring were not modelled.

Discussion Substituting IPM with rapid intravenous irons reduces workforce burden. Relative to FCM, FDI's higher single-dose reduces infusion time and benefits nurses/pharmacists. These systemic efficiencies generate net cost-savings that may justify higher initial acquisition prices, supporting FDI's use.

002

The challenge of penicillin challenges. Developing a multidisciplinary education package for penicillin direct oral challenges

Dr Adam Livori[1], David Brownridge[1]

[1]Grampians Health, Ballarat, Vic

EMAIL adam.livori@gh.org.au

Background Penicillin allergy assessment and delabelling of low-risk penicillin allergies via direct oral challenge (DOC) by non-allergists within a multidisciplinary model (including pharmacists) is safe and efficacious. Ensuring adequate clinician education and training to support DOC processes is challenging, especially in multi-campus settings within regional areas.

Objective(s) To develop a credentialling package suitable for multidisciplinary education at a multi-site regional health service to facilitate equitable patient access to inpatient penicillin allergy assessment and DOC.

Action (Method) To ensure consistent DOC provision at campuses without an onsite antimicrobial stewardship (AMS) pharmacist, an education package was developed using the 'Allied health: credentialling, competency and capability framework'. This ensured scope of practice was consistent with existing credentialled pharmacist roles (e.g. warfarin charting). The package was also offered to infection control nurses and nurse practitioners to complete.

Key package elements included:

1. A DOC guideline which includes clear roles and responsibilities for credentialled clinicians;
2. Utilisation of existing publications and online resources for pre-reading;
3. Development of a webinar style presentation focused on local DOC procedures;
4. Case study-based online assessment developed by AMS pharmacist and Infectious Diseases physician; and
5. Practice-based assessment of at least two DOCs, supervised by the AMS pharmacist.

Evaluation Ongoing safety of the DOC program is monitored using existing systems, including bi-monthly DOC outcome data and incident reporting pathways. The implementation framework and developed resources have been shared with the Safer Care Victoria Check Again Network for participating organisations to adapt locally. Assessment of the impact of extending the package to non-pharmacists is planned as part of ongoing monitoring for the DOC program.

Discussion Ensuring equity of access to services including oral penicillin challenges remains difficult for multi-campus organisations. Pharmacist credentialling packages extended to non-pharmacists may expand access to DOCs, supporting consistent service delivery across multidisciplinary teams.

003

Look at this photograph: A visual wellbeing intervention to support workforce morale and connection

Trina Ahmad[1]

[1]*Concord Repatriation General Hospital, Concord, NSW*

EMAIL trina.ahmad@health.nsw.gov.au

Background Healthcare workforce shortages and sustained operational pressures may impact staff morale and wellbeing across hospital pharmacy departments. During a period of workload strain within our service, maintaining team connection and workplace culture was considered an important priority. Simple, low-cost initiatives were therefore explored to reinforce shared experiences and strengthen workplace identity, with the aim of supporting staff wellbeing and connectedness.

Aim To implement and evaluate a low-cost wellbeing initiative using departmental and social staff photographs to promote morale, connection, and reflection among pharmacy staff during a period of workforce strain. The initiative aimed to strengthen social connection, reinforce departmental identity, and support workplace wellbeing through shared positive experiences.

Method Historical photographs of staff, departmental events, celebrations, achievements, graduations, and social activities were collected and displayed throughout communal pharmacy workspaces. Images represented both current and former staff members across different eras of the department. Staff were enthusiastic about contributing to the initiative, often revisiting personal records and collections to share photographs they felt proud of or that reflected happy workplace memories.

Evaluation Evaluation was undertaken through feedback and observation of engagement following implementation. Staff frequently interacted with the displays, prompting conversation, storytelling, laughter, and shared reflection. Feedback indicated that the initiative promoted positive emotions and reinforced perceptions of departmental resilience, camaraderie, and culture despite ongoing operational pressures. The displays also facilitated interaction between newer and more long-standing staff members.

Discussion This initiative demonstrated that simple, low-resource wellbeing strategies can positively influence workplace culture during periods of workforce stress. Displaying departmental photographs fostered reflection, connection, and shared identity, contributing to staff morale and psychological wellbeing. The intervention was inexpensive, sustainable, and easily adaptable to other healthcare settings seeking to support staff resilience and team cohesion.

004

Promoting Safe Sleep During Hospitalisation: a quality improvement project utilising the NSW TAG Toolkit

Hana Al Mahdy[1], Justine Ayre[1], Sharna Nation[1], Peter Falloon[1]

[1]*Launceston General Hospital, Launceston, TAS*

Background Sleep disturbance during hospital admission is common, potentially detrimental to health outcomes and distressing to patients. Commonly used sedative medications can have serious consequences. This regional hospital has conducted audits and interventions since 2016 targeting the prescribing of benzodiazepines for sleep.

Objective To educate nursing, medical, pharmacy staff and patients utilising the NSW Therapeutic Advisory Group 'Getting it Right for Sleep at Night' toolkit and to evaluate the impact on prescribing and documentation of all sedatives.

Action Over one month, a single medical ward was targeted to implement strategies including intensive nursing education; promotion of a decision support flow chart; provision of 'Night Packs' and patient information. All pharmacy and junior medical staff were educated on the risks of sedatives, promoting non-pharmacological management for sleep. A one-day, cross-sectional audit was conducted across the medical and surgical wards before and after the education program.

Evaluation Pre-education, 270 patients were audited and 238 post education. Post education, 64% fewer sedatives were prescribed (pre n=42 vs post n=18), including a 75% reduction in benzodiazepine initiation. There was no reduction in melatonin prescribing (n=6). Pre education, twenty-two patients were prescribed more than two sedatives compared with seven, post education. Nurses and medical staff responded positively to the introduction of the education, flow chart and Night Pack.

Discussion From a quality and safety point of view, the project was deemed a success. While there continues to be a reduction in sedative prescribing, the project alone cannot claim responsibility for the results as it is part of a multifactorial approach to reducing sedative use. The hospital Medication Safety Committee supports the continued roll out of strategies including education, the flow chart, Night Packs and patient information. With increased assistance from Clinical Nurse Educators, all medical wards will be included in the next stage.

005

Conducting BPMHs in Ambulatory Day Infusion Centre patients. How often is beneficial?

Brett Anderson[1], Alex Vo[1], Daniel O'Brien[1]

[1]*Royal Melbourne Hospital, Parkville, Vic*

EMAIL brett.anderson4@mh.org.au

Background Ambulatory patients attending Day Infusion Centres (DICs) have frequent interactions with health services but often receive care focused on a single condition, without holistic medication reviews. Given high patient attendance (>1400 presentations per month), conducting a Best Possible Medication History (BPMH) at every visit is not feasible, highlighting the need for evidence-based patient prioritisation guidance.

Aim/Objectives To determine an evidence-based frequency for pharmacist-led BPMHs for ambulatory patients attending a DIC.

Method A single centre, prospective study was conducted at a major metropolitan hospital. Pharmacists conducted BPMHs for consecutive DIC patients and documented within the electronic medical record. Repeat BPMHs were performed at each subsequent DIC visit over a six-month period. The number of changes to their 'Prior To Admission' (PTA) medication list per visit were recorded and analysed.

Results A total of 127 patients were followed over six months, with BPMHs completed at 432 of 557 visits (77.6%). Prior to their initial DIC BPMH, 36.4% of patients had never had a medication review, and 31.0% were last reviewed over 12 months ago. The most common reasons for DIC attendance were infliximab (30.7%) and natalizumab (29.9%) administration.

On average, patients had 5.5 medication changes made to their PTA list during their initial DIC BPMH. Patients whose PTA list were last reviewed over 12 months prior had significantly more medication changes compared with those reviewed within three months (7.0 vs 3.3 changes; p=0.006).

Following the initial BPMH, medication changes per visit decreased substantially, averaging one new change every third DIC visit.

Discussion Initial pharmacist BPMHs should be prioritised over repeat BPMHs, particularly for patients whose PTA list has not been reviewed by a pharmacist within 12 months. Repeat BPMHs should be performed at least every third visit, where possible, to optimise medication list accuracy, and efficient use of pharmacy resources.

006

From Stockpiles to Smart Supply: A Statewide Approach to Smarter Supply Chain Management.

Ashlee Anderson[1,2], Luke Corbett[1,2]

[1]*Statewide Hospital Pharmacy, Hobart, Tas,* [2]*Tasmanian Health Service, Hobart, Tas*

EMAIL ashlee.anderson@ths.tas.gov.au

Background The COVID-19 pandemic had a significant impact on global supply chains and medication availability. In response to the pandemic, a hospital network increased their stockholding to 12-weeks to mitigate shortages, resulting in a corresponding increase in medication disposals. A review was conducted to identify a data driven approach to medicines stockholding, balancing resilience to shortages with cost efficacy. This review recommended the development of a statewide Medicines Supply Chain Team to implement this approach.

Objective(s) To implement a Statewide Medicines Supply Chain Initiative that improves resilience, reduces waste, optimises stockholding, and ensures equitable access to medicines through a strategic, data-driven model.

Action (Method) A phased implementation was undertaken. Phase one involved reviewing stockholding levels, analysing inventory and disposals to safely reduce stock (from 12 to 8 weeks) while maintaining supply continuity. Phase Two developed systems to enable real-time inventory visibility, automated reporting, expiry tracking, and inter-site redistribution, supported by pilot testing and staff training. Phase Three utilised continuous monitoring, stakeholder engagement, and iterative refinement to support system-wide management of inventory.

Evaluation Prior to the implementation of the initiative our service recorded disposals at 1.13% of purchases, reflecting the challenges of managing dispersed, large stockholdings. 12 months after implementation disposal rates had reduced to 0.8% of total purchases. Stock on hand value reduced by 19% and stock outages remained steady. Feedback from the hospitals highlighted improved redistribution and enhanced inventory visibility. A disposals target of 0.6% of total purchases while maintaining shortages management has been set for the next 12 months.

Discussion This initiative demonstrates the impact of coordinated, data-driven approaches in ensuring cost effective supply chain management. The reduction in disposals highlights the value of centralised oversight and data driven stock management. The model provides a scalable framework to sustain improvements and respond to ongoing supply challenges.

007

Unlock the Full Potential of the Medication Safety Pharmacist with Power BI

Joshua Anderson[1], Katie Thomas[1], Angela Tarn[1], Alan Tuxford[1]

[1]*Albury Wodonga Health, Albury, NSW*

EMAIL joshua.anderson@awh.org.au

Background Medication incident systems provide valuable safety data, yet manual processes place a heavy burden on pharmacists in regional hospitals. Extensive time on collation, validation and report preparation limits capacity for governance and quality improvement. Static fragmented data sources reduce transparency and restrict insight into true safety signals.

Objective Redesign medication safety reporting through a dynamic dashboard that strengthens governance, improves efficiency, reduces manual workload and enables pharmacists to focus on proactive, high-impact safety initiatives.

Action A data-driven medication safety dashboard was developed in Power BI using Victorian Health Incident Management System Riskman data. The medication safety pharmacist completed specialised training to ensure alignment with reporting expectations. A structured review of data sources identified data entry idiosyncrasies that were addressed during dataset construction. A retrospective 18-month dataset then underwent data quality and conformance validation to ensure accuracy and completeness in order to create a single ongoing source of truth.

Conformant data was then used to build accurate data visualisation with Power BI. A draft dashboard was introduced in July 2025, then refined and formally launched in September 2025. Interactive, multidimensional analysis across severity, medication class, clinical area and high-risk medications, enabled the medication safety committee to interrogate incident data dynamically within committee meetings.

Evaluation Automation and dynamic analytics reduced manual tasks, freeing the medication safety pharmacist for higher-value work and tight turn-around initiatives. Dynamic data interrogation supported robust discussion and targeted actions, improving risk identification, management and overall governance.

Discussion Removal of low-value tasks enables delivery of high-value safety initiatives, strengthens proactive risk identification and supports data-informed decisions with direct and measurable impact on medication safety outcomes. Automation shifts the medication safety pharmacist role from data custodian to safety strategist and creates a scalable model for regional services.

008

Improving Heparin Infusion Safety: A Retrospective Audit to Inform Targeted Education for Medical Officers

Dionisia Andreone[1]

[1]*St George Public Hospital, Kogarah, NSW*

EMAIL dionisia.andreone@health.nsw.gov.au

Background Heparin infusions are frequently implicated in medication errors and associated with serious adverse events. Safe use requires coordinated multidisciplinary input. Despite inclusion in junior medical officer (JMO) orientation, local survey data showed low confidence in prescribing and managing infusions, highlighting a gap between theoretical knowledge and practical capability.

Aim/Objective(s): To identify common errors and deviations in heparin infusion management to inform education strategies for medical officers.

Methods A retrospective audit of heparin charts reviewed compliance with institutional protocols, including baseline investigations, protocol selection, bolus indication and dosing, and initial infusion rate. Management actions were analysed, including infusion rate adjustments, pauses, continuation, and cessation. Errors were defined as deviations from protocol. Transitions to alternative anticoagulants were assessed.

Results Thirty-three patients were included. Baseline investigations were often ordered, but not documented on the appropriate hardcopy order, with APTT missing in 69.7% and platelets/INR in 75.8%. Errors in bolus indication occurred in 31.9% of cases, although dosing was appropriate in 92.3% when prescribed. Initial infusion rates were often appropriate (87.9%). 94% of cases demonstrated at least one protocol deviation, predominantly related to delayed APTT monitoring beyond six hours.

Across 401 management actions, clinically significant incorrect actions were infrequent (2%) but included inappropriate postoperative recommencement at reinitiation rates and escalation based on unexpected low APTT results when previous samples were supratherapeutic. Standard rate adjustment errors were rare (0.8%). Transitions to other anticoagulants were frequently error-prone (26%), most commonly involving enoxaparin.

Discussion Heparin infusion management is compromised by inconsistent protocol adherence. Three priority areas were identified: bolus decision making, timing and interpretation of an unexpected APTT result, and transitions between anticoagulants. A pharmacist-led practical rotation-based program for JMOs in high prescribing specialties, supported by simulated case-based learning focusing on key decision points and situational awareness may improve confidence and safety.

009

A Case of Mistaken Identity: Severe Mucositis and Myelosuppression Due to Inadvertent Daily Methotrexate Ingestion

Sebastian Altendeitering[1]

[1]*Royal Brisbane and Women's Hospital, Brisbane, Qld*

EMAIL altendeitering.seb@gmail.com

Objective To describe a serious case of non-oncology methotrexate toxicity caused by a medication identification and dosing error, and to demonstrate the critical role of pharmacist-led medication history taking and reconciliation in identifying the cause of hospital presentation.

Clinical features A 67-year-old male presented with a two-week history of severe mucocutaneous eruption, including blistering erythematous lesions in a photodistributed pattern, severe mucositis and perianal involvement. Initial blood tests showed marked thrombocytopenia and neutropenia. Concurrent use of ixekizumab further complicated the dermatological differential. Initial differential diagnoses included cutaneous lupus and bullous pemphigoid. Despite supportive management, symptoms and cytopenias progressed. A detailed pharmacist medication history and request for patient's own medicines revealed the patient had inadvertently taken methotrexate 30 mg daily for 7 days, having mistaken an old bottle of methotrexate for allopurinol during travel. This established the diagnosis of methotrexate toxicity, despite a low subsequent serum methotrexate concentration.

Literature review Non-oncology methotrexate toxicity most commonly results from dosing errors, particularly daily administration of weekly doses for >3 days, often related to labelling, patient misunderstanding or expired medicines. Repeated supratherapeutic dosing can cause life-threatening mucositis and myelosuppression. Delayed presentations may be associated with low or undetectable methotrexate levels that may not correlate with the clinical picture, so results should be interpreted cautiously.

Pharmacy Intervention, Case Progress and Outcomes Pharmacist-led medication history and reconciliation was pivotal in identifying the cause of presentation and subsequent multidisciplinary management, including calcium folinate rescue, filgrastim, antiviral therapy and Pneumocystis jirovecii pneumonia (PJP) prophylaxis. Pharmacist input also optimised supportive treatments, suggesting atovaquone for PJP prophylaxis to mitigate ongoing antifolate activity. The patient's clinical status improved with targeted care.

Discussion This case reinforces the critical role of pharmacists in medicines safety through systematic medication history taking, reconciliation, and prompt review of patient's own medicines, particularly where high-risk medicines are involved.

010

Implementation of an Online Outpatient Prescription Ordering Form: A retrospective evaluation study

Sneha-Kavya Babji[1], Jayne Hui[1], Saly Rashed[1]

[1]*Eastern Health, Melbourne, Vic*

EMAIL sneha-kavya.babji@easternhealth.org.au

Background Outpatient prescription renewal processes are frequently associated with workflow interruptions, administrative burden and unreliable patient accessibility. In August 2024, a metropolitan pharmacy department in Melbourne, Victoria introduced an online outpatient repeat prescription ordering platform, accessible via QR code and hospital website. The intervention aimed to automate medication ordering workflows, improve accessibility and patient experience.

Objective To evaluate the effectiveness, usability and user demographics of the platform following implementation and opportunities to improve uptake.

Method This six-month retrospective evaluation (August 2024 to February 2025) assessed platform utilisation, user demographics and prescription ordering patterns. Data extracted via REDCap included prescribing clinics, medication category, timing of order submission and frequency of repeat order. A patient feedback survey evaluated user satisfaction using a five-point Likert scale and collected free-text responses. Usage outside pharmacy operating hours and proportion of total orders submitted via the form were also analysed.

Results Over six months, 5% of outpatient prescription orders were submitted via the online platform. Sixty-six users generated 141 orders, averaging 1.2 medications per order. Most users were ≥50 years (63.8%), and 62% were female. Cancer services accounted for 55% of prescriptions, followed by cardiology and infectious diseases clinics. Notably, 44% of orders were submitted outside standard pharmacy operating hours and 23% of users reused the platform for subsequent orders. Orders predominantly involved anticancer, high-cost, or specialised therapies. Overall satisfaction was high, with 64% of users rating it 5/5. Qualitative feedback emphasised convenience, usability, and potential enhancements via app functionality and pre-populated fields.

Discussion Implementation of the digital ordering platform improved user satisfaction and accessibility beyond pharmacy standard hours. Uptake showed users requiring specialised therapies may value further platform utilisation. Despite this, overall utilisation remained low, indicating incomplete integration into routine workflows. Future strategies should focus on clinician engagement and targeted promotion across outpatient clinics.

011

Subcutaneous Natalizumab – Effects of temperature on patients' injection experience

Raiyah Bagley[1], Vanessa Sinclair[1]

[1]*Fiona Stanley Hospital, Murdoch, WA*

EMAIL raiyahpng@gmail.com

Background Product information for natalizumab pre-filled syringes recommends allowing the product to reach room temperature prior to subcutaneous administration. This process requires at least 30 minutes and prolongs patient appointments, contributing to workflow inefficiencies in ambulatory infusion services.

Objective(s) To evaluate the impact of administering refrigerated natalizumab pre-filled syringes without a warming period on patient-reported injection-site pain in patients attending the day medical unit at a quaternary public hospital.

Action (Method) In August 2025, a practice change was implemented whereby patients received natalizumab injections without a warming period. Nursing staff documented injection temperature (room temperature vs refrigerated [2–8°C]) and patient-reported pain scores at each visit. A retrospective review of the patients' medication records, electronic medical records and observation charts was conducted for patients receiving subcutaneous natalizumab for relapsing-remitting multiple sclerosis to collate this data. Patient interviews and a staff survey were also undertaken to evaluate perceptions of pain and acceptability of refrigerated administration.

Evaluation Twenty-seven patients and a total of 75 administrations of natalizumab were evaluated over a period of 8 months. No meaningful difference in injection-site pain was reported between natalizumab administered at room temperature and refrigerated temperature (2–8°C). Among patients who had received injections at both temperatures, 73% reported no difference in pain response. Staff reported no administration concerns associated with refrigerated injections.

Discussion Administration of refrigerated natalizumab without a warming period did not appear to increase injection-site pain and was well accepted by both patients and staff. This practice may reduce appointment duration and improve workflow efficiency in ambulatory settings. Further studies are required to evaluate broader patient safety and clinical outcomes.

012

'At Your Fingertips': A Statewide Mobile Solution for Real-Time Medicines Inventory Access

Michael Bakker[1]

[1]*SA Pharmacy, Adelaide, SA*

EMAIL Michael.bakker@sa.gov.au

Background Hospital pharmacists performing on-call services frequently face information-access barriers, often requiring cumbersome remote logins to multiple legacy systems to verify medication availability. These technical hurdles delay clinical decision-making during time-critical events.

Objectives This project sought to develop a 'top-down' mobile-first pharmacy inventory application. The goal was to provide near real-time visibility of stock levels by location or medication name across a statewide network, leveraging modern data architecture for secure access via personal mobile devices.

Action The application integrates data from over 250 Automated Dispensing Cabinets (ADCs) and a central pharmacy inventory management system. Key features include:

Secure Access Microsoft 365 Single Sign-On (SSO) for authenticated use on personal devices.

Clinical Prioritization Specific flagging of emergency and life-saving medications for rapid identification.

Regulatory Compliance Inventory volumes for controlled drugs are obscured to maintain 'blind count' integrity while still confirming availability.

Data Integrity High-frequency refresh cycles ensure decision-making is based on current data.

Evaluation The application is now an integral part of daily workflows, with over 250 monthly accesses. Qualitative feedback from clinical staff highlights improved efficiency during on-call queries, while management noted its effectiveness in orienting staff due to its intuitive design.

Discussion By bridging the gap between fixed automation and mobile accessibility, this tool has transformed on-call services from a reactive, hardware-dependent process into a proactive, data-driven one. Successful deployment demonstrates how modern architecture can overcome systemic information barriers. Future phases will expand access to nursing and ambulance services, further enhancing statewide emergency response and the rapid identification of life-saving medicines.

013

'After the Cresting Wave': Evolution of a statewide Hospital Pharmacy Workforce (2018–2025)

Michael Bakker[1], Richard Marotti[1], Anita Abarno[1], Eleni Labadas[1]

[1]*SA Pharmacy, Adelaide, SA*

EMAIL Michael.bakker@sa.gov.au

Background The Australian pharmacy workforce has historically been described as a 'cresting wave', defined by high graduate influx and low retention beyond age 50. As the hospital sector expands, evaluating demographic shifts and employment stability is critical for sustainable service delivery.

Objectives This analysis evaluates shifts in a statewide hospital pharmacist workforce between 2018 and 2025, focusing on demographic transitions, seniority ratios, and the balance between career advancement and workforce stability.

Methods A comparative longitudinal analysis of pharmacist positions was conducted for 2018 and 2025. Key metrics included gender, age, employment status (full-time vs. part-time), seniority classification, and years of experience.

Results Total positions increased by 38% (from 284 to 392). Key findings include:

Demographics The 2025 workforce is 74% female and more concentrated in the 35–54 age bracket (55%) compared to national AHPRA averages.

Seniority vs. Experience Senior clinical roles grew from 42% to 51% of total positions; however, median experience in these roles dropped significantly from 8 to 4.5 years.

Flexibility & Stability Full-time employment declined from 78% to 58%, while 'acting' or secondment roles doubled to 33%. Part-time hours remained stable (~21–22 hours).

Retention 64% of the 2018 cohort remained employed in 2025, indicating moderate long-term stability.

Discussion Sector expansion has prioritized senior (AHP3) positions over rotational (AHP2) roles. As the workforce navigates key life stages, there is a clear shift toward part-time work and job-sharing. While this facilitates accelerated career progression and 'acting' opportunities, it reduces full-time consistency. Future strategies must balance the demand for senior-level growth with the need to preserve institutional experience and permanent career pathways.

014

Pharmacist–Nurse Practitioner Transition of Care Service for a High-Risk Cardiothoracic Patient: A Case Report

Alexandra Barton[1], Dr Jonathan Yong Jie Lam[1], Dr Liza-Jane Raggatt[2], Estelle Jensen[2], Dr Nazanin Ghahreman-Falconer[2,1], Professor Michael Barras[1,2]

[1]*Princess Alexandra Hospital, Brisbane, Qld,* [2]*University of Queensland, Brisbane, Qld*

EMAIL alexandra.barton@health.qld.gov.au

Objective To describe the impact of the RECARD (Reducing Hospital Re-Admission for High-Risk Cardiology Patients) collaborative pharmacist–nurse practitioner transition of care (TOC) model on medication management in patients with low health literacy.

Clinical Features A 67-year-old male was reviewed by the RECARD pharmacist and nurse practitioner TOC service after being identified as high risk for medication-related readmission using a risk prediction tool and assessment of adherence and health literacy. The patient underwent a coronary artery bypass graft (CABG). On discharge, ramipril was withheld due to hypotension and amiodarone was commenced for post-operative atrial fibrillation. After discharging, limited health literacy led to medication mismanagement, including inadvertent double dosing of amiodarone and inappropriate reinitiation of ramipril.

Literature Review Patients who undergo cardiothoracic surgery or have a myocardial infarction are required to manage complex medication regimens when they discharge from hospital, which increases their risk of medication-related harm. Pharmacists and nurse practitioners are well placed to provide collaborative and comprehensive medication management support, to ensure a safe TOC, and prevent hospital readmission.

Pharmacist Interventions, Case Progress and Outcomes The RECARD service, led by a pharmacist in collaboration with a nurse practitioner, identifies cardiology patients at the highest risk of medication-related readmission. In this case, the combined expertise enabled a comprehensive medication review, identification and resolution of medication-related issues, assessment of symptoms and adverse effects, implementation of a dose administration aid, and prescribing of a reduced ramipril dose. A multidisciplinary case conference with the general practitioner (GP) supported effective TOC, by facilitating post-discharge clinical handover and ensuring continuity of patient care in the community.

Discussion This case highlights the value of a collaborative pharmacist and nurse practitioner TOC model to identify and resolve high risk medication issues in the post-discharge period and prevent medication-related harm.

015

From Compassionate Access to Clinical Practice: Emapalumab in Refractory HLH

Dr Karim Ibrahim[1], Annabelle Bechara[1], Dr Georgia McCaughan[2], Dr Lee Reid[2]

[1]Pharmacy department, St Vincent's Hospital, Sydney, NSW, [2]Haematology department, St Vincent's Hospital , Sydney, NSW

EMAIL Karim.Ibrahim@svha.org.au

Objective To describe a fatal case of haemophagocytic lymphohistiocytosis (HLH) secondary to systemic Epstein–Barr virus (EBV) T-cell lymphoma, highlighting the use of emapalumab as a novel Individual Patient Use (IPU) therapy and the critical role of pharmacists in its implementation.

Clinical features A 38-year-old female was transferred from a rural hospital with sepsis and multi-organ failure and diagnosed with severe HLH triggered by systemic EBV T-cell lymphoma of childhood. Despite rituximab, CHOP chemotherapy, anakinra, and ruxolitinib, she developed extreme hyperinflammation (peak ferritin ~91,000 µg/L; LDH 15,300 U/L), encephalopathy, synthetic liver failure (bilirubin 288 µmol/L, INR 2.6) requiring continuous dextrose infusion, anuric acute kidney injury requiring CRRT, and multifactorial respiratory failure. During her third ICU admission, she died from progressive disease.

Literature Review Malignancy-associated HLH has high mortality and is often refractory to standard therapies. Emapalumab, a monoclonal antibody targeting interferon-gamma, reduces macrophage activation and downstream cytokine release central to HLH pathophysiology. Adult evidence is limited to retrospective series and case reports showing responses in refractory malignancy-associated HLH. Prospective data are lacking, and access is restricted by cost and IPU status.

Pharmacist Intervention The haematology pharmacist collaborated with the team to optimise dosing of emapalumab, anakinra and ruxolitinib in severe organ dysfunction. The ICU pharmacist provided bedside education to support safe preparation and administration, coordinated urgent IPU procurement, and assisted with CRRT dose adjustments. Pharmacists also managed supply chain challenges, governance, and compassionate-access requirements to facilitate timely treatment.

Discussion This case highlights the aggressive nature of EBV-driven HLH and challenges in refractory disease management. Emapalumab provided a mechanistically targeted option; however, significant barriers existed due to cost, non-formulary status, and compassionate-use eligibility criteria. Pharmacists were integral to enabling access and optimising therapy, demonstrating the expanding role of pharmacy in precision medicine and navigation of complex access pathways in critical care.

016

Impact of Pharmacist-Led Intervention on the Accuracy of Discharge Summaries: A Pre–Post Study

Mario Besic[1], Joseph Huynh[1], Lisa Ho[1], Karen Garratt[1]

[1]Western Health, Melbourne, Vic

EMAIL Marsbesic@gmail.com

Background Unplanned hospital admissions place a considerable strain on our health care system, especially among patients ≥65 years. Previous studies have shown that fewer than 40% of discharge summaries accurately reflect medication changes, and medication omissions can significantly contribute to hospital readmissions.

Aim To evaluate whether targeted pharmacist-led interventions on medical discharge summaries on geriatric wards enhance the accuracy of medication documentation during transitions of care.

Method The discharge documentation of 106 geriatric patients discharged from a tertiary hospital was audited (20 pre-intervention, 86 post-intervention). Pharmacist intervention involved editing the medication list in the medical discharge summary. Discharge summary medication accuracy was compared with the pharmacist-generated medication list as the source of truth. Discrepancies were categorised according to high-risk medication groups associated with hospital readmission.

Results The accuracy of the documented medication plan in discharge summaries improved from 30% pre-intervention to 66% post-intervention. Documentation errors relating to high-risk medications decreased from 94.7% at baseline to 66.6% after implementation of pharmacist review.

Discussion Pharmacists editing the discharge summary medication list significantly improved the accuracy of medication documentation for geriatric inpatients. Given the high prevalence of polypharmacy and medication-related harm in this population, improving the accuracy of discharge documentation is critical to reducing medication errors during transitions of care and supporting safer continuity of care. For these interventions to be sustainable, integration of a pharmacist medication summary note within the EMR is recommended to allow pharmacist-documented medication information to automatically populate discharge summaries. This would streamline workflow, reduce manual editing, improve documentation accuracy, and minimise the need for ongoing coordination with medical staff.

017

GP Shared Care and Patient Information– Bridging the GAP between Community and Specialist Respiratory Care

Nandni Bhan[1], Madeleine Washbourne[1]

[1]*Princess Alexandra Hospital Pharmacy Department, Woolloongabba, Qld*

EMAIL nandni.bhan@health.qld.gov.au

Background Chronic respiratory conditions increasingly require long-term management with high-risk immunosuppressive and antifibrotic therapies including azathioprine, methotrexate, mycophenolate mofetil, nintedanib, and pirfenidone. These medications require close monitoring, coordinated prescribing, and clear communication between specialist respiratory services and primary care providers. Variability in monitoring responsibilities and limited patient-friendly and indication specific educational resources highlighted the need for resources to guide general practitioners (GP) in better supporting patients who are receiving shared care from respiratory specialists. For patients, a need for more patient-centred and disease specific resources was a priority.

Objectives To develop respiratory GP shared care and patient-centred information leaflets for key respiratory therapies, with the aim of improving communication, enhancing medication safety, supporting shared decision-making, and strengthening collaboration between specialist and primary care services.

Method A multidisciplinary working group comprising of respiratory physicians, pharmacists, specialist nurses, and patient stakeholders was established. Existing clinical resources, local prescribing frameworks, and safety monitoring recommendations were reviewed to developed the shared care documents. Patient engagement surveys and stakeholder feedback identified a significant need for concise, accessible, and digestible information to support treatment understanding and adherence. Draft patient information leaflets (PILs) were designed using plain language principles and focused on key counselling points, side effects, monitoring requirements, and escalation pathways.

Evaluation Early clinician and patient feedback suggested improved usability and confidence in shared care processes.

Discussion Shared care guidance improve role delineation, promote safer prescribing practices, and support continuity of care across healthcare settings. Patient-centred PILs enhanced accessibility of complex treatment information and encouraged patient involvement in therapy management. The project highlights the importance of integrated care models and co-designed educational resources in improving patient experience, supporting adherence, and facilitating safe long-term management of respiratory therapies across the primary–secondary care interface.

018

Medication Self-Management Programs in Subacute Care: An Evaluation of Healthcare Professional Perspectives and Practice Variation

Rebecca Biggs[1], Chelsea Borg[1], Andrew Chin[1], Lisha Kuruvilla[1], Diana Bortoletto[1]

[1]*Barwon Health, Geelong, Vic*

EMAIL rebecca.biggs@barwonhealth.org.au

Background Self-medication trial programs (SMPs) support hospitalised patients to develop skills for safe and independent medication management following discharge. Variability in program structure and limited local evaluation of perceived effectiveness restrict optimisation of practice.

Aim To evaluate healthcare professional perceptions of the utilisation and effectiveness of a local SMP and compare program structures across Victorian settings.

Methods A mixed-methods study was conducted using REDCap. A cross-sectional local survey of pharmacists, nurses, and occupational therapists (OT) was completed, incorporating multiple-choice, Likert-scale, and free-text questions assessing patient outcomes, staff impact, and barriers. Descriptive statistics and subgroup analyses were performed. A comparative audit of SMP protocols across subacute hospitals was also performed using convenience sampling with data analysed descriptively.

Results Forty-three survey responses were analysed (pharmacists n=17, nurses n=21, OT n=5). Among respondents involved in the SMP (n=36), 66.7% actively considered referring patients. Key drivers included adherence concerns (77.1%), discharge destination (74.3%), pre-admission medication management (71.4%), and regimen complexity (54.3%). Barriers included time constraints, limited program knowledge, and patient consent.

Most survey respondents agreed the SMP assesses adherence (91.5%), self-management (91.4%), and identifies medication errors (97.2%), but fewer agreed it improves adherence (57.2%) or reduces errors (48.6%). Moderate agreement was observed for improvements in medication knowledge (60.0%) and self-management (74.3%), while perceived impact on hospital readmission was limited (42.8%). Regarding staff impact, 47% reported increased workload, with pharmacists reporting this most commonly (p=0.012). However, 88.3% of respondents reported improved discharge planning.

Eight SMP protocols demonstrated variability in initiation, assessment, and documentation processes. Notable differences in multidisciplinary involvement, assessment criteria and program duration were found. However, all protocols audited failed to define explicit outcome criteria.

Discussion This study highlighted opportunities for improvement of the local SMP. Staff knowledge, workload concerns and protocol comprehensiveness were identified as key areas that could be optimised.

019

Beyond Harm Ratings: A Systems Approach.Using Thematic Analysis of Incidents to Strengthen Medication Safety.

Sylvia Birch[1], Peter Smart[1]

[1]*St John of God Health Care, Perth, WA*

EMAIL sylvia.birch@sjog.org.au

Background Traditional medication incident review processes prioritise incidents resulting in significant patient harm. While essential, this approach may overlook system weaknesses identified through lower-harm incidents and near misses. A national private not-for-profit healthcare organisation implemented prospective thematic analysis of reported medication incidents to support organisation-wide learning and proactive risk reduction.

Objectives To evaluate whether thematic analysis of medication incidents, regardless of outcome severity and including near misses, could identify recurring system failures and inform organisation-wide medication safety strategies.

Action Medication incidents reported across the organisation were regularly monitored by the Manager, Clinical Medication Safety. Emerging trends and incident clusters underwent thematic review using Machen et al.'s framework. Each cluster was assessed using a five-stage process:

1. Brief description of incidents
2. Process mapping of system/s involved
3. Identification of contributing factors
4. Grouping of incidents with shared contributing factors
5. Development of systems-focused recommendations

Initial analyses focused on intravenous insulin incidents and overdose prescribing errors. Findings were presented regularly to the organisation's Medication Safety Advisory Committee (MSAC) to inform groupwide recommendations and targeted risk mitigation strategies.

Evaluation Effectiveness of thematic review was measured via:

- Executive engagement: Additional recommendations endorsed at MSAC, on top of those resulting from standard review of serious harm events
- Quality improvement: Increased strength of organisation-wide recommendations, assessed using the hierarchy of interventions scale
- Organisational assurance: Increased reporting of medication safety trends reported to the group Clinical Governance Committee

Discussion Outcomes include cross-site trend reporting, review of intravenous insulin chart design, enhanced prescribing incident analytics, and exploration of standardised governance responses to prescribing errors and near misses.

Thematic analysis enabled proactive identification of emerging medication safety risks and strengthened systems-focused organisation-wide learnings across hospitals of varying size and location. Reviewing incidents beyond harm classification supported scalable improvement strategies and complemented traditional incident investigation frameworks.

020

Anti-Xa monitoring: assessing alignment against a Queensland Health anticoagulant guideline in high-risk populations.

Kaitlin Boc[1]

[1]*Mercy Health Hospital, Werribee, Vic*

EMAIL bock@mercy.com.au

Background Anti-Xa level monitoring plays an important role for special populations receiving low molecular weight heparins (LMWH) for therapeutic anticoagulation. High risk patients such as renally impaired, extreme (low/ high) bodyweights, or pregnant individuals, may benefit from anti-Xa monitoring due to altered pharmacokinetics compared to the general adult population.

Objective(s) This study investigates the timeliness and appropriateness of anti-Xa monitoring in high-risk patients and identifies if anti-Xa monitoring conducted facilitated accurate result interpretation and optimised therapy.

Action (Method) A retrospective audit of inpatient admissions was conducted using scanned medical records to identify patients meeting criteria for high-risk classification and those who received anti-Xa monitoring. The results were assessed against the Queensland Health anticoagulant guideline, which was selected for its comprehensive recommendations on anti-Xa monitoring within Australia.

Evaluation Approximately one-third (9/26, 35%) of high-risk patients failed to have anti-Xa sampling collected at any point throughout their admission, placing patients at an increased risk of suboptimal anticoagulation.

Of the 17 patients who received initial anti-Xa sampling, 7 (41%) had levels taken outside the guideline's recommended dosing intervals. This includes samples collected before the third or fourth dose which may suggest steady state had not been achieved. Samples collected after the recommended timeframe may yield misleading anti Xa results potentially leading to inaccurate dosing adjustments.

Other findings from this study demonstrated inconsistency in satisfying the recommendations outlined in existing literature and guidelines which support anti-Xa monitoring in high-risk patients.

Discussion These findings may help standardise anti-Xa adjusted therapy in high-risk populations and potentially support the development of a Victorian or hospital-specific guideline or improvements in current clinical practices. The implementation of a standardised protocol will improve consistency in initiation, monitoring, and interpretation of results to reduce the risk of suboptimal anticoagulation.

021

Longitudinal versus Block Work-Integrated Learning: Exploring Student Experiences and Contributions across Developmental Stages

Elaine Bong[1], Samuel Shepherd[1], Daniel Malone[2], Kirsten Galbraith[2], Suzanne Kirsa[1], Simon Furletti[2], Samanta Wood[1]

[1]*Monash Health, Clayton, Vic,* [2]*Monash University, Parkville, Vic*

EMAIL elainelingling.bong@monashhealth.org

Background Evidence is limited on how different pharmacy Work-Integrated Learning (WIL) models align with student developmental stages and influence learning experiences. This pilot study explored two stage-appropriate models – a longitudinal WIL for second-year pharmacy (P2) students and a block WIL for third-year pharmacy (P3) students – designed to align with developmental stages and institutional supervisory capacity.

Objective To explore the influence of tailored longitudinal and block WIL models on cohort-specific learning experiences, workplace contributions, and supervisors' perceptions.

Methods A convergent mixed-methods design evaluated a 12-week longitudinal WIL (one day per week) for P2 students (n=12) focused on operational tasks, and a two-week intensive block WIL (five days per week) for P3 students (n=10) dedicated exclusively to clinical practice. Quantitative survey data were analysed statistically, while open-ended survey responses and focus groups underwent thematic analysis. Data were integrated via triangulation.

Results P3 students reported significantly greater placement enjoyment than P2 students (p=.018, r=.596) and a substantial positive shift in perceived workplace contribution (p=.046, r=.471). Thematic analysis revealed that the P2 longitudinal pilot was hindered by structural barriers, specifically a 'logistical clash' between dispensary duties and ward activities, which limited clinical exposure. Conversely, the P3 block model fostered specific career intentions (e.g., hospital pharmacy) over the broad 'passion-seeking' reported by P2 students. A secondary finding was a reciprocal learning dynamic, where student inquiries acted as catalysts for supervisor self-reflection and team knowledge reinforcement.

Discussion WIL effectiveness can depend on aligning placement structure with developmental stages. Longitudinal models build operational foundations, while intensive blocks facilitate the clinical immersion required for senior students to solidify career intentions. A scaffolded curriculum can optimize student readiness and workplace contribution beyond a 'one-size-fits-all' approach.

022

Friend or Foe? When Familiar Medications Become Overlooked In Paediatric Practice

Mariam Boulos[1]

[1]*The Children's Hospital at Westmead, Westmead, NSW*

EMAIL mariam.boulos@health.nsw.gov.au

Background In paediatric practice, omeprazole is so commonly prescribed that associated drug interaction risks may be overlooked. Despite pharmacist awareness of the interaction between clopidogrel and omeprazole, workflow-related factors such as interruptions, multitasking, and alert fatigue may contribute to inconsistent pharmacy intervention and missed medication-related risks.

Objective To explore how workflow pressures, alert fatigue, and familiarity with commonly prescribed medications, including omeprazole, may influence pharmacists' management of significant drug-drug interactions in paediatric practice, using the clopidogrel-omeprazole interaction as a model.

Action A questionnaire-based survey was conducted to evaluate pharmacist awareness and management of the clopidogrel-omeprazole interaction in paediatric practice. The survey explored workflow factors, including alert fatigue, multitasking, and formulation considerations that may influence the identification and intervention of clinically significant drug interactions. Results were used to identify opportunities for targeted education, optimisation of electronic clinical alerts, and strategies to reduce workflow interruptions, to improve the identification and management of clinically significant drug-drug interactions in paediatric practice.

Evaluation Despite high awareness of the clopidogrel-omeprazole interaction among pharmacists, interventions were performed inconsistently. These findings suggest that knowledge alone does not always lead to clinical action. Results indicate that alert fatigue, multitasking, interruptions, and workload pressures may contribute to missed detection of significant drug interactions. In paediatric practice, routine use of familiar medications such as omeprazole, alongside formulation and administration considerations, may increase the risk of missing significant drug interactions.

Discussion This project highlights the complexity of maintaining medication safety in paediatric pharmacy practice, particularly when medications such as omeprazole are perceived as low risk. Paediatric medication management involves additional challenges, including formulation selection, administration considerations and high cognitive workload, which may compete for attention during clinical screening. Greater consideration should be given to targeted pharmacist education and optimising clinical decision-support systems to enhance safe and consistent medication management in paediatric practice.

023

A Mind Mistaken for Madness: Navigating Diagnostic Uncertainty and Treatment in Suspected Anti-NMDA Receptor Encephalitis

Verity Boustead[1]

[1]*The Royal Melbourne Hospital, Parkville, Vic*

EMAIL verity.boustead@mh.org.au

Objective To present a case of suspected Anti-N-methyl-D-aspartate receptor encephalitis (NMDARE) and evaluate medication considerations amid diagnostic uncertainty.

Clinical features A 22-year-old male presented to the emergency department with acute behavioural disturbance and was admitted to the intensive care unit following a drop in GCS. Clinical features included tachycardia, fever, hypertonicity with inducible clonus and concerns for serotonin toxicity secondary to fluoxetine. An extensive work-up was undertaken to exclude organic pathology. Following medical stabilisation, the patient was transferred to the inpatient psychiatric unit (IPU) with a diagnosis of FEP.

Serum testing subsequently returned positive for NMDAR antibodies, prompting transfer to ICU for management of NMDARE.

Literature review Results from meta-analyses and cohort studies demonstrate that delayed initiation of immunotherapy in NMDARE is associated with poorer functional outcomes. Given delays in antibody and CSF testing, empirical treatment with high-dose corticosteroids and intravenous immunoglobulin (IVIG) is often commenced, followed by rituximab once malignancy is excluded. However, up to 23.2% of serum NMDAR antibody results may represent false positives, necessitating cautious interpretation in isolation.

Pharmacist interventions, Case Progress and Outcomes Pharmacists contributed to multidisciplinary discussions regarding medication management and adverse effect monitoring. Intravenous methylprednisolone and IVIG were commenced, followed by rituximab, alongside valproate, antipsychotics and benzodiazepines.

Improvement in mental state prompted tapering of antipsychotics and corticosteroids, coinciding with recurring psychotic symptoms. When CSF results returned negative for NMDARE, the FEP diagnosis was reinstated. Corticosteroids were weaned, psychotropic therapy optimised, and the patient transferred to IPU.

Discussion This case highlights the complexity of medicines management when NMDARE is suspected. Overlapping features of NMDARE, psychosis and medication-induced syndromes necessitates active pharmacovigilance. Pharmacists are crucial in correlating symptom evolution with medication changes and guiding therapy amid diagnostic uncertainty.

024

Capecitabine-induced coronary vasospasm occurring in the setting of HER2-directed therapy, highlighting multidisciplinary team importance

Montana Bowker, Maria Ayra Evangelista

[1]*Chris O'Brien Lifehouse, Camperdown , NSW*

EMAIL montana.bowker@lh.org.au

Objective To highlight capecitabine-induced coronary vasospasm as an uncommon but clinically significant adverse effect and demonstrate the importance of multidisciplinary assessment when evaluating cardiotoxicity in patients receiving concurrent human epithelial growth factor receptor 2 (HER2)-targeted therapy.

Clinical Features A 54-year-old female with metastatic breast cancer presented with chest pain and bilateral arm pain 5 days after commencing capecitabine and trastuzumab. Initial differential diagnoses included acute coronary syndrome due to elevated troponins and trastuzumab-related cardiotoxicity given prior exposure to trastuzumab deruxtecan. However, computerised tomography coronary angiography showed no significant coronary artery disease and transthoracic echocardiography demonstrated preserved left ventricular ejection fraction. Following multidisciplinary review, capecitabine-induced coronary vasospasm was identified as the most likely diagnosis.

Literature review The incidence of fluoropyrimidine cardiotoxicity ranges from 1 to 18%, although the incidence of coronary vasospasm is unclear. Reports during combined capecitabine-trastuzumab therapy remain limited. Proposed mechanisms include 5-fluorouracil-mediated endothelial dysfunction and endothelin-1 release causing vasospasm. In contrast, trastuzumab cardiotoxicity results from disruption of HER2-mediated cardiomyocyte protection. Both toxicities are often reversible with treatment interruption, thus early identification of the offending agent is imperative

Pharmacist Interventions, Case Progress and Outcomes Cardiology, oncology, intensive care, nursing and pharmacy teams collaborated in management. The patient received aspirin, isosorbide mononitrate, ivabradine and atorvastatin. Beta-blockers were avoided due to asthma. Capecitabine was discontinued. Following review, aspirin and ivabradine were ceased, atorvastatin continued and isosorbide mononitrate was prescribed for one week. Education was provided to the patient. Symptoms resolved completely and the patient was discharged. Subsequent oncology review continued trastuzumab and commenced vinorelbine.

Discussion This case highlights the importance of multidisciplinary decision-making in oncology patients with cardiac symptoms. Capecitabine-induced cardiotoxicity should be considered early, even in patients receiving other cardiotoxic therapies, as prompt recognition and discontinuation may prevent recurrent or severe cardiac events.

025

Small Patient, Global Effort: the Logistics of Antitoxin Supply for Infantile Botulism

Luke Bradford[1], Thomas Ewin[1], Jennifer Collins[1]

[1]*Royal Darwin Hospital, Darwin, NT*

EMAIL luketbradford@gmail.com

Objective To highlight the key role pharmacy plays in the logistical aspects of medication supply for hard to source but clinically important, time critical medicines.

Clinical Features A 6 week old baby presented with two days of increasing lethargy, unsettledness, and poor feeding. The infant was initially treated via the paediatric sepsis pathway; however, they failed to improve, with increasing inability to tolerate feeds and worsening respiratory distress. This culminated in elective intubation, as the clinical picture suggested a likely case of botulism.

Literature Review Botulism is a relatively rare event in Australia, averaging only one case per year, mostly in paediatric patients. It is a life threatening condition requiring intubation and ventilation, often with prolonged recovery times without antitoxin treatment. Human immunoglobulin for botulism has been shown to significantly improve outcomes in infants, including reductions in ventilation requirements, intensive care unit admission time, and overall hospital length of stay. Evidence demonstrates that early administration of antitoxin improves survival.

Pharmacist Interventions, Case Progress and Outcomes The on call pharmacist was contacted after hours on a Sunday to assist with procuring BabyBIG, a human immunoglobulin used to treat botulism in infants. Facilitating access to this product required liaising with the California Department of Health in the United States, organising import documents and seeking approval from senior executives from the health service. This was successfully coordinated by the pharmacist in collaboration with the paediatric team, resulting in the product being received and administered within 60 hours of the initial on call request.

Discussion The logistical processes required to import BabyBIG are extensive, particularly in regional and remote settings. This case highlights the vital role pharmacy plays in ensuring timely access to critical medicines, ultimately improving outcomes for infants with botulism.

026

Developing the developers: Improving Professional Development Discussions in Pharmacy

Tess Bradshaw[1]

[1]*Pharmacy Department, Royal Hobart Hospital, Hobart, Tas*

EMAIL tess.bradshaw@ths.tas.gov.au

Background Performance and Development Discussions (PDDs) and Performance Development Agreements (PDAs) are critical to individual development, organisational culture and workforce capability. In our pharmacy department, competing operational pressures and an increase in inexperienced leaders (due to increased workforce turnover) reduced confidence and capability to undertake PDDs/PDAs. Compliance rates fell significantly, limiting opportunities for staff development and recognition. Additionally, the existing template was viewed as lengthy and overly structured, which detracted from its intended focus on meaningful discussion.

Objective(s) To improve the quality and completion rates of PDDs/PDAs within the pharmacy department, through template redesign and capability building via education sessions and peer review.

Action (Method) A redesigned Pharmacy-based PDD/PDA template was developed, incorporating organisational values, progression aspirations and clinical or operational pharmacy peer-review feedback. The tool intentionally shifted from performance management toward reflective discussion that supports proactive planning for individual career progression and goal setting.

Education sessions were delivered to all team leaders and managers, emphasising preparation, active listening, and managing challenging conversations constructively. Expectations for PDD/PDA completion were reinforced through team meetings, with ongoing peer-supervision provided to those undertaking PDAs to support practice and build confidence.

Evaluation Seventeen pharmacy workplace leaders attended the education sessions. PDA completion rates increased from below 50% to 81% following template implementation and education. Qualitative feedback from workplace leaders indicated improved engagement, greater perceived value of discussions, and increased leader confidence.

Discussion Structured redesign of the PDA template, alongside targeted education for leaders, significantly improved participation in PDDs/PDAs, which reinforces a workplace culture of accountability and growth. This is important for pharmacy staff, whose roles require high levels of clinical judgement, adaptability, and collaboration within complex healthcare environments. Meaningful PDDs strengthen workforce capability, foster professional autonomy and development, and reinforce accountability, and therefore ultimately contribute to improved pharmacy service delivery and patient care.

027

Chance to Shine: ANZCAP Registrar Regional Secondment Cross-Pollinating Expertise and Harmonisation in Mental Health

Daniel Brennan[1], Lucy Arno[2], Susan Trevillian[2], Alan Tuxford[1]

[1]*Albury Wodonga Health, Albury, NSW,* [2]*North East Health Wangaratta, Wangaratta, Vic*

EMAIL daniel.brennan2000@gmail.com

Background An intra-regional secondment between organisations with established ties and geographical overlap is a practical, self-sufficient method to address workforce challenges and service demand. This offers a practical platform to review and harmonise cross-organisational pharmacy service delivery in mental health.

Objectives Create a secondment model between regional health services that supports the exchange of staff, clinical expertise, mentorship, and leadership. Enable a substantial career advancement prospect for the secondee, with the opportunity to implement a key quality improvement project. Develop an audit tool that assesses adherence to the Advanced Pharmacy Australia (AdPha) Standard of Practice (SoP) in Mental Health for Pharmacy Services that maps variations in service delivery between organisations and establishes future actionable improvement initiatives.

Action An early-career mental health pharmacist, in progress towards Australian and New Zealand College of Advanced Pharmacy (ANZCAP) Registrar recognition, was seconded to the mental health inpatient unit at a host site with a predominantly generalist workforce for three months. The secondee was the primary driver of mental health pharmacy service delivery and routinely provided clinical advice, guidance, and tutelage. An audit tool with risk assessment capability was designed to support a gap analysis that evaluated differences between health services and against AdPha SoP.

Evaluation The model was successfully implemented and demonstrated a scalable template for future placements. The secondee contributed clinical expertise and strengthened mental health pharmacy capability at the host site. The audit identified gaps between organisations and highlighted opportunities for future initiatives to deliver improved pharmacy service delivery in mental health.

Discussion The secondee fulfilled a workforce need and seized the chance to shine with this substantial career progression opportunity that fulfilled several ANZCAP portfolio activities. The implementation of initiatives identified from the audit at each organisation will enable the continual cross-pollination of pharmacy service delivery harmonised with clinical practice standards.

028

Pharmacist-led optimisation of fracture prevention in a Residential Aged Care Home-based fracture clinic

Prue Brian[1], June Chan, Dr Elizabeth Marsden

[1]*Older Persons Emergency Network, Brisbane, Qld*

EMAIL prue.brian@health.qld.gov.au

Background Osteoporosis-related minimal trauma fractures (MTF) are common in residential aged care and associated with significant morbidity and mortality. Despite strong evidence, antiresorptive therapies remain underutilised due to clinical complexity and prescriber hesitancy. Embedding pharmacists within a home-based fracture clinic may support initiation of fracture prevention therapies through medication review and prescriber collaboration.

Objective To assess implementation of evidence-based fracture prevention practices following pharmacist recommendations in a home-based fracture clinic.

Method A six-month retrospective audit included residents ≥65 years referred to the clinic after MTF. Exclusion criteria were community-dwelling status, fracture liaison services elsewhere, end-of-life care, or death during service. Data included baseline osteoporosis therapy, pharmacist recommendations, and discharge management. The primary outcome was change in fracture-prevention therapy from baseline to discharge; secondary outcome was uptake of pharmacist recommendations.

Evaluation Twenty-nine patients were included, all received medication reviews. Pharmacists made 29 antiresorptive recommendations: initiate (20; 68.9%), continue dose (3; 10.3%), recommence (2; 6.9%), modify (2; 6.9%) and continue to omit (2; 6.9%). All 29 were endorsed by the clinic prescriber; 26 (89.7%) were implemented and 3 (10.3%) were not actioned due to consent limitations. Appropriate antiresorptive use increased from 5/29 (17.2%) at baseline to 26/29 (89.7%) at discharge from the clinic.

On admission, 22/29 (75.9%) patients were on appropriate vitamin D therapy. Pharmacists made 29 recommendations: continue dose (20; 69%), initiate (6; 20.7%), continue to omit (2; 6.9%) and increase (1; 3.4%). Twenty-eight (96.6%) recommendations were actioned, with one (3.4%) not actioned. At discharge, 28 (96.6%) patients were on appropriate vitamin D therapy.

No calcium recommendations were made and prescribing remained unchanged.

Discussion This model achieved high uptake of pharmacist recommendations and supported prescribing. Integration of pharmacists within fracture services may reduce treatment gaps and optimise osteoporosis management in aged care populations.

029

Pharmacist interventions for upcoming Day Surgery Treatment Unit appointments at a digital metropolitan hospital

McKenna Broderick[1], Alistair Meldrum[1], Neelam Mehta[1]

[1]*Princess Alexandra Hospital, Brisbane, Qld*

EMAIL mckenna.broderick@health.qld.gov.au

Background Medication administration in the Day Surgery Treatment Unit (DSTU) of a metropolitan hospital requires planning and communication between clinicians and pharmacists to ensure stock availability, correct documentation of treatment plans, and clinical appropriateness. Although digital systems such as the integrated electronic Medication Record (ieMR) streamline processes, they can also cause digital-specific issues.

Objectives To evaluate the number and type of issues identified by a pharmacist when organising medication supply at the DSTU of a large metropolitan hospital with digital systems to ascertain how to improve workflow.

Action A retrospective audit of documented communications between pharmacists and clinicians from August 2025 and February 2026 of DSTU procedures was conducted. The audited document is utilised by pharmacists as a communication tool to flag concerns for upcoming medication administrations. Data was analysed descriptively.

Evaluation There were 583 interventions made by pharmacists prior to supply. Of these, 148/583 (25%) had more than one issue flagged by a pharmacist. Overall, 253/583 (43%) of the interventions pertained solely to incompletion of PowerPlans, a standardized pre-packaged group of medication orders within ieMR allowing for timely administration by nursing staff on the day of appointment. Interventions categorised as requiring clarification from a clinical standpoint constituted 89/583 (15%). Of these, 25/89 (28%) were associated with natalizumab, mostly regarding pre-screening for JC virus to mitigate the risk of progressive multifocal leukoencephalopathy. Lastly, 59/583 (~10%) required written prescriptions necessary for PBS reimbursement.

Discussion Interventions made by pharmacists when organising medications for the DSTU were frequent and generally related to missing digital documentation. This illustrates that whilst digital systems can streamline hospital workflow, it does not replace effective communication between multidisciplinary teams. Further digital education should be considered for clinicians regarding Powerplan requirements. Similarly, incorporating JCV monitoring requirements into natalizumab-specific PowerPlans to remind prescribers to monitor this may reduce future workload.

030

Crossing to the Other Side: Redefining Leadership Beyond Professional Silos

Rebecca Broom[1]

[1]*South Western Sydney Local Health District, Liverpool, NSW*

EMAIL rebecca.broom@health.nsw.gov.au

Background Health service leadership is often structured around professional silos, despite growing recognition that effective leadership in complex systems requires adaptive, capability-based approaches. Transitions between discipline-specific leadership roles remain uncommon, limiting opportunities for cross-disciplinary integration and innovation, particularly at executive levels.

Objective(s) To examine the transferability of pharmacy leadership capabilities to an executive allied health director role and explore implications for contemporary leadership models.

Action (Method) A structured reflective practice and service evaluation was undertaken following transition from Director of Pharmacy to an executive Director of Allied Health role within a tertiary health service. Core leadership capabilities – clinical governance, operational management, workforce leadership, and innovation – were applied across allied health services at an organisational level. Leadership approaches incorporated systems thinking, adaptive leadership in response to service complexity, and distributed leadership to shift ownership beyond traditional hierarchies. These approaches were applied to strategic priorities including workforce redesign, service integration, and patient flow optimisation. Evaluation drew on stakeholder feedback, implementation outcomes, and service-level performance indicators.

Evaluation Pharmacy-derived leadership capabilities translated effectively across a multidisciplinary and executive context, challenging assumptions of profession-specific leadership. Structured governance and risk management improved consistency across diverse services. A systems focus on patient flow reframed allied health contributions as whole-of-system impact. Adaptive leadership supported responsiveness to competing priorities, while distributed leadership increased engagement, accountability, and participation in improvement initiatives. This aligned services more closely with organisational priorities and enhanced visibility within hospital performance frameworks.

Discussion This experience challenges the premise that leadership must remain profession-specific, particularly at executive level. Leadership effectiveness is grounded in transferable capabilities rather than discipline. Pharmacy leadership provides a strong foundation for broader system leadership, particularly in governance, operational rigour, and innovation. Expanding cross-disciplinary leadership pathways may strengthen integration, workforce flexibility, and system performance, with implications for development of future executive leaders.

031

Supporting Virtual Emergency Care: Impact of Pharmacists in a State-wide Service

David Nguyen, Alexandra Brown[1], Uyen Hua, Jier Nguyen

[1]*Northern Health, Epping, Vic*

EMAIL David.Nguyen@nh.org.au

Background Effective virtual emergency care relies on timely multidisciplinary collaboration to support safe medication management and clinical decision-making. Pharmacists are well-positioned to provide this support; however, the nature and scope of their contribution within virtual care has not previously been reported.

Objective(s) To describe and quantify pharmacist interventions supporting clinicians within a Virtual Emergency Department (VED).

Action (Method) A retrospective, descriptive analysis of pharmacist-logged interventions within a state-wide VED was conducted over 15 months (February 2025 – April 2026). Interventions were extracted from a standardised log and categorised by communication modality and intervention type. Intervention types were retrospectively grouped into thematic categories: clinical enquiries, electronic prescribing issues, VED workflow/process enquiries, prescribing enquiries and patient-led enquiries. Descriptive statistics were used to quantify intervention patterns and workload distribution.

Evaluation A total of 351 pharmacist interventions were analysed. Pharmacists were predominantly contacted via Microsoft Teams (n=258, 73.5%), followed by telephone (n=53, 15.1%), reflecting pharmacist integration into virtual workflows.

The most common interventions were clinical enquiries from medical and nursing staff (n=160, 45.6%), electronic prescribing issues (n=78, 22.2%), VED workflow enquiries (n=57, 16.2%) and prescribing enquiries (n=45, 12.8%).

Requests relating to electronic prescribing and workflows accounted for 38.4% of all interventions, demonstrating that pharmacists provide substantial operational support alongside traditional clinical and prescribing expertise.

Importantly, these interventions were delivered in addition to direct patient care activities. During the study period, pharmacists conducted over 3000 patient reviews across the pharmacist-led COVID antiviral clinic (n=2009) and virtual respiratory clinic (n=1069), highlighting both patient and clinician facing contributions to safe prescribing, workflow continuity and service delivery.

Discussion Pharmacists provide a critical and multifaceted service within virtual care; supporting clinicians through clinical decision support, prescribing advice, workflow guidance and medication management. Their contribution extends beyond traditional pharmacy services and supports the safe and sustainable delivery of virtual care.

032

Aripiprazole Two Injection Start: Does it reduce in-patient bed days?

Minnie Park[1], Sara Bruce[1]

[1]*RBWH – Queensland Health, Brisbane, Qld*

EMAIL Minnie.park@health.qld.gov.au

Background Aripiprazole Long-Acting Injection (LAI) initiation involves a single 400 mg LAI plus 14 days of oral aripiprazole. Internationally, the two-injection start (TIS) is an accepted alternative, where patients receive two 400 mg LAI and a single 20 mg oral dose, without further oral supplementation required thereafter. Evidence suggests comparable pharmacokinetics and safety between regimens, with potential reductions in hospital length of stay (LOS) and readmission rates.

Aim/Objective(s) Evaluate aripiprazole initiation in mental health wards of a tertiary public hospital and explore impact on LOS, readmission rates and associated cost implications.

Methods A retrospective audit of aripiprazole initiation between January 2024 and June 2024 was conducted. Clinical documentations were reviewed to identify LOS, discharge barriers, and readmission rates within 14 days.

Results Of the 59 patients who commenced aripiprazole LAI, five received TIS. The total cost of aripiprazole LAI in the audit was $18,549; however, projected to exceed $37,000 if all patients received TIS. Documented barriers to discharge were similar across both groups and unrelated to depot initiation, typically involving awaiting symptom improvement, ongoing investigations, and unstable accommodation, resulting in minimal difference in median LOS. Although three patients from the standard group and one TIS patient re-presented to the Psychiatric Emergency Centre within 14 days of depot administration, none required re-admission.

Discussion As discharge barriers were unrelated to depot initiation, routine use of TIS may not provide significant clinical or economic benefit in the inpatient setting. TIS may be best reserved for patients with established tolerability and therapeutic response to oral aripiprazole in outpatient settings, or for patients who are ready for discharge without psychosocial barriers to discharge destinations, where eliminating the need for ongoing oral supplementation is preferred by the patient and simplifies transition of care. This project has led to a development of best practice guideline when utilising TIS.

033

Insulin Beyond Glycaemia: Healing Corneal Epithelial Defects

Ljubica Bukorovic[1], Dr Blair Shearwin[1], Dr Joshua Hann[1]

[1]*Metro South Health, Woollongabba, Qld*

EMAIL ljubica.bukorovic@health.qld.gov.au

Background Persistent corneal epithelial defects (PEDs) are associated with significant morbidity, including pain, visual impairment, infection, stromal melting, and corneal perforation. Management can be challenging, particularly when defects fail to respond to conventional therapies such as lubricants, topical antibiotics, bandage contact lenses, or surgical interventions. Topical insulin has emerged as a potential low-cost adjunctive therapy for ocular surface healing. In 2024, our tertiary public hospital introduced compounded insulin eye drops as a novel treatment option for selected patients with PEDs.

Objective To evaluate the effectiveness, safety, and implementation of compounded insulin eye drops for the treatment of PEDs within a large tertiary ophthalmology service.

Method A retrospective quality improvement review was conducted of patients prescribed compounded insulin eye drops from late 2024 to present. Eligible patients had PEDs refractory to standard management. Data collected included patient demographics, underlying ocular diagnoses, defect characteristics, treatment duration, healing outcomes, visual acuity changes, adverse events, and subsequent interventions. Pharmacy compounding processes and multidisciplinary collaboration between ophthalmology and pharmacy services were also reviewed.

Evaluation Most patients demonstrated complete epithelial healing following initiation of insulin eye drops, with progressive reduction in defect size observed during follow-up. Treatment was well tolerated, with no serious adverse events attributed to therapy. Introduction of insulin eye drops provided clinicians with an additional therapeutic option for managing complex corneal disease and reduced reliance on more resource-intensive alternatives in selected cases.

Discussion This initiative demonstrates the successful implementation of compounded insulin eye drops within a tertiary public hospital setting. Pharmacist involvement was integral to formulation development, quality assurance, and governance processes. The findings support the growing body of evidence for topical insulin in corneal epithelial healing and highlight the value of collaborative innovation between pharmacy and ophthalmology services. Further prospective studies are required to optimise treatment protocols and assess long-term outcomes.

034

Immunise today, Keep Beds for Tomorrow

Rosemary Burke[1], Hannah Turton[2], Rebekah Lee[3], Bruce Wu[3], Olivia King[1], Amanda Yates[1]

[1]*Sydney Local Health District, Camperdown, NSW,* [2]*Royal Prince Alfred Hospital, Camperdown, NSW,* [3]*Concord Hospital , Concord, NSW*

EMAIL rosemary.burke@health.nsw.gov.au

Background Every winter emergency departments see high rates of patients with influenza. In 2025 there was a prolonged season, a surge in hospital admissions on a background of falling vaccination rates (1). Embedding immunisation into every day care is a priority. A state-wide nurse initiation protocol for influenza vaccine (over 65 years) was implemented in 2026.

Objective(s) To embed vaccination into workflows and optimise hospital-initiated influenza vaccination.

Action (Method) Embedding immunisation processes required multidisciplinary involvement, inpatient & community actions and pharmacy played several key roles. This included the development of education pathways, communication strategies, decision support tools in the eMR and changes to workflows. Vaccinations recorded in the electronic medical record(eMR) are uploaded to the Australian Immunisation Register (AIR). Pharmacists successfully piloted embedding vaccine questions in best possible medication history & confirming status in AIR.

Two eMR PowerPlans™ were implemented: the influenza vaccine PowerPlan(updated) to assist clinicians in selecting the correct influenza vaccine for the appropriate age group and a nurse-initiated influenza PowerPlan™ which included eligibility criteria. Pharmacy developed and distributed a twice weekly report (Power BI) to key stakeholders to monitor adoption.

Evaluation Compared to 2025, influenza vaccinations recorded in the eMR for the over 65 age group increased by 160% and 114 of these were nurse initiated. All age group influenza vaccination increased by 83%. AIR access is now being extended to all pharmacists in one hospital.

Discussion Pharmacists were critical members of the team with roles including assessing vaccination status, cold chain & logistics management, pharmacist led design of eMR PowerPlans, development of communication materials & designing the reporting tool. Immunisation programs require clinical stewardship, targeting high-risk populations and system integration all of which are roles the pharmacist is well equipped to deliver.

1. NCIRS Annual Immunisation Report 2025-Summary. ncirs.org.au accessed 21/5/2026

035

Paracetamol Overdose Management in the Emergency Department: A Retrospective Audit of Guideline Adherence

Georgia Burley[1,2], Emily Cooper[2], Rowena Magoffin[2]

[1]*North West Regional Hospital, Burnie, TAS,* [2]*Royal Hobart Hospital, Hobart, TAS*

EMAIL georgia.burley@ths.tas.gov.au

Background Paracetamol overdose is a common Emergency Department (ED) presentation and a leading cause of acute liver injury in Australia. Management requires timely risk assessment and appropriate use of N-acetylcysteine (NAC) in accordance with clinical guidelines. However, the complexity of NAC prescribing and dosing may contribute to practice variation and medication errors.

Objective To evaluate whether adult patients presenting to the ED with paracetamol overdose are managed in accordance with current clinical guidelines.

Action A single-centre retrospective audit of adult paracetamol overdose presentations to a tertiary hospital between 1 January and 31 December 2024 was conducted. Patients were identified via the ED electronic medical record system. Data extracted included demographics, overdose characteristics, laboratory results, activated charcoal use, presentation timing and NAC prescribing and administration. Data was analysed using descriptive statistics.

Evaluation At least one deviation from guideline recommended management occurred in 35/57 presentations (61.4%). NAC was administered in 40/57 cases (70.2%), including four where it was not indicated. Median time to NAC commencement from ED arrival was 2.9 hours. Dosing or infusion errors occurred in 10/40 cases (25%), including one tenfold underdose. In seven cases requiring immediate NAC initiation, treatment was delayed from ED arrival (median 2.9 hours). Patient weight was not documented in 35/57 cases (61.4%), and alanine aminotransferase was not obtained in 2/57 cases (3.5%). Double-dose second infusions were indicated in five cases, with administration occurring in three.

Discussion Frequent deviations highlight significant patient safety risks in paracetamol overdose management, particularly in NAC initiation, dosing and monitoring. Despite the limitations of a retrospective single-centre study and potential documentation bias, the consistent pattern of errors demonstrates system-level gaps in care. Targeted pharmacy-led strategies, including mandatory weight documentation, electronic decision support and standardised prescribing tools, are needed to improve care and reduce medication related harm.

036

Tocilizumab for Acute Lung Allograft Dysfunction in Lung Transplant Recipients: A Retrospective Review

Fay Burrows[1], Dr Alistair Abbott[1], Lilibeth Carlos[1], Dr Pamela Karas[1], Dr David Darley[1], Dr Claire Thomson[1], Dr Rebecca Pearson[1], Dr Emma Stumbles[1], Dr Natalie Belousova[1], Dr Adrian Havryk[1], Professor Marshall Plit[1]

[1]*St Vincent's Hospital , Sydney, NSW*

EMAIL fay.burrows@svha.org.au

Background Evidence supporting tocilizumab, an anti–IL-6 receptor antibody, for antibody-mediated rejection (AMR) or acute lung allograft dysfunction (ALAD) after lung transplantation remains limited.

Aim To evaluate outcomes in lung transplant recipients who received tocilizumab for AMR or ALAD.

Methods Retrospective review of all lung transplant recipients who received tocilizumab for AMR or ALAD at our institution between Feb-2024 and Aug-2025, assessing indications, regimens, outcomes, and adverse effects. ALAD was defined as a fall in FEV_1 >10% or new hypoxia with radiological infiltrates.

Results Fifteen recipients (13 bilateral, 2 single lung transplants) received tocilizumab. Indications were AMR in 9 (4 probable, 5 possible) and ALAD with a possible alloimmune component in 6 (2 refractory acute cellular rejection [ACR], 1 infection with new donor-specific antibodies [DSA], 3 early ALAD <1 month post-transplant). AMR cases received 3–6 months of therapy, typically one intravenous infusion followed by subcutaneous doses every 1–2 weeks (n=7). Most ALAD patients received a single intravenous dose. All received additional therapies including intravenous immunoglobulin, pulse methylprednisolone or plasmapheresis.

In the AMR cases, DSA cleared in 4/9 (44%) and mean florescence intensity (a measure of circulating DSA reactivity) declined in 5/9 (56%). Lung function improved or stabilized in 3/6 (50%) at 6 months. Two AMR patients required readmission for additional therapies, and one died of chronic lung allograft dysfunction (CLAD). Of 6 ALAD patients, 2 refractory ACR cases died of CLAD with infection, while 3 early ALAD cases improved.

Adverse events included cytomegalovirus reactivation (n=2) and transient transaminitis (n=6), with no infusion reactions or hepatic failure.

Discussion Tocilizumab was well tolerated and associated with improved or stable graft function in most AMR patients. Subcutaneous dosing enabled outpatient therapy. Early ALAD appeared more responsive than refractory cases, supporting further study of IL-6 blockade in alloimmune lung allograft dysfunction.

037

Beyond Medicines Management: A Pharmacist Navigator Model for Improving Care Transitions for First Nations Peoples

Annette Bush[1], Cameron Thorpe[1]

[1]*Cairns And Hinterland Hospital And Health Service, Cairns, Qld*

EMAIL annette.bush2@health.qld.gov.au

Background First Nations Australians experience significant inequalities in healthcare access, outcomes, and medication continuity, particularly during transitions between hospital and community care. Geographic isolation, fragmented communication pathways, medication affordability challenges, and culturally unsafe healthcare experiences contribute to medication related harm. The Communication of Medicines Reconciliation at Admission and Discharge Events (CoMRADE-CTG) service is a newly implemented service in a Far North Queensland hospital. This pharmacist-led, First Nations medication management service recognises the unique positioning of pharmacists to address these barriers through medicines management and navigation across care settings.

Objective To describe the development, implementation and evolution of the COMRADE-CTG model from a service designed to improve medication access and provide support across transitions of care between hospital and community for First Nations Peoples to an emerging pharmacist navigator model that redefines the pharmacist's role in coordinating equitable, culturally safe healthcare.

Action The service was co-designed with First Nations leaders, community representatives, and healthcare partners. Pharmacists undertake medication reconciliation, identify and resolve medication-related problems, conduct hospital outreach medication reviews, facilitate access to Closing the Gap funding mechanisms, coordinate communication between hospital and community providers and provide culturally responsive medicines education. Partnerships were established with primary care services, community pharmacies, Aboriginal and Torres Strait Islander health services, and diverse multidisciplinary teams.

Evaluation A mixed methods evaluation framework has been developed. Quantitative evaluation will use a quasi-experimental design to assess all-cause hospital readmissions and emergency department presentations at 28, 60, and 90 days post-discharge, including medication-related presentations. A complementary qualitative evaluation will explore patient experiences and the role of the pharmacist in supporting care transitions.

Discussion The CoMRADE-CTG model expands the pharmacist's role beyond traditional medicines management to include navigation, coordination, and advocacy. This approach provides a scalable framework for reducing medicine-related harm in First Nations Peoples and improving equitable access to healthcare.

038

Determining limits: prevalence and risk stratification of therapeutic anticoagulant use in a tertiary hospital.

Layla Cahill[1], Dr Libby McCourt[1], Danielle Ironside[1], Angela North[1], Abby Yu[1], Caroline Logan[1], Caitlin Merz[1]

[1]*Royal Brisbane And Women's Hospital, Herston, Qld*

EMAIL layla.cahill@health.qld.gov.au

Background Anticoagulants are high-risk medications associated with bleeding and thrombotic complications. In our tertiary public hospital, timely identification and review of high-risk patients receiving therapeutic anticoagulation (TAC) is essential but challenging due to a paper-based system, no stewardship support, and high patient complexity and turnover.

Objective To determine the prevalence of TAC use, identify high-risk patients using pre-defined criteria, and evaluate whether these criteria would have identified previous anticoagulant-related Severity Assessment Code (SAC) 1 incidents.

Methods A two-week point-prevalence audit was conducted across medical and surgical wards within a tertiary public hospital. Patients were included if prescribed TAC at the time of auditing. Relevant data was collected including TAC dose and frequency. Patients were screened against high-risk criteria (heparin infusions, withheld anticoagulants, eGFR <30 mL/min/1.73 m^2, weight <50 kg or >120 kg, and anticoagulant bridging). These criteria were applied to two recent anticoagulation-related SAC-1 incidents. Data were analysed descriptively.

Results Of 300 inpatients screened, 60 (20%) were prescribed TAC, including withheld anticoagulants. Most patients (42/60, 70%) were prescribed direct oral anticoagulants, 16 (27%) enoxaparin, 7 (12%) warfarin, and 2 (3%) heparin infusions with some patients prescribed multiple agents.

Approximately one-third (37%, 22/60) of patients met at least one high-risk criterion;15 (68%) had withheld TAC, 8 (36%) received bridging, 5 (22%) weighed >120 kg, 2 (9%) had a heparin infusion, 2 (9%) eGFR< 30 mL/min/1.73 m^2, and 1 (5%) weighed <50 kg.

Both SAC-1 incidents met at least one high-risk criterion and occurred in outpatients and day-surgery, where pharmacist review isn't routinely available.

Discussion A substantial proportion of patients receiving TAC were identified as high-risk, highlighting the need for targeted clinical review and anticoagulation stewardship. These criteria identified the SAC-1 incidents, suggesting potential utility as a screening tool. Expanding pharmacist involvement into outpatient and day-surgery settings, where high risk activities such as withholding or bridging occur, may reduce anticoagulation-related harm.

039

The Limits of Local Guidance: Variation in Intravenous Iron Clinical Practice Documents Across Major Hospitals

Siena Cameron[1], Kitty St Pierre[1,2,3], Karl Winckel[1,4], Dr Keshia De-Guzman[1,5], Aaron Van Garderen[6], Alana Delaforce[7], Edgar Poon[1,2,4]

[1]School of Pharmacy and Pharmaceutical Sciences, University of Queensland, Brisbane, Qld, [2]Pharmacy Department, Gold Coast Health and Hospital Services, Southport, Qld, [3]School of Pharmacy and Medical Sciences, Griffith University, Southport, Qld, [4]Princess Alexandra Hospital, Metro South Health, Brisbane, Qld, [5]Queensland Ambulance Service, Queensland Health, Brisbane, Qld, [6]Office of the Chief Clinical Information Officer, Queensland Health, Brisbane, Qld, [7]Australian E-Health Research Centre, CSIRO, Brisbane, Qld

EMAIL si3nacameron@gmail.com

Background Clinical practice in Australia is supported by multiple layers of guidance, from national and statewide recommendations to health service and site-specific documents. Variation between locally endorsed documents is common, and intravenous iron is no exception. Inconsistent recommendations for intravenous iron administration may expose patients to harms such as skin discolouration and hypophosphataemia, while varied dosing protocols may result in inadequate or excessive iron replacement. We examined local clinical practice documents from three major metropolitan facilities to characterise these differences.

Objective To characterise variation in intravenous iron clinical practice documents across three major metropolitan hospitals.

Action We analysed ten documents of interest using Walt and Gilson's Policy Analysis framework, assessing context, content, process and actors and profiled any variations found based on these domains.

Evaluation We identified variations across all domains, spanning dose recommendations, administration, monitoring, and patient consent. Notably, the same adult patient could receive a >2-fold difference in total iron dose depending on the admitting site, driven by use of the Ganzoni formula versus simplified dosing tables. Guidance for managing hypophosphataemia and extravasation-related skin staining as adverse drug reactions was also inconsistent, potentially affecting early recognition and escalation to minimise preventable harm.

Discussion Where local variation is required, intravenous iron documentation should include clear, evidence-based justification and explicit contextual parameters to enable safe application. Document governance processes should be strengthened to mandate cross-site review of such documents with formal approval criteria for variation, and scheduled updates to maintain alignment with current evidence. Collectively, these actions will reduce unwarranted variation, standardise patient care, and improve usability for clinicians working across multiple sites by reducing ambiguity, supporting consistent decision-making, and minimising the risk of suboptimal practice.

040

Defining and validating a safety and quality indicator to monitor chemical restraint use

Martin Canning[1], Jennifer Wu[1], Amanda Murphy[1], Claire MacBean[1]

[1]Metro North Health, Herston, Qld

EMAIL Martin.Canning@health.qld.gov.au

Background Chemical restraint (CR), defined as the use of medication primarily to influence behaviour rather than treat an underlying condition, poses significant clinical and ethical challenges in hospital care. Monitoring its use is a requirement of the National Safety and Quality Health Service Standards (Action 5.35) and for safeguarding patient safety. However, reliance on manual audits is resource-intensive and unsustainable.

Aim To define and validate a safety and quality indicator (SQI) for monitoring CR use within an entire health service using routinely collected prescription data.

Methods An anonymised dataset containing prescription information from a previous health service-wide CR point prevalence audit was analysed. Potential indicators were developed based on the most frequent medicines and documented indications associated with CR. Indicators were tested for sensitivity, specificity, and Youden's J statistic at prescription and patient levels. Prevalence estimates were compared against manual audit benchmarks.

Results The dataset included 592 prescriptions for 288 patients. Twenty-seven indicators were defined and evaluated. An indication-based indicator centred on the term agitation (including wildcard searches and common misspellings) demonstrated the highest accuracy at the prescription level (sensitivity 0.923, specificity 0.832, Youden's J statistic 0.755) and patient level (sensitivity 0.774, specificity 0.884, Youden's J statistic 0.658). Inclusion of medicine-specific information including olanzapine, lorazepam, risperidone or quetiapine to this indicator reduced sensitivity (0.670) and increased specificity (0.948) at the patient level, but overall accuracy was reduced (Youden's J statistic 0.618). Medicine-based indicators consistently overestimated chemical restraint prevalence and showed lower accuracy.

Discussion Indication-based indicators, particularly those incorporating wildcard searches for 'agitation', provide the most robust proxy for monitoring CR using prescription data in hospital care. While these indicators offer a practical interim solution, their moderate accuracy underscores the need for structured documentation of clinical intent when prescribing CR to more accurately monitor use.

041

Evaluation of Collaborate Pharmacist Medication Prescribing Time and Motion – a single site study

Martin Canning[1], Andrew Munns[2], Matthew Ogana[3], Olivia Oh[3]

[1]Metro North Health, Herston, Qld, [2]The Prince Charles Hospital, Chermside, Qld, [3]The University of Queensland, Woolloongabba, Qld

EMAIL Martin.Canning@health.qld.gov.au

Background Collaborative Pharmacist Medication Prescribing (CPMP) enables authorised pharmacists to prescribe medicines under formal collaborative protocols. This model has been associated with improved medication safety, quality use of medicines, and health service efficiencies. Limited data exists regarding pharmacist workflow and time allocation while performing CPMP, particularly in Emergency Department (ED) and post-take ward round settings.

Aim To determine the extent and time spent by ED and post-take ward round CPMP pharmacists performing evidence-based clinical pharmacy activities.

Methods A prospective time and motion study was conducted over 8 weekdays in February 2026 at a metropolitan tertiary referral hospital. CPMP pharmacists in the ED and post-take ward round were shadowed for full 8-hour shifts, with activities recorded using a structured electronic tool. Clinical pharmacy key performance indicators, including interventions, were collected using standardised forms and compared with historical pre-CPMP data.

Results ED CPMP pharmacists saw fewer new patients per day (7.1 vs 10.8 pre-CPMP) but spent more time per patient (31.9 vs 19.8 minutes), with 63.2% receiving CPMP and 86.8 minutes/day dedicated to prescribing. Post-take pharmacists saw more patients (11.6 vs 5.9) with reduced time per patient (16.9 vs 26.6 minutes), and CPMP performed in 57% of cases. Pharmacist interventions increased substantially post-CPMP (ED: 188 vs 90 per 100 patients; post-take: 138 vs 97 per 100 patients).

Discussion CPMP implementation shifted pharmacist practice toward earlier, more intensive clinical involvement and increased intervention rates, suggesting improved identification and management of medication-related problems. Differences between models reflect workflow integration and scope of responsibility, with ED pharmacists undertaking deeper individual patient input and post-take pharmacists demonstrating efficient ward-round integration. Observed inefficiencies are likely related to early implementation and evaluation processes and are expected to improve, supporting further optimisation and potential clinical benefits.

042

Beyond the register: Time demands of Electronic Controlled Drug management

Margaret Carroll[1], Ruth Colley[1], Christine Ting[1,2]

[1]Austin Health Pharmacy Department, Heidelberg, Vic, [2]Austin Health EMR & ICT Services, Heidelberg, Vic

EMAIL Margaret.CARROLL@austin.org.au

Background The HS8 electronic controlled drug register (eCDR) is an integral part of the receiving, dispensing, transacting and administering controlled drugs across the pharmacy and 37 inpatient areas of a multi-campus tertiary public health service. An eCDR pharmacist oversees register administration.

Objective To track the time and tasks undertaken by the eCDR pharmacist (0.6 full time equivalent) to administer the eCDR across the health service and to determine if any duties can be allocated to the pharmacy dispensary teams.

Action The eCDR pharmacist kept a daily log of the time spent on hospital, pharmacy and ward eCDR tasks for one month. The task categories included: eCDR alert review and management, application defect, register check and workflow issues; downtime and hospital information technology issues; pharmacy operational; education, communication and other.

Evaluation Of the eighty-one hours recorded, 38 hours (47%) were spent on overall hospital eCDR administration, 29 hours (36%) on pharmacy eCDR, and 12 hours (15%) on ward eCDR tasks. Downtime issues and application defect investigation comprised 72% (27.5/38 hours) of the hospital eCDR administration time. Pharmacy alert management accounted for 40% (11.5/29) of the pharmacy eCDR administration hours, while education and workflow issues required more time than pharmacy operational tasks, which represented less than 10% (2.8/29 hours). Ward register checks (7.5/12 hours) took more ward eCDR administration time than alert review (3.7/12 hours).

Discussion The review period included an unplanned eCDR downtime due to a hospital IT problem. Excluding this, the eCDR pharmacist spent most time administering the eCDR on: pharmacy alert management and education, hospital-wide application defects, ward register checks and alert review. Although there are limited operational tasks to remove from the eCDR pharmacist role, dispensing teams could manage pharmacy alerts, allowing the eCDR pharmacist to focus on other tasks such as new eCDR version testing when required.

043

A Cautionary Tail: The impact of turkey tail mushroom supplementation on FOLFIRI treatment

Geoff Wills[1], Gabrielle Casey[1], Lauren Redmond[1]

[1]*The Sutherland Hospital, Caringbah, NSW*

EMAIL Geoff.wills@health.nsw.gov.au

Objective To report a case of transaminitis linked to turkey tail mushroom supplementation resulting in a potentially avoidable chemotherapy dose reduction, and to highlight the importance of screening for complementary medications in the oncology setting.

Clinical Features A 71-year-old male with metastatic colorectal cancer receiving fluorouracil, leucovorin, irinotecan (FOLFIRI) and bevacizumab developed transaminitis prior to cycle 8. Previously stable liver function tests rose, with AST rising nine-fold to 234 and ALT increasing three-fold to 87. This led to a 25% dose reduction of irinotecan for cycles 8 and 9.

Literature Review Turkey tail mushroom has been used in traditional Chinese, Japanese and Native American medicine to enhance immune function, remove toxins and treat infections. It has recently gained popularity for possible antineoplastic effects. Its active constituents are polysaccharide-K (PSK) and polysaccharopeptide (PSP). Elevated liver enzymes, liver impairment and hepatotoxicity have occurred when PSK has been taken with chemotherapy, although causality remains unclear.

Pharmacist Interventions, Case Progress and Outcomes Review by the oncology nurse practitioner to determine causes of new transaminitis identified recent initiation of turkey tail supplementation. Escalation to, and review by, the oncology pharmacist highlighted the possible causal link based on the temporal association and hepatotoxicity risk noted in the literature. Supplementation was ceased as per pharmacist recommendation and liver function tests returned to baseline within 11 days. Irinotecan was then resumed at full dose.

Discussion This case highlights the importance of routine screening for complementary medicine use, including turkey tail mushroom, given its increasing popularity among patients with cancer. Patients should be advised to avoid initiating complementary therapies mid-cycle without first discussing with their oncology team. Failure to identify such agents may result in misattribution of adverse effects to chemotherapy, potentially leading to unnecessary dose modifications or treatment delays which may then impact treatment outcomes.

044

Pharmacist-integrated digital discharge documentation package improves medication safety during hospital to residential aged care transitions

Carol Chan[1], Kate Gorell[2], Justin Somers[2], Sony Palikhe[2], Clare Stephenson[2,3], Chrysta Bridge[4], Fariza Binti Nordin[5], Ash Smyth[3,6,7,8], Kasia Bail[3,6]

[1]*Pharmacy department, Canberra Health Services, Canberra, ACT,* [2]*Acute Care of the Elderly, Canberra Health Services, Canberra, ACT,* [3]*Centre for Ageing Research and Translation, University of Canberra, Canberra, ACT,* [4]*Digital Canberra, Canberra, ACT,* [5]*Department of Geriatrics, Canberra Health Services , Canberra, ACT,* [6]*School of Nursing and Midwifery, Faculty of Health, University of Canberra, Canberra, ACT,* [7]*Dept of Nursing, School of Health & Clinical Sciences, University of Western Australia, Perth, WA,* [8]*Brightwater Research Centre, Brightwater Care Group, Perth, WA*

EMAIL carol.chan@act.gov.au

Background Transitions of care (TOC) are a high-risk period for medication errors and miscommunication, accounting for over 50% of medication errors and representing a national priority. Older people are particularly vulnerable due to complex care needs. Medication handover to Residential Aged Care (RAC) is often poorly aligned across charts, discharge summaries, and medication supply, increasing error risk.

To address this, a co-designed digital discharge documentation package (DDP) was implemented across two aged-care wards in a tertiary hospital. This pharmacist-integrated model incorporates a pharmacist-generated medication administration record (MAR) aligned with the discharge summary, alongside a seven-day medication supply in dose administration aid (DAA) sachets, replacing handwritten charts and traditional medication supply.

Objective To evaluate whether a pharmacist-integrated DDP improves medication chart accuracy, reduces medication errors, and enhances handover during transitions from hospital to RAC.

Methods A mixed-methods evaluation was conducted. A retrospective comparison included 40 medication charts: 20 paper-based charts (January 2022 to November 2024, pre-intervention) and 20 pharmacist-prepared MARs with DAAs (February 2025 to August 2025, post-intervention). Errors included medication-specific (omissions, dose/frequency discrepancies) and administrative errors (missing identifiers, allergies, routes, and prescriber signatures), assessed by two independent nurses, adjudicated by a geriatric pharmacist. Semi-structured interviews with 10 RAC nurses assessed satisfaction and handover quality.

Results Median errors per chart decreased from 6.55 to 0.85 (131 vs 17 errors). Chart error frequency reduced significantly (95% vs 50%, p=0.003) with elimination of administrative and high-risk medication errors. RAC nurses consistently reported positive experiences and improved care quality. Most (88%) reported sufficient information for care, and 100% reported clear reconciliation and alignment with discharge summaries.

Discussion A pharmacist-integrated DDP with DAA supply significantly improves medication chart accuracy, reduces transcription errors, and enhances handover to RAC. This scalable model demonstrates the value of pharmacist-integrated digital innovation in improving medication safety during transitions of care.

045

Lost in Clearance: Ganciclovir Dosing Through the CRRT Rollercoaster

Carman Chan[1]

[1]*Canberra Hospital, Garran, ACT*

EMAIL carman.chan@act.gov.au

Objective To optimise ganciclovir therapeutic drug monitoring (TDM) in patients with complex pharmacokinetics due to intermittent continuous renal replacement therapy (CRRT).

Clinical features A 69-year-old male with multiorgan failure secondary to statin-induced myositis received high-dose steroids, intravenous immunoglobulin, and rituximab for suspected primary biliary cirrhosis–idiopathic inflammatory myopathy overlap syndrome. He subsequently developed cytomegalovirus (CMV) viraemia and anuric renal failure requiring intermittent CRRT.

Literature review CMV disease is associated with substantial morbidity and mortality, particularly in immunocompromised populations. Ganciclovir is first-line therapy for severe systemic CMV infection, with dose adjustment recommended in renal impairment. TDM has been proposed to optimise drug exposure and reduce toxicity; however, validated therapeutic targets remain poorly defined. A trough concentration of 1–2 mg/L was targeted based on limited available evidence.

Case progress Myelosuppression was a key concern due to prior thrombocytopenia with thrice-weekly dosing at another institution. Ganciclovir was initiated at 1.25 mg/kg daily. In the absence of local TDM, samples were sent externally, resulting in several-day delays in level reporting. With improving renal function off CRRT, dosing was increased to 1.25 mg/kg twice daily.

The initial trough level returned at 1.4 mg/L (within target range), prompting reduction back to once-daily dosing, despite prior adjustments reflecting improved renal function and additional levels being pending. A subsequent level of 9.2 mg/L, corresponding to the twice-daily regimen, indicated supratherapeutic exposure.

Despite this variability, CMV viral load continued to decline, and no evidence of myelosuppression was noted during treatment. Therapy was later transitioned to valganciclovir 450 mg daily.

Discussion Dynamic renal recovery and intermittent CRRT complicated ganciclovir dosing. Delayed TDM limited utility in the context of labile renal function and limited interpretive guidance. Following initial target attainment, dosing aligned with real-time clinical assessment rather than delayed levels, emphasising clinical judgement to optimise efficacy and minimise toxicity.

046

Beyond Brand Substitution: Improving Local Processes for Implementing Large-scale Pharmaceutical Contracts

Eunice Wing Yin Chan[1], Anthony Byers[1], Katie Paddon[1], Suzanne Olding[1]

[1]*Royal North Shore Hospital Pharmacy Department, St Leonards, NSW*

EMAIL eunice.chan@health.nsw.gov.au

Background Large-scale medicine brand changeovers associated with jurisdiction-wide pharmaceutical contracts present local medication safety, inventory, electronic medication record (eMR), automated dispensing cabinet (ADC) and supply continuity challenges. A structured process was required to locally coordinate and risk-manage these transitions at our major metropolitan facility.

Objective(s)

1) To develop and implement a framework and electronic tool to support medicine brand changeover.
2) To evaluate the intervention through measuring key task completion, timeliness and cost savings.

Action (Method) A multi-disciplinary working group explored and defined key tasks required for brand changeover. Process mapping informed development of an end-to-end workflow. An electronic collaborative task-tracking tool was developed to support coordination and visibility. The framework was implemented prospectively over 13 weeks (February – April 2026) alongside a new state-wide pharmaceutical contract. Iterative Plan–Do–Study–Act cycles were used, with weekly audit and feedback to monitor progress and refine processes. Outcomes included key task completion, timeliness and cost savings.

Evaluation Key tasks were :

1) clinical inter-changeability and medication safety risk assessment
2) storage assessment
3) stock run-down planning and
4) electronic system updates (inventory management system, eMR, imprest lists and ADCs).

Of 171 medicines requiring changeover, all underwent risk and storage assessments. Seven (4.1%) items had identified risk; 6 were accepted with action plans and 1 referred for state contract reconsideration. By week 13, 124/170 (72.9%) items were completed [117/117 (100%) 'fast-movers;' 6/53 (11.3%) 'slow-movers'], with median (range) completion of 8 (0–37) items/week. All completed items (n=124) had correct stock run-down and electronic updates. Cost savings over 13-weeks were $57,060.

Discussion A structured, task-based framework enabled consistent, coordinated management of complex brand changeovers, improving process reliability, oversight and early identification of clinical and medication safety risks. This provides a practical model for future large-scale brand transitions during contract change or medication shortage.

047

Analytical Validation of an Onsite Voriconazole Immunoassay to Support Therapeutic Drug Monitoring

Ricky Chen[1,2], Cankayan Suthaharen[1], Jason Chung[1], Justin Beardsley[1,2], Sophie L. Stocker[1,2,3], Stephen C. H. Li[1,4], Prof Jan-Willem Alffenaar[1,2]

[1]Westmead Hospital, Sydney, NSW, [2]University of Sydney, Sydney, NSW, [3]St Vincent's Hospital, Sydney, NSW, [4]Western Sydney University, Sydney, NSW

EMAIL chen.ricky088@gmail.com

Background Voriconazole therapeutic drug monitoring (TDM) is essential for optimising clinical outcomes due to its narrow therapeutic range and highly variable pharmacokinetics. In institutions relying on send-away testing models, extended turnaround times hinder dose optimisation, prolonging patient exposure to subtherapeutic or toxic concentrations.

Aim/Objective(s) To analytically validate the ARK™ Voriconazole II enzyme immunoassay for onsite testing and evaluate its preliminary feasibility in a tertiary hospital setting.

Methods Analytical performance was assessed according to ISO 15189, National Pathology Accreditation Advisory Council (NPAAC), and National Association of Testing Authorities (NATA) standards. A 5×5 imprecision design was conducted at three quality control (QC) concentrations (1, 4.5, and 9 mg/L). Trueness was evaluated using six external quality assurance samples. Method comparison against established liquid chromatography–tandem mass spectrometry (LC–MS/MS) was performed on 30 de-identified patient plasma samples using Passing-Bablok regression and Bland-Altman analysis. A preliminary cost analysis compared direct operational costs of onsite immunoassay versus send-away testing.

Results Within-run, between-day, and within-laboratory coefficients of variation remained below 2.90%, 1.91%, and 3.41% respectively across all QC levels, satisfying acceptance criteria (<10%). All external quality assurance samples passed assessment. Passing-Bablok regression yielded a slope of 1.04 (R^2=0.992), with Bland-Altman analysis demonstrating a mean positive bias of 8.0%. Onsite implementation reduced turnaround time from 5–7 days to less than 24 hours, enabling same-day pharmacist review and collaborative dose adjustment at the point of care. Preliminary cost assessment indicates onsite testing is cost-competitive with send-away LC–MS/MS.

Discussion The immunoassay demonstrated acceptable analytical performance and strong agreement with LC–MS/MS. Onsite implementation enables timely and informed dose optimisation, thereby reducing treatment failure and preventing toxicity. For institutions dependent on centralised send-away testing, this immunoassay represents a practical solution to improve pharmacy-facilitated TDM capability within existing laboratory workflows.

048

Reducing inappropriate formulation alterations in aged care through pharmacist-led Stewardship and enhanced prescribers' collaboration

Rachel Cheung[1]

[1]Wellness Partner Foundation, Adelaide, SA, [2]Choice Aged Care, Adelaide, SA, [3]Regis Aged Care, Adelaide, SA

EMAIL rachel.cheung@choiceagedcare.com.au

Background Inappropriate alteration of oral dosage forms in residential aged care is a medication safety and governance gap that may lead to altered pharmacokinetics, reduced therapeutic effect, and administration risks. Despite Quality Use of Medicines (QUM) policies, formulation-related risks are often not systematically addressed. A pharmacist-led audit was undertaken to improve QUM compliance through crushed medication stewardship.

Objectives To determine the prevalence of crushed medication use and inappropriate formulation alterations in a 180-bed residential aged care facility, followed by an evaluation of the impact on pharmacist-led, prescriber-collaborative interventions to reduce inappropriate formulation alterations in the facility.

Method A baseline audit conducted in April 2026 identified residents receiving crushed medications and assessed formulation suitability. Pharmacist-led medication reviews were conducted for residents on crushed medications, advising recommendations including formulation changes, deprescribing, or alternative administration routes. Recommendations were provided to seven general practitioners, with onsite discussions conducted with five prescribers. A crushed medication review referral pathway was implemented to support ongoing identification and pharmacist–prescriber collaboration. Nursing education was delivered to improve awareness and embed the pathway into routine practice.

Evaluation Of 180 residents, 33 received crushed medications and 42.4% (14) had at least one inappropriate formulation. Pharmacist recommendations achieved an 89.5% (17/19) acceptance rate following prescriber engagement, compared with <22.0% (4/19) before onsite collaboration. Implementation of agreed recommendations reduced inappropriate formulation alterations to 6.1% (2), representing an 85.6% relative reduction. The referral pathway and education improved identification of at-risk residents and strengthened interdisciplinary communication.

Discussion This pharmacist-led stewardship improved QUM compliance and medication safety in residential aged care. High recommendation uptake demonstrated the value of prescriber engagement and collaborative decision-making. Embedding a crushed medication review referral pathway supported sustained practice change beyond the audit. This scalable model highlights the role of onsite pharmacists in improving formulation safety through stewardship, education, and collaborative prescribing.

049

Optimising Antipsychotic Use in Residential Aged Care Through Pharmacist-Led Stewardship and Prescriber Collaboration

Rachel Cheung[1]

[1]*Wellness Partner Foundation, Adelaide, SA,* [2]*Choice Aged Care, Adelaide, SA,* [3]*Regis Aged Care, Adelaide, SA*

EMAIL rachel.cheung@choiceagedcare.com.au

Background Antipsychotic use without an approved indication in residential aged care is a significant Quality Use of Medicines and medication safety issue monitored through the Australian Commission on Safety and Quality in Health Care Mandatory National Quality Indicator Program (MNQIP). Despite established guidelines, the issue persists and is associated with significant adverse outcomes, including sedation, falls, cerebrovascular events, cognitive decline, and increased mortality. Pharmacist-led stewardship provides a structured approach to optimise antipsychotic use in residential aged care.

Objectives To reduce antipsychotic use without an approved indication and improve compliance with MNQI criteria through pharmacist-led, prescriber-collaborative interventions in a 180-bed aged care facility.

Method An audit on 31/03/2026 identified residents prescribed antipsychotics and assessed indication appropriateness. Pharmacist reviews targeted residents without an approved indication, recommending deprescribing, dose reduction, or indication clarification. Recommendations were provided to prescribers, followed by structured prescriber–pharmacist discussions to support shared decision-making. Outcomes were communicated to facility leadership through weekly multidisciplinary updates. A follow-up audit on 04/06/2026 evaluated interim impact.

Evaluation At baseline, 42 residents were prescribed antipsychotics, including 20 without an approved indication. At follow-up, 36 remained on antipsychotics, with 13 without an approved indication. 14 residents were reviewed by a pharmacist; 11 prescriber–pharmacist discussions were conducted, resulting in antipsychotic cessation (27.3%), dose reduction (27.3%), and indication clarification (27.3%). Recommendation acceptance increased from 0% pre-discussion to 81.8% following collaborative review. The MNQI rate improved from 11.3% to 7.8% (31% relative reduction), compared with the national MQIP benchmark of 9.8%.

Discussion Structured pharmacist–prescriber collaboration significantly improved recommendation uptake and reduced antipsychotic use without an approved indication. Embedding a weekly pharmacist-led update to the facility leadership enabled timely feedback for system-level improvement in antipsychotic stewardship. This model has demonstrated a transferable approach to improve MNQI performance through structured pharmacist–prescriber collaboration and integrated stewardship in residential aged care.

050

The development of a risk prediction model for medication related readmissions in cardiology patients

Gloria Chui[1,2], Dr Nazanin Ghahreman-Falconer[1,2], Dr Chariclia Paradissis[1,4], Dr Keshia De-Guzman[1,3], Estelle Jensen[1,2], Prof Ian Coombes[1,4], Professor Michael Barras[1,2]

[1]*School of Pharmacy, University Of Queensland, Dutton Park, Qld,* [2]*Pharmacy Department, Princess Alexandra Hospital, Woolloongabba, Qld,* [3]*Pharmacy Department, Royal Brisbane and Women's Hospital, Herston, Qld,* [4]*Information Support, Research & Evaluation Unit, Queensland Ambulance Service, Kedron, Qld*

Background Unplanned hospital readmission after an acute myocardial infarction (AMI) or cardiac surgery (CS) is a resource intensive burden on healthcare. Medication harm can be a preventable cause of readmission and can negatively impact patient outcomes. Therefore, there is a need for effective methods to identify AMI/CS patients at high risk of medication-related readmission (MRR) to improve health service delivery.

Aim/Objective(s) To develop and validate a risk prediction model (RPM) to identify 30-day MRR following an AMI/CS at a quaternary hospital.

Methods A retrospective cohort study was conducted on patients discharged over a twelve-month period. Data including patient sociodemographic, clinical, and presentation characteristics were extracted from the patient's electronic medical records. To identify MRR, two senior pharmacists independently conducted a comprehensive chart review and causality assessment. Multivariable binomial logistic regression was used to develop the RPM based on clinical relevance and their contribution to model performance. The optimal model was then chosen based on the mean area under the receiver operating characteristic curve (AuROC) and internally validated using repeated stratified 5-fold cross validation.

Results This study included 1391 AMI/CS patients, with 197 (14.2%) patients readmitted within 30-days, including 69 (5%) patients classified as MRR. The final RPM included seven variables: gender, age, history of chronic kidney disease, history of cerebrovascular accident, history of hypertension, estimated Glomerular Filtration Rate of <60 mL/min, and treatment with an anticoagulant and antiplatelet. Following validation, the AuROC was 0.65 (95% CI: 0.55–0.74). The positive predictor value of the model was 0.18 (95% CI: 0.07–0.35) and negative predictor value was 0.95 (95% CI: 0.90–0.98).

Discussion A validated RPM for evaluating 30-day MRR for patients post-AMI/CS was developed, demonstrating modest discrimination. Future studies will include an expanded dataset from multiple hospitals to improve the model's predictive performance and clinical utility across healthcare settings.

051

Enhancing Outpatient Prescription Review Skills Through a Dispensary Educator–Led Workshop

Ailsa Clark, Samanta Wood, Sachith Prasad, Tamana Hakimi, Andrew Chong, Nicole Dirnbauer

[1]*Monash Health, Clayton, Vic*

EMAIL 702455@monashhealth.org

Background Reviewing outpatient prescriptions is a critical step in the dispensing process, ensuring prescriptions are safe and appropriate for the patient, and reflect the prescriber's intentions. In a fast-paced outpatient dispensary, inconsistent or inadequate prescription review may risk patient safety. Inconsistency in the skill level of pharmacists reviewing outpatient prescriptions has been identified across a large, multi-site health service. An educator pharmacist specialising in dispensary services developed and delivered a training workshop.

Objective(s) To evaluate a Dispensary Educator Pharmacist led workshop designed to improve pharmacists' skills in reviewing outpatient prescriptions.

Action (Method) Fifteen dispensary pharmacists attended a 2 to 2.5-hour workshop facilitated by a Dispensary Educator Pharmacist. This included a presentation and discussion on clinical and operational aspects of outpatient prescription review, including stock availability and formulary restrictions. This was followed by four simulated roleplay cases in small groups (two or three learners with one facilitator), to address practice gaps and support peer learning and feedback. Participants completed a post-workshop evaluation survey using 5-point Likert scale and open-ended questions to assess relevance, delivery, and overall satisfaction. Data was analysed using descriptive statistics.

Evaluation Twelve participants (80%) completed the evaluation survey. Most participants 'agreed' or 'strongly agreed' the workshop enhanced their ability to review outpatient prescriptions (92%), the knowledge gained would positively impact their practice (92%) and they felt confident applying the learning in practice (100%). All respondents (n=12) 'agreed' or 'strongly agreed' that the workshop was inclusive, engaging, and met all learning objectives. Open-ended question responses (n=8) suggested improvements such as additional cases, a prescription review demonstration, and extending the workshop duration.

Discussion The interactive design of the workshop resulted in high participant satisfaction and self-reported improvements in outpatient prescription review skills. These findings support the value of expanding the workshop to the broader dispensary pharmacist workforce.

052

Mind the Meds: Auditing the Quality of Psychotropic Medicines Management in Cognitive Disability or Impairment

Annie Collins[1], Erin Dunn[2]

[1]*Queensland University of Technology, Brisbane, Qld,* [2]*The Prince Charles Hospital, Chermside, Qld*

EMAIL annabelle.collins@connect.qut.edu.au

Background The Australian Commission on Safety and Quality in Health Care (ACSQH) published the Psychotropic Medicines in Cognitive Disability or Impairment Clinical Care Standard (Psychotropic CCS) in 2024. The Psychotropic CCS aims to support evidence-based use of psychotropic medicines. These medicines are associated with patient morbidity and mortality. Retrospective review against evidence-based standards represents an opportunity for healthcare providers to ensure safe, appropriate and judicious use of psychotropic medicines.

Objectives To evaluate the quality of psychotropic medicines management amongst patients with cognitive disability or impairment admitted to a tertiary referral hospital.

Method Retrospective chart audits were completed for patients admitted to acute medical and surgical wards during the month of January 2026. Patients were identified via International Classification of Diseases (ICD) codes for cognitive impairment or disability. Care episodes were audited against the Psychotropic CCS indicators, including informed consent, ongoing review and clinical handover at care transitions.

Evaluation Fifty-one care episodes were audited, across multiple clinical units, including General Medicine, Surgery, Geriatric Medicine, Cardiology and Thoracic wards. 63% of patients were prescribed a psychotropic medicine, of which informed consent was documented in 3% of cases. Where psychotropic medicines were prescribed, 31% of patients had non-medicine strategies described as part of their treatment. Where psychotropic medicines were continued beyond a single dose, timeframe to review was documented for 25% of patients, whilst psychotropic effectiveness and adverse reactions were documented for 16% and 9% of patients respectively. Documentation of psychotropic medicine indication and clinical handover at transitions of care was also noted to be poor.

Discussion This study has compared local psychotropic medicines management for patients with cognitive impairment or disability, against evidence-based standards. The findings suggest that documentation of psychotropic medicines management could be improved, particularly informed consent, ongoing medicines review and implementation of non-medicine strategies for behaviour management.

053

STAY ON TRACK – DO NOT LET THE POLE HOLD YOU BACK

Rachelle Concepcion[1], Amy Le[1]

[1]*Surgical Treatment and Rehabilitation Service, Queensland Health, Brisbane, Qld*

EMAIL rachelle.concepcion@hotmail.com

Objective To describe a pharmacist-led strategy enabling concurrent intravenous (IV) antibiotic administration via a single-lumen peripherally inserted central catheter (PICC) without an IV pole to improve mobility and reduce falls risk in a geriatric rehabilitation patient.

Clinical Features A 95-year-old male presented with shoulder pain after a fall and was diagnosed with right shoulder septic arthritis and Enterococcus faecalis bacteraemia. Due to atrial fibrillation and echocardiographic findings, he was treated for presumed infective endocarditis with six weeks of IV ampicillin (four times daily) and ceftriaxone (twice daily) via a single-lumen PICC. Limited vascular access required sequential antibiotic administration. On transfer to rehabilitation, policy mandated continuous IV pole connection to maintain patency and minimise infection risk, restricting mobility and participation.

Literature Review A single 24-hour infusor is preferable for patients with single-lumen PICCs, reducing line access and improving mobility. However, stability data are limited: ampicillin 7.2 g is stable over 24 hours, but no data support higher-dose ampicillin (8 g) or co-formulation with ceftriaxone 4 g. This is significant, as ampicillin–ceftriaxone is recommended for Enterococcus faecalis endocarditis, and lack of stability data limits delivery via continuous infusion.

Pharmacist Interventions, Case Progress and Outcomes The pharmacist recommended conversion to a 24-hour Baxter infusor. Ampicillin was replaced with benzylpenicillin for continuous infusion, while ceftriaxone 2 g twice daily continued. The IV pole was removed, and a three-way stopcock enabled concurrent administration via the single-lumen PICC.

Discussion Pharmacist-led antimicrobial and device optimisation addressed vascular access and policy constraints. This improved mobility, reduced falls risk, and enhanced rehabilitation participation, supporting return to baseline function and timely discharge home. The case highlights pharmacists' role in balancing antimicrobial efficacy, stability, and device compatibility to individualise therapy, and shows how flexible policy interpretation, supported by clinical reasoning and collaboration, can safely improve patient-centered outcomes in complex geriatric care.

054

Implementing AUC-Guided Vancomycin Dosing Through Multimodal Pharmacist Education

Jackson Crawn[1], Nilaan Blacker[1], Tess Bradshaw[1]

[1]*Royal Hobart Hospital, Hobart, TAS*

EMAIL jackson.crawn@ths.tas.gov.au

Background A new vancomycin dosing guideline recommending area under the curve (AUC)–guided monitoring was developed by multidisciplinary stakeholders to support safer and more consistent dosing practices. Successful implementation required pharmacists to develop both conceptual understanding of AUC principles and confidence using Bayesian dosing software. Observed variation in baseline familiarity indicated that structured education and training was required.

Objective To improve pharmacist understanding, confidence and readiness to implement AUC-guided vancomycin dosing in accordance with new local guideline recommendations.

Action (Method) Following development of the new vancomycin guideline incorporating AUC-guided dosing principles, a multimodal education package was delivered to all pharmacists. This included a whole of department education session, small group case-based workshops, targeted upskilling for managers and team leaders and ongoing on-the-ground support during rollout. A post-education survey assessed understanding of AUC-guided dosing, confidence using the dosing software, perceived usefulness of the education and anticipated practice change.

Evaluation Nineteen pharmacists completed the survey. Understanding of AUC-guided dosing principles was high, with 74% reporting good or strong understanding. Confidence using the dosing software was similarly strong, with 89% reporting moderate confidence or higher. All respondents reported improved understanding following the education and 95% indicated they were likely or very likely to change their practice. Most respondents (84%) reported no need for further structured training beyond on the ground support as required.

Discussion A structured, layered education package effectively improved pharmacist capability and readiness to implement AUC-guided vancomycin dosing following implementation of the new vancomycin guideline. High confidence, strong intention to change practice and minimal ongoing training requirements all indicate strong readiness for sustained adoption. This approach demonstrates how targeted education in response to guideline development can support safe and consistent implementation of complex dosing models in pharmacy practice.

055

Delayed Diagnosis of Euglycaemic Ketoacidosis: A Five Year Retrospective Analysis of SGLT2 Inhibitor Associated Cases

Ngoc Hoan Dang[1,2], Namita Warrior[1], Dr Rahul D Barmanray[3], Louise Lord[4,5]

[1]Pharmacy Department, Western Health, Melbourne, Vic, [2]Pharmacy Department, Eastern Health, Melbourne , Vic, [3]Endocrinology and Diabetes Department, Western Health, Melbourne, Vic, [4]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Melbourne, Vic, [5]Pharmacy Department, Royal Melbourne Hospital, Melbourne, Vic

EMAIL ngoc.dang1@easternhealth.org.au

Background Euglycaemic ketoacidosis (EKA) is a serious risk associated with sodium-glucose cotransporter-2 inhibitors (SGLT2i), which are being increasingly prescribed for metabolic and cardiorenal conditions. Prompt diagnosis and treatment of EKA improves outcomes, and initial screening is by a rapid point-of-care ketone test. It is therefore important to evaluate the diagnostic timelines of EKA, and the need to identify patients for early ketone testing.

Aim/Objective(s) To evaluate diagnostic timelines of EKA relative to the time of initial ketone testing.

Methods This retrospective cohort audit examined in-patients prescribed SGLT2i from 2019 to 2024 in three tertiary metropolitan hospitals. Patients meeting locally defined biochemical criteria for EKA were included: pH ≤7.3, bicarbonate ≤18 mmol/L, ketones ≥3 mmol/L and glucose level ≤13.8 mmol/L. The primary outcome was the median time from first ketone test to EKA diagnosis. Clinical and pathology data were extracted from the electronic medical record. Demographics and number of ketone tests prior to diagnosis were also collected.

Results Of 9254 inpatient orders for SGLT2i, 46 EKA cases (0.5%) were identified. All cases had diabetes; mean HbA1c 8.9% (SD=1.8) and BMI 33.6 kg/m² (SD=11.5). The interval between first ketone test and EKA diagnosis was short (median 12 minutes, IQR 0–360), compared to the interval between hospital presentation and diagnosis (median 13.2 hours, IQR 7.1–23.0), reflecting a delay in first ketone testing (median 10.9 hours, IQR 5.5–15.5). Time to first ketone test positively correlated with time to diagnosis (Spearman's correlation coefficient =0.90, p=0.04). The mean number of ketone tests prior to diagnosis was 1.74 (SD=1.48).

Discussion EKA with SGLT2i use is uncommon but associated with diagnostic delays, largely driven by delayed ketone testing. Diagnosis occurred rapidly after ketone testing, highlighting the importance of early testing. When completing medication reconciliation, pharmacists are well positioned to identify patients receiving SGLT2i and recommend early ketone testing.

056

Training Needs of Preceptors and Mentors in Pharmacy Training Programs: Perspectives of Learners, Preceptors, Mentors

Ngoc Nhung Dang[1], Christine Pho[1], Marianne Jovanovic[1]

[1]Monash Health, Clayton, Vic

EMAIL ngocnhung.dang@monashhealth.org

Background Preceptors and mentors play a key role in supporting Pharmacist Resident and Registrar Training Programs through guidance, assessment and feedback. While the literature identifies training needs for those supervising pharmacy students and interns, these are less well studied for those supporting registered pharmacists.

Objectives To identify the learning needs of preceptors/mentors within a hospital pharmacy training program, from both learner and preceptor/mentor perspectives.

Action A training needs analysis was conducted in a large multi-site metropolitan teaching hospital using surveys distributed to preceptors/mentors and current/past residents/registrars. Participants rated the perceived importance of preceptorship knowledge and skills using a five-point Likert scale. Survey domains included communication, feedback, facilitation of critical thinking, and other preceptorship knowledge/skills. For workplace-based assessments, residents/registrars rated the importance of preceptor/mentor understanding, while preceptors/mentors rated their confidence in understanding and using these tools. Quantitative Likert responses were analysed descriptively, and qualitative open-ended responses on additional training needs were analysed thematically.

Evaluation Effective communication and facilitation of critical thinking were consistently rated as 'very important' by both groups (95.9% and 91.7%; 91.8% and 87.5% for preceptors/mentors and residents/registrars, respectively). Understanding how to provide effective feedback was also rated as a 'very important' knowledge domain (85.7% of preceptors/mentors; 95.8% of residents/registrars).

Residents/registrars consistently rated understanding of workplace-based assessments as important; although preceptors/mentors reported moderate confidence in understanding and using these tools, with 34.7–38.8% reporting 'very confident' across most assessment types.

Thematic analysis identified the importance of interpersonal skills (empathy, psychological safety, and support for learner wellbeing) across both groups.

Discussion Findings demonstrate agreement between residents/registrars and preceptors/mentors on key skills and knowledge required for effective preceptorship, but a mismatch in workplace-based assessment domains, showing a gap between expectations and confidence. These findings highlight specific training needs and support development of structured training for preceptors/mentors aligned with learners and preceptors/mentors' perspectives.

057

Characterisation of anticancer desensitisation protocols and the cancer pharmacist role at a private hospital

Ashleigh DeMarie[1], Ingrid Myc[1]

[1]*St John of God Hospital Subiaco, Subiaco, WA*

EMAIL ashleigh.demarie@sjog.org.au

Background Hypersensitivity reactions (HSRs) to anticancer therapies – particularly platinum agents, taxanes and monoclonal antibodies – can interrupt optimal treatment and range from mild symptoms to life-threatening anaphylaxis. Rapid desensitisation enables temporary tolerance, but patients with severe or recurrent reactions require highly individualised, high-risk management. Clinical pharmacists contribute to risk assessment, protocol selection, patient counselling and safe delivery.

Aim/Objectives Characterise desensitisation practices at a single centre. Primary outcomes were safety and success of desensitisation. Secondary outcomes included protocol characteristics, breakthrough reaction incidence, treatment discontinuation reasons, corticosteroid exposure and the pharmacist's role.

Methods A retrospective review of adults (≥18 years) at the organisation who underwent parenteral anticancer desensitisation over 12 months was conducted. Patients were identified through oncology information and dispensing systems. Data included protocol type, desensitisation outcome, reaction characteristics, adjunct omalizumab use and corticosteroid exposure.

Results Thirteen patients underwent desensitisation. Most (85%) received a three-bag, 12-step protocol; 15% received a single-bag protocol with variable rate steps. Single bags were selected due to drug stability or compounding constraints identified by the clinical pharmacist. Omalizumab was used in 23% of patients, who subsequently had lower corticosteroid exposure than those desensitised without it. No patient discontinued anticancer therapy due to desensitisation failure; cessation occurred only for disease progression, complete response or unrelated toxicity. All patients had a clinical pharmacist involved in their treatment planning and education.

Discussion Clinical pharmacists are central to safe rechallenge after HSRs through protocol development, compounding oversight, premedication design, patient education and medication access. Our centre achieved high desensitisation success with no therapy discontinuations due to intolerance. However, substantial variation in protocol structure and premedication regimens highlights a safety risk. These findings support development of standardised local protocols and further evaluation of adjunct omalizumab in desensitisation strategies.

058

Where Does the Time Go? Delays in Controlled Drugs Destruction After Policy Update

Laura Delemare[1], Jayne Hui[1]

[1]*Eastern Health, Box Hill, Vic*

EMAIL laura.delemare@easternhealth.org.au

Background Efficient management of controlled drugs (CD) is essential for legislative compliance, medication safety, and optimising pharmacy workflow. In October 2025, a local 'delayed destruction' policy update was introduced, directing nurses to quarantine unwanted CDs withdrawn for patients in ward safes pending later pharmacist-assisted destruction. Whilst the policy update intended to improve compliance, the effect on pharmacy workflow was unclear.

Objective(s) To evaluate the impact of a 'delayed destruction' policy on volume of CD returns and efficiency of disposal practices.

Action (Method) A retrospective audit was conducted from May 2025 to March 2026 using electronic CD registers (HS8) at a metropolitan hospital, comparing data pre- and post-policy update. Data included return volume and reason for return (expiry, damage or policy-driven 'delayed destruction' and time between ward-based 'transfer for destruction' and pharmacy-based 'destruction'.

Evaluation Total CD returns increased from 21 to 55 post-policy update. 'Expiry' was the primary reason for return pre- and post-policy change (52.4% and 56.4%) while 'delayed destruction' represented 21.8% of post-policy returns. Mean time from 'transfer for destruction' to 'destruction' for all items increased from 45 minutes to 142 hours. For expired and damaged stock, mean delay increased from 55 minutes to 98 hours. 'Delayed destruction' stock had the longest delay (mean 294 hours) including two items pending >3 months. All 'delayed destruction' returns originated in a maternity unit without clinical pharmacy services.

Discussion The 'delayed destruction' policy whilst aiming at improving hospital legislative compliance was associated with longer delays in disposal, with a nonsignificant increase in CD return volume. This transition highlighted challenges in CD destruction workflow, particularly in areas without clinical pharmacy support. Targeted interventions, including pharmacy and nursing staff education, and introducing maternity clinical pharmacy services, have been implemented to address delays. A follow-up audit is planned to evaluate the impact of these changes.

059

Brown Bag Medication Review Teaching Improves Medical Student Confidence in Geriatric Medication Management

Karishma Deo[1], Danielle Ní Chróinín[1,2]

[1]NSW Health, Liverpool, NSW, [2]South Western Sydney Clinical School, UNSW Medicine, Liverpool, NSW

EMAIL Karishma.deo@health.nsw.gov.au

Background Medication management in older adults is complex due to polypharmacy, age-related physiological changes, and increased risk of medication-related harm. Local feedback identified that medical trainees lacked confidence in managing medications for older adults. To address this gap, a pharmacist-led Brown Bag Medication Review (BBMR) simulation was developed to enhance learning in geriatric medication management.

Objective(s) To improve medical student confidence in medication reconciliation, identification of medication-related problems, recognition of medication management challenges in older adults, and deprescribing or medication simplification strategies.

Action (Method) A BBMR simulation was designed by a pharmacist in collaboration with a geriatric medicine specialist and integrated into a mandatory aged care and rehabilitation teaching block for medical students in 2023. The 90–120-minute session incorporated role-play, medication reconciliation activities, identification of medication-related problems, and group discussion using a simulated older patient case. Students completed pre- and post-session surveys assessing self-reported confidence across four domains. Confidence was defined as a Likert scale rating of 4 or 5 out of 5.

Evaluation Twenty-six medical students participated across three teaching blocks, with a 100% survey completion rate. No students reported confidence in any domain before the intervention. Following the session, confidence increased significantly across all domains ($P<0.001$): medication reconciliation (58%), identification of medication-related problems (58%), recognition of medication management challenges in older adults (81%), and deprescribing or medication simplification strategies (54%).

Discussion This pharmacist-led educational initiative significantly improved medical student confidence in managing medications for older adults. The program provides a practical, cost-effective, and scalable approach to interprofessional education and highlights the value of pharmacist-led teaching in preparing future doctors for safe prescribing. Following evaluation, the BBMR session has been embedded into the medical curriculum, supporting sustainability and ongoing impact on future practice.

060

DOACumenting the Gaps: A Two-Hospital Evaluation of Inpatient Apixaban Prescribing

Sharelle Douaihy[1], Arrianna Villena[2]

[1]St George Hospital, Kogarah, NSW, [2]The Sutherland Hospital, Sutherland, NSW

EMAIL sharelle.douaihy@health.nsw.gov.au

Background Apixaban is a high-risk anticoagulant commonly used for stroke prevention in atrial fibrillation (AF) and for treatment or prevention of venous thromboembolism (VTE). Appropriate inpatient use is complicated by renal impairment, acute illness, drug interactions, concomitant antiplatelet or non-steroidal anti-inflammatory therapy, and transitions of care, increasing the risk of preventable harm. Variation in dosing and co-prescribing practices has been reported, highlighting the need for local evaluation of apixaban use.

Aim/Objective(s) To evaluate the appropriateness of inpatient apixaban prescribing against evidence-based guidelines.

Methods A retrospective medication use evaluation was conducted in two tertiary hospitals. A randomised sample of adult inpatients prescribed apixaban over a six-month period was used. Data was extracted from electronic medical records, including indication, dose, renal function, interacting or bleeding-risk medicines and discharge regimen. Apixaban use was assessed against evidence-based resources.

Results A total of 89 patients prescribed apixaban were reviewed. The most common indications were stroke prevention in AF (69%), followed by VTE treatment (17%) and prevention of recurrent VTE (12%). Overall, based on indication and renal function, 75 prescriptions (84%) were dose-appropriate, while 10 (11%) were potentially under-dosed, 3 (3%) potentially over-dosed, and 1 (1%) had insufficient information in patient records to determine. Among the 45 AF patients who did not meet dose-reduction criteria, 10 (22%) inappropriately received a reduced dose. High-risk co-prescribing included CYP3A4/P-glycoprotein inhibitors or inducers in 7 patients (8%), duplicate anticoagulation in 1 (1%), non-steroidal anti-inflammatory drugs in 9 (10%) and antiplatelets in 10 (11%), 4 of which were potentially inappropriate.

Discussion Guideline-concordant apixaban prescribing was observed in most inpatients; however, opportunities for dose optimisation and interaction recognition were identified. Despite their low frequency, these gaps may result in significant harm, highlighting the need for pharmacist-led anticoagulant stewardship to reduce harm.

061

The clinical and healthcare system outcomes of pharmacist prescribing in hospitals: a systematic review

Hana Amer[1,2,3], Jacinta Johnson[1,2], Sally Marotti[1,2], Jessica Coddo[1,2], Renae Lloyd[2], Courtney Hill[4,5], Ru Jing Ang[2], Imaina Widagdo[1], Lauren Corre[2], A/Prof Lisa Kalisch Ellett[1]

[1]Quality Use of Medicines and Pharmacy Research Centre, School of Pharmacy and Biomedical Sciences, College of Health, Adelaide University, Adelaide, SA, [2]SA Pharmacy, Adelaide, SA, [3]Faculty of Medicine and Health, School of Pharmacy, The University of Sydney, Sydney, NSW, [4]School of Pharmacy, The University of Queensland, Brisbane, Qld, [5]Department of Pharmacy, Princess Alexandra Hospital, Brisbane, Qld

EMAIL hana.amer@sydney.edu.au

Background Pharmacist prescribing models have expanded internationally to improve medicine safety and optimise medicine use, with emerging evidence of their clinical and healthcare system outcomes. A previous systematic review was limited by small study numbers, exclusion of models requiring doctor authorisation before administration, and omitted healthcare system outcomes. An updated synthesis is needed to support broader implementation in hospitals, where high-acuity illness, high-risk medicine use, and coordinated multidisciplinary care are common.

Aim To (i) provide a summary of hospital pharmacist prescribing models, and (ii) examine their clinical and healthcare system outcomes in the inpatient setting.

Methods A systematic search of four major databases was conducted in May 2024. Full-text English publications evaluating clinical and healthcare system outcomes of hospital inpatient pharmacist prescribing were included. Two independent reviewers screened articles and extracted data using Covidence, and appraised studies using Joanna Briggs Institute tools. Narrative synthesis was performed due to study heterogeneity.

Results Fifty-six studies were included, most from Australia (26%) and the United States of America (26%). Fifty-one unique models were identified. Collaborative models were most frequently evaluated (60%), with most reporting reduced medication errors (82%). Improvements were also consistently observed in the completeness of medication orders (100%), potential harm (100%), medicines optimisation (100%), and efficiency outcomes (80%). Evidence for therapeutic benefit and healthcare resource utilisation was more variable. Fewer studies evaluated dependent (28%) and independent (10%) models. Dependent models improved potential (100%) and actual (60%) harm; independent prescribing improved efficiency (100%). No model reported worse outcomes than usual care.

Discussion Pharmacist prescribing in hospitals, particularly collaborative models, is associated with improvements in prescribing quality and medication safety without evidence of harm, supporting expansion in hospital settings. Evidence for other models and economic outcomes remains limited. High-quality standardised evaluations, including economic evaluations, are needed to guide safe, sustainable implementation internationally.

062

End-To-End Training: From Pharmacy Student to Rural Hospital Pharmacist Team Leader

Susan Trevillian[1], Lucy Arno[1], Sean Clark[1], Laura Keppel[1]

[1]Northeast Health Wangaratta, Wangaratta, Vic

EMAIL susan.trevillian@nhw.org.au

Background Our pharmacy intern training program drives workforce attraction & retention, with 84% (16/19) of interns employed during 2017–2024 retained as pharmacists.

However, between 2017 and 2021, only 22% (2/9) of interns remained employed as pharmacists for longer than three years .

In 2019, accreditation to deliver a Pharmacist Residency Program was achieved, however implementation efforts were unsuccessful.

In early 2025, 63% (5/8) of 2022–2024 interns continued as pharmacists in their first three years post-internship. Retention of this cohort is a focus.

Objective(s) Describe the implementation of Australia's first Rural & Remote – Generalist Registrar Pharmacist Training Program.

Action (Method) Individual pharmacist development goals were ascertained, with career progression emerging as a common theme.

We observed that a Rural & Remote – Generalist Registrar Training Program would provide structured leadership skill development, preceptorship of early career pharmacists & future Resident Pharmacist candidates, and a self-directed learning program.

Eligibility criteria were established collaboratively with AdPha's Workforce Team, and expressions of interest sought from current employee pharmacists.

Evaluation In early 2026, 45% (5/11) of employed rotational clinical pharmacists expressed interest in commencing a 2-year Rural & Remote – Generalist Registrar Pharmacist Training Program, including 100% (4/4) of full-time Grade 2 clinical pharmacists.

All five prospective Registrar candidates, Training Program Lead & Director of Pharmacy unanimously agreed on the logistics of how the program would commence.

Successful recruitment of two pharmacists already credentialed as clinCAT evaluators further supports Training Program sustainability. Alongside this, we considered a range of contingency options to support program continuity, including collaboration with other disciplines and larger regional hospitals.

Discussion With ANZCAP-Reg candidates in place, and Registrar Candidate Learning Plans including preceptorship of future Resident Pharmacist candidates during Medical and Surgical rotations, our final stage of implementation includes a Pharmacist Resident Training Program to complete the end-to-end training pipeline.

063

Paediatric Antibiotic Formulary for Renal Impairment

Brenna Bailey[1]

[1]*The Royal Children's Hospital, Parkville, Vic*

EMAIL baileybre@rch.org.au

Background Antibiotic use in paediatric patients with acute and chronic renal impairment requires targeted pharmacological management. Dosing is based on appropriate therapeutic concentrations to treat an infection whilst also reducing potential toxicity that may impact renal function. Inappropriate prescribing leads to increased hospital admissions and a higher risk of developing co-morbidities. A paediatric formulary was developed to aid healthcare providers in prescribing antibiotic medications to patients with various stages of renal impairment. Consideration was made for renal replacement therapies such as hemodialysis, peritoneal dialysis, and continuous renal replacement therapy. Currently, there are medication reference guidelines for clinicians; however, there is limited accessible information for renally adjusted, antibiotic dosing in paediatrics at the bedside.

Objectives The aim is to allow greater medication safety standards and dosing accuracy to provide improved patient outcomes.

Method The project was reviewed by a multidisciplinary team, consisting of medical practitioners and pharmacists, who analysed evidence-based paediatric guidelines and pharmacokinetic data to collate a formulary. Creatinine clearance was used to calculate medication dosing, and a 'traffic light' system was developed to provide an accessible reference tool for prescribers. Medications for which no dose adjustment was necessary were given a green classification, whilst medications that required moderate or severe dosing adjustments were classified as orange or red, respectively. Medications entered into the formulary were selected based on usage, with the 25 most common antibiotic medications included.

Evaluation The formulary currently includes antimicrobials with the aim of expanding to other commonly used medications. It will be made available as a readily accessible clinical guideline to support decision making and prescribing at the bedside.

Discussion The formulary will lead to improved prescribing practices in paediatric patients with the aim to reduce pharmacist interventions and the impact on patients treated with antibiotic medications.

064

Implementation of analgesic stewardship programs across multiple health services

Susan Poole[1,2], Thuy Bui[1,2], David Nguyen[3], Prof Paul Myles[4,5], Nicole Cretan[6], Brennan Fitzpatrick[7], Danni Miatke[3], Julia Salanowski[8], Lisa Solomon[9], Jeremy Szmerling[10], Prof Simon Bell[2,11], Professor Michael Dooley[1,2,12]

[1]Pharmacy Department, Alfred Care Group, Melbourne, Vic, [2]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Parkville, Vic, [3]Pharmacy Department, Northern Health, Epping, Vic, [4]Anaesthesiology and Perioperative Medicine Department, Alfred Care Group, Melbourne, Vic, [5]Anaesthesiology and Perioperative Medicine Department, Monash University, Melbourne, Vic, [6]Pharmacy Department, Albury Wodonga Health, Albury, Vic, [7]Pharmacy Department, Melbourne Health, Melbourne, Vic, [8]Pharmacy Department, Barwon Health, Geelong, Vic, [9]Pharmacy Department, Peninsula Health, Frankston, Vic, [10]Pharmacy Department, Eastern Health, Box Hill, Vic, [11]Faculty of Health Sciences, University of Eastern Finland, Kuopio, Finland, [12]Department of Epidemiology and Preventive Medicine, Monash University, Melbourne, Vic

EMAIL s.poole@alfred.org.au

Background Opioid analgesics, while effective for managing acute pain, carry significant risks of misuse and overdose. Analgesic stewardship (AGS) programs, modelled on antimicrobial stewardship frameworks, aim to promote safe opioid use.

Aim/Objectives This study retrospectively evaluated the implementation of core AGS program elements, changes in prescribing practices, and program sustainability 12 months post-implementation.

Methods In February 2022, a pharmacy-led AGS program was introduced across six public health services in Victoria, Australia. Five core AGS program elements were implemented: multidisciplinary AGS committee and governance structure, discharge opioid guidelines, clinician education, routine monitoring, and patient resources. Opioid and analgesic use were collected retrospectively via baseline and follow-up audits, fortnightly measures over 18 weeks, and 12-month follow-up. The primary target outcome was a 20% relative reduction in the proportion of opiate-naïve surgical patients discharged with opioids.

Results Within 18 weeks, all six sites implemented four of the five core AGS program elements. No significant reduction was observed in the proportion of opioid-naïve patients discharged with opioids (58% pre-implementation vs 59% post-implementation, P=0.761). Significant improvements were observed in completion of discharge medication management plans (26% vs 46%, P<0.0001) and the use of multimodal analgesia (82% vs 88%, P=0.020). At 12 months post-implementation, improvements in discharge medication management plans and the use of real time prescription monitoring program were sustained, and one site maintained all five core AGS program elements.

Discussion Pharmacy-led AGS programs can be implemented successfully across multiple health services within a short timeframe, resulting in improvements in discharge planning and multimodal analgesic use, though they did not reduce opioid prescribing at discharge. Sustainability depended on dedicated resources. These findings support AGS programs as a scalable strategy to promote safer analgesic use in acute care. Future research should examine alternative models, person-centred outcomes, and long-term program sustainability across diverse healthcare settings.

065

Exploring The Non-Technical Skills Utilised by Voluntary Assisted Dying Pharmacists

Niki Ferreira[1,2], Madison Darling[2], Emma Engelke[2], Chelsea Robinson[2], Curtis White[2], Assoc Prof Liza Seubert[2]

[1]WA VAD Statewide Pharmacy Service, NEDLANDS, WA, [2]University of Western Australia, Crawley, WA

EMAIL niki.ferreira@health.wa.gov.au

Background Recent legalisation of voluntary assisted dying (VAD) in Australia enables people with a terminal diagnosis to choose the manner and timing of their death. This emerging practice requires health professionals develop specific skills to meet high legal, ethical and practice standards. Non-technical skills enhance patient outcomes.(1) In VAD this reflects individualised care reducing psychosocial distress, concordance between perceived and actual experience, and ensuring those deemed ineligible continue to be supported. Pharmacists play a crucial role in delivering VAD, yet there is little research on the skills pharmacists need to deliver optimal VAD care.

Objective To explore the non-technical skills utilised by pharmacists delivering VAD care in Australia.

Methods Qualitative descriptive study involving semi-structured interviews of pharmacists working in VAD across Australia. Nine pharmacists were interviewed from Western Australia, Queensland and Victoria. A co-interviewing method was employed and interviews were transcribed verbatim. Reflexive thematic analysis was guided by the Framework Method creating a codebook to establish Outcomes.

Results Nine themes emerged; self-awareness, organisation, teamwork, self-regulation, professionalism, reflection, communication, cognitive and emotional skills. With communication, reflection and teamwork the most common. Many skills were consistent amongst the group however, each participant demonstrated unique skills. Skills appeared interlinked suggesting when used in conjunction, services can be optimised.

Discussion The utilisation of self-awareness, communication, organisation, self-regulation, professionalism, reflection and cognitive skills are prominent non-technical skills in VAD care. Teamwork and displaying personal emotions are considered strengths in VAD practice. Further research could help standardise training and enable consistent, sustainable quality VAD pharmacy practice.

1. Peddle M, Bearman M, Radomski N, McKenna L, Nestel D. What non-technical skills competencies are addressed by Australian standards documents for health professionals who work in secondary and tertiary clinical settings? A qualitative comparative analysis. BMJ.2018;8(8):e020799-e.

066

From Error to Education: Implementing a Swiss Cheese Log to Support Medication Safety Learning.

Danielle Ironside[1], Alexandra Freeman[1], Amanda Bernhagen[1]

[1]Royal Brisbane and Womens Hospital, Brisbane, Qld

EMAIL danielle.ironside@health.qld.gov.au

Background Our busy dispensary environment sees the regular rotation of junior and new-start staff through the department. Dispensing errors are traditionally only reported back to the clinical assistant (CA) involved. We wanted to create a broader learning opportunity for the team through regular meetings that encourage open discussion within a no-blame culture. To achieve this, we implemented a tool to capture dispensing errors/incidents and used common themes for real-life scenario training and education.

Objective(s) To implement an electronic 'Swiss cheese Log' that's available in real-time for reporting dispensing errors and near misses. Reported incidents are used in regular CA education sessions to support open discussion and foster a no blame learning culture.

Action (Method) The log was implemented in the dispensary of a quaternary metropolitan hospital in August 2025. Education was provided to staff how to use the tool. The log was reviewed once a month and errors themed to identify trends for learning. Key themes were discussed at monthly CA education sessions with open discussion from staff. Error processes were presented, with discussion on barriers to workflows and strategies to prevent recurrence. Pharmacists were involved in education, providing context of errors and potential consequences if the error reached the patient.

Evaluation Over 10 months, 358 errors and near-misses were recorded. Two education sessions were conducted, with 85% of CAs attending and four errors discussed. Key learnings included rescanning edited items, maintain vigilance where barcode scanning is unavailable, and avoiding the use of 'same' function when dispensing. Anecdotally, post-education CA staff are more proactively seeking clarity when dispensing medications and feel more confident discussing potential errors.

Discussion The log will be expanded to capture triage variations as scripts are presented to pharmacy, and imprest errors. The log can also identify trends to guide professional development and system improvement.

067

Pharmacist-led Deprescribing to Reduce Inappropriate Medication Use in Frail Older Adults: A Pre-Post Implementation Study

Mirette Girgis[1,3], Sam Maleki[1], Bessie Wong[1], Dr Jonathan Beavers[2], Dr Mohammed Salahudeen[3]

[1]Eastern Health Pharmacy Program, Melbourne, Vic, Australia, [2]Eastern Health Aged Medicine Program, Melbourne, Vic, Australia, [3]School of Pharmacy and Pharmacology, University of Tasmania, Hobart, Tas, Australia

EMAIL Mirette.girgis@easternhealth.org.au

Background Polypharmacy and potentially inappropriate medication (PIM) use contribute to frailty-related adverse outcomes in older adults, including falls, delirium and hospitalisation. Despite benefits of deprescribing in reducing PIMs, integration into routine clinical practice remains inconsistent.

Objective To evaluate the impact of a pharmacist-led deprescribing intervention on PIM use in frail older adults admitted to a Geriatric Evaluation and Management (GEM) unit.

Methods A pre-post implementation study was conducted in a metropolitan GEM ward (Feb-May 2026). Patients aged ≥65 years with Clinical Frailty Scale (CFS) ≥5 and ≥5 medications were included. Intervention involved pharmacist-led structured medication review embedded within admission workflows using Beers and STOPP criteria. Recommendations were discussed with the multidisciplinary team and communicated to community care providers at discharge. Primary outcome was change in PIM prevalence from admission to discharge. Secondary outcomes included feasibility of PIM deprescribing in routine clinical care and communication at transitions of care.

Results A total of 71 patients were recruited (mean age 83.7±7.8 years; 55% female). On admission, 76.1% had ≥1 PIM using both PIM criteria, reducing to 25.4% at discharge. Common PIM classes included proton pump inhibitors, opioids, benzodiazepines, statins/ezetimibe and sulfonylureas. Of 121 total PIMs identified, 75 (61.9%) were discontinued, 18 (14.8%) dose-reduced, and 28 (23.1%) were unchanged at discharge. Median medication count was unchanged (10 [IQR 5.0] vs 10 [IQR 4.5]). Overall, 76.9% (n=93) of pharmacist deprescribing recommendations were fully or partially accepted by the treating team. However, only 56.5% of accepted recommendations were subsequently documented in the discharge summaries.

Discussion Pharmacist-led deprescribing appeared feasible within routine subacute settings and substantially reduced PIM prevalence among frail older adults. These findings support broader integration of structured deprescribing into routine geriatric care and improved discharge communication to enhance continuity of care. Further research is needed to evaluate long-term outcomes and sustainability.

068

A Prospective Audit of Workflow Interruptions Within a Hospital Pharmacy Dispensary

Dr Fiona Warner[1], Claire Hadolt[1], Christopher Macintyre[2], Jessica Day[1], Leah Di Guglielmo[1], Melanie Slater[1]

[1]Statewide Hospital Pharmacy, Launceston, Tas, [2]Statewide Hospital Pharmacy, Hobart, Tas

EMAIL fiona.warner@ths.tas.gov.au

Background Staff feedback within our regional hospital pharmacy identified frequent interruptions, particularly while dispensing and checking medications, as contributors to workflow inefficiency and task fragmentation. Concurrent workflow and time and motion analysis demonstrated substantial variability in prescription turnaround times and identified concentrated delays within outpatient dispensing processes, prompting further investigation into the role of interruptions within our dispensary workflow.

Objective To better understand the frequency, type, and source of interruptions within the dispensary workflow and to identify opportunities for targeted workflow improvement.

Action A prospective interruption audit was undertaken within a regional public hospital pharmacy dispensary. Data collected included the task being performed, interruption details, urgency classification, and approximate interruption duration. Descriptive analysis was performed to assess interruption frequency, duration, and distribution across workflow stages.

Evaluation A total of 68 interruptions were recorded. Pharmacy advice/support interruptions were most frequent (n=25, 36.8%), followed by patient/customer service (n=16, 23.5%). Patient/customer service interruptions contributed to the greatest cumulative interruption duration (104 minutes), followed by pharmacy advice/support (101 minutes). Triage (n=20) and outpatient dispensing (n=19) activities were the most frequently interrupted workflow stages, contributing 104 and 96 cumulative interruption minutes, respectively. Most interruptions were classified as non-urgent (n=41, 60.3%). Overall, phone and in-person interruptions occurred at similar rates (n=35 vs n=33).

Discussion Interruptions were concentrated within triage and outpatient dispensing and were frequently related to communication, coordination, and workflow support activities. The predominance of non-urgent interruptions suggests opportunities to improve workflow visibility, communication processes, and interruption management strategies within the dispensary. Findings also suggest interruption burden differs across workflow stages, with triage functioning as a major coordination hub and outpatient dispensing experiencing substantial workflow fragmentation. These findings provide a foundation for targeted quality improvement initiatives to reduce workflow fragmentation ad optimise dispensary efficiency in similar hospital pharmacy settings.

069

A Pharmacy Technician-Led Credentialing Model to Improve Discharge Medication List Provision

Zachary Pittas[1], Wassi Hossain[1], Monique Kornman[1], Rayan Nahas[1]

[1]*St George Hospital – Pharmacy, Kogarah, NSW*

Background Provision of accurate medication lists at discharge is essential for safe transitions of care, particularly for high-risk patients. A baseline audit in April 2026 demonstrated low provision, with only 13% of high-risk patients receiving a medication list on discharge. Workflow inefficiencies, including reliance on pharmacist capacity and complex communication processes, were identified as key barriers in a pharmacist survey.

Pharmacy technicians have not traditionally been involved in medication list preparation, presenting an opportunity to redesign workflow and expand technician scope through training and credentialing.

Objective(s) To develop and evaluate a pharmacy technician-led credentialing model to improve technician capability and workflow processes supporting discharge medication list provision.

Action (Method) A pharmacy technician-led intervention was implemented, including an education session and an Entrustable Professional Activity (EPA)-based training and credentialing program. Technicians were trained, assessed, and authorised to prepare medication lists for pharmacist review. A credentialled technician supported peer training to enable scalable workforce development.

Evaluation Following implementation, 11 technicians were credentialled. Technician survey responses (n=5) demonstrated improved capability, with 80% reporting being very confident in preparing medication lists and 80% reporting excellent understanding of workflow processes. All respondents (100%) reported being able to independently prepare medication lists for pharmacist review.

Discussion This project demonstrates the successful development of a technician-led model to support discharge medication list provision through structured training and credentialing. Improving technician capability and workflow understanding addressed key system barriers and enabled more efficient and standardised processes.

Embedding EPA-based credentialing supports sustainable expansion of technician scope of practice while maintaining governance and quality assurance. This model highlights the role of pharmacy technicians in workforce redesign and provides a scalable strategy to improve medication safety and discharge processes.

070

Octreotide in the Management of Chylothorax

Lucinda Dowling[1]

[1]*Tasmanian Health Service, Hobart, Tas*

EMAIL lucinda_dowling@hotmail.com

Objective To explore the safety and efficacy of octreotide in the management of postoperative chylothorax.

Clinical Features A 76-year-old female was admitted for thoracic duct ligation following a right lower lobectomy complicated by persistent high-output chylothorax. Due to ongoing significant drain output, octreotide therapy was commenced alongside TPN and a no-fat diet. The patient initially received a continuous intravenous infusion at 150 micrograms/hour for four days before transitioning to subcutaneous octreotide 200 micrograms three times daily for a further 21 days. Despite treatment, drainage output consistently remained between 500–1000 mL daily.

Literature Review Octreotide is proposed to reduce lymphatic flow, to allow breaches in the lymphatic system to close. The evidence supporting octreotide use in chylothorax remains limited, consisting primarily of case reports, retrospective studies, and small case series. There remains no established consensus regarding the optimal dosing regimen or route of administration for octreotide in the management of chylothorax. Reported adverse effects at intravenous doses of 100 mcg/hr have included total heart block, arrhythmias, cardiac arrest, hypoxia, pancreatitis and lactic acidosis.

Pharmacist Interventions, Case Progress, and Outcomes Given the lack of clinical guidelines and concerns surrounding prolonged high-dose intravenous administration, pharmacists recommended transitioning from continuous intravenous infusion to lower-dose subcutaneous therapy to minimise the risk of patient harm. Dose recommendations were guided by available case reports and safety data. Overall, drainage output remained largely unchanged, and it was believed that octreotide made no difference to clinical outcomes. No adverse effects were reported while on intravenous octreotide.

Discussion This case highlights the significant gap in current clinical guidelines surrounding the pharmacological management of chylothorax. Further research is needed to establish the efficacy, optimal dosing, duration, and administration route of octreotide for this indication, with an established guideline better supporting pharmacists in their clinical decision making.

071

Mind the gap: Improving insulin discharge safety in pharmacy practice

Erin Downey (Robinson)[1]

[1]*Royal Hobart Hospital (Tasmanian Health Service), Hobart, Tas*

EMAIL erin.downey@ths.tas.gov.au

Background Safe transitions of care for people using insulin are complex and vulnerable to medication-related harm. Hospital discharge may be associated with missing consumables, insulin device incompatibility, inadequate education, barriers to ongoing supply, and fragmented follow-up. Omission of hypoglycaemia counselling and emergency preparedness strategies may further increase risk of preventable harm following discharge.

Objective(s) To describe pharmacist-identified insulin discharge safety gaps and practical approaches to reducing medication-related risk during transitions of care for people using insulin.

Action (Method) A pharmacist-informed insulin discharge safety framework was conceptualised based on recurring medication safety issues identified during inpatient practice. Key domains included insulin device compatibility, access to consumables (including reusable pens and needles), diabetes technology requirements, hypoglycaemia management education, glucagon access where clinically appropriate, continuity of supply, National Diabetes Services Scheme (NDSS) access, discharge communication, and follow-up planning. Pharmacist interventions focused on identifying and mitigating preventable barriers to safe insulin use following discharge.

Evaluation Recurring latent medication safety risks were identified, including mismatched insulin delivery devices, omitted consumables, limited hypoglycaemia counselling, infrequent glucagon prescribing whereclinically appropriate, gaps in patient understanding, and challenges accessing ongoing therapy following discharge. A structured pharmacist approach highlighted opportunities for greater standardisation, improved continuity of care, and reduction of preventable insulin-related harm during transitions of care.

Discussion Pharmacists are well positioned to identify and mitigate insulin-related discharge risks through structured medication review, patient education, and discharge planning. Greater attention to insulin discharge safety, including emergency preparedness and continuity of insulin supplies, may improve transitions of care and support safer insulin use following discharge.

072

Bridging the diabetes technology gap in inpatient pharmacy practice

Erin Downey (Robinson)[1]

[1]*Royal Hobart Hospital (Tasmanian Health Service), Richmond, Tas*

EMAIL erin.downey@ths.tas.gov.au

Background Rapid growth in diabetes technology, including continuous glucose monitoring (CGM), insulin pumps, connected insulin delivery systems, and reusable insulin devices, is changing inpatient diabetes care. Hospital pharmacists are increasingly required to support medication management involving diabetes technology despite variable formal education, confidence, and practical exposure to device-related care.

Objective(s) To describe practical approaches to pharmacist education and capability building for evolving diabetes technology in inpatient pharmacy practice.

Action (Method) A pharmacist-informed diabetes technology education framework was conceptualised to support practical inpatient management of contemporary diabetes devices. Key domains included device fundamentals, inpatient safety considerations, troubleshooting, glucose monitoring interpretation, insulin delivery systems, ketone monitoring, discharge continuity, and practical counselling regarding consumables and National Diabetes Services Scheme (NDSS) access. Education priorities were informed by recurring inpatient practice issues and pharmacist knowledge gaps.

Evaluation Practice reflection identified variability in pharmacist confidence regarding diabetes technology management, particularly relating to insulin pump troubleshooting, glucose sensor interpretation, device compatibility, inpatient escalation, and discharge continuity. A structured educational approach highlighted opportunities to improve pharmacist confidence, consistency, and medication safety in increasingly technology-enabled diabetes care.

Discussion As diabetes technology continues to evolve, pharmacists require practical and adaptable education to support safe inpatient care. Building pharmacist capability in diabetes technology may improve medication safety, discharge continuity, and confidence in managing increasingly complex diabetes therapies.

073

Reimagining a 'Limitless' Pharmacy Workforce: Scoping Advanced Pharmacy Technician Roles ('Sunshine and Roses' Project)

Melinda Downie[1], Diana Bortoletto[1]

[1]*Barwon Health, Geelong, Vic*

EMAIL melinda.downie@barwonhealth.org.au

Background Pharmacy technician roles are evolving beyond traditional supply functions to support workforce redesign and address pharmacist capacity constraints. Despite this, adoption of advanced roles remains variable, often limited by uncertainty regarding scope, capability, and governance. Structured evaluation of potential roles is required to inform strategic workforce planning.

Objective To identify and map opportunities for advanced pharmacy technician roles, and define the skills, knowledge, and competencies required within a 'limitless' model of care.

Action A mixed-methods approach was undertaken. A department-wide survey of pharmacists and technicians explored perspectives on role expansion, priority practice areas, and confidence in technician capability. Semi-structured interviews (n=15) with senior pharmacy staff across clinical, operational, governance, and education domains examined potential roles, associated tasks, and workforce requirements. Identified roles were mapped to the Australasian Pharmacy Technician Competency Standards.

Evaluation Survey findings demonstrated strong support for role expansion, with >85% of respondents agreeing technician scope could be extended. Priority areas included clinical/ward services (81.6%), outpatients (55.3%), quality use of medicines (44.7%), and antimicrobial stewardship (34.2%). Confidence in technician capability was high (79%), although variability in readiness and understanding of scope was noted.

Interview findings reinforced these results, identifying opportunities across clinical, dispensing, and governance domains. Technicians favoured broader scope expansion, particularly in clinical and dispensary settings while pharmacists emphasised role clarity, accountability, and defined boundaries. Key enablers included structured training, governance frameworks, and clear role delineation. Although implementation barriers (e.g. time, funding, training) were recognised, the project intentionally focused on defining ideal-state opportunities.

Discussion There is substantial opportunity to expand pharmacy technician roles within a reimagined 'limitless' workforce model. Realisation of this model will require clearly defined scope, structured training, and robust governance frameworks to support safe, effective, and sustainable workforce redesign.

074

Pharmacy Publications to Support Medication Safety and Quality of Care Across Healthcare Teams

Sallie Drake[1]

[1]*HPS, Melbourne, Vic*

EMAIL sallie.drake@hps.com.au

Background Healthcare professionals must remain informed about emerging clinical evidence, medication safety issues, regulatory changes, and practice innovations. This includes pharmacy staff as well as nursing, medical and allied health practitioners involved in medication-related care. Engaging a geographically dispersed, multidisciplinary workforce is challenging, particularly where participation in traditional education is variable. Regular, targeted publications offer an accessible and sustainable approach to support continuous education, promote best practice, and strengthen engagement with pharmacy-led medication safety initiatives.

Objective(s) To describe the development and implementation of a structured program of regular pharmacy publications designed to educate and inform healthcare practitioners, support professional practice, and reinforce organisational priorities in medication safety, clinical excellence, and regulatory compliance.

Method A publication strategy was established, involving regular communications aligned with clinical priorities and emerging practice needs. Topics are identified through clinical updates, regulatory alerts, stakeholder feedback, and incident trends. Clinical pharmacists develop content using evidence-based sources and consistent formatting to optimise clarity and accessibility. Publications are disseminated on a scheduled basis via digital platforms, with flexibility to release additional communications in response to time-critical issues.

Evaluation The program was evaluated using a mixed-methods approach, including readership analytics, staff feedback, and qualitative assessment of engagement and perceived relevance. Client surveys demonstrated positive feedback regarding clarity and relevance, with increased awareness of key clinical and medication safety messages among pharmacy and multidisciplinary staff. Ongoing review allows continual refinement to meet workforce needs.

Discussion Regular pharmacy publications can effectively complement other workforce training methods. This approach supports consistent messaging across diverse practice settings, promotes a culture of continuous learning, and enables rapid dissemination of critical information. The model can be adapted to evolving practice priorities and has the potential to enhance workforce capability, medication safety, and quality of care within hospital pharmacy practice.

075

Deprescribing within a surgical inpatient unit: use of an EMR-integrated Drug Burden Index calculator

Jayne Droney[1], Tim Tran[1], A/Prof John Coutsouvelis[2], Dr Sean Stevens[3], Elizabeth Su[1], Dr Christopher McMaster[4], Millicent Iles[1]

[1]Pharmacy Department, Austin Health, Heidelberg, Vic, [2]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Parkville, Vic, [3]Division of Surgery, Anaesthesia, and Procedural Medicine, Austin Health, Heidelberg, Vic, [4]Department of Clinical Pharmacology & Therapeutics, Austin Health, Heidelberg, Vic

EMAIL jayne.droney@austin.org.au

Background The Drug Burden Index (DBI) measures a person's cumulative exposure to the sedative and anticholinergic effects of medicines. It may be used by pharmacists to identify medicines that increase falls risk, for review and potential deprescribing among patients admitted to hospital with fall-related injuries.

Aim To evaluate the impact of an Electronic Medical Record (EMR)-integrated DBI calculator, used within usual pharmacist workflow, on identification and implementation of deprescribing interventions among older falls patients admitted to a general surgical unit.

Method A pre- and post-intervention study was undertaken among patients admitted to the general surgery unit at a metropolitan public hospital. Patients aged ≥65 years with an injury sustained from falling were included. All patients had a best possible medication history obtained by a pharmacist within 72-hours of admission. During the intervention, the pharmacist used an EMR-integrated DBI tool to identify falls risk-associated medicines, calculate the DBI score, and tailor deprescribing recommendations for consideration by surgical prescribers. The primary endpoint was the proportion of patients who had a pre-admission DBI-contributing medicine deprescribed in hospital.

Results Overall, 81 patients were included in each group. DBI exposure was higher in the pre-intervention group, with 54 patients taking a contributing medicine compared with 40 post-intervention patients ($p=0.03$). At least one DBI-contributing medicine was deprescribed for 14 pre-intervention and 19 post-intervention patients ($p=0.33$). The pharmacist made a deprescribing recommendation for 4 pre-intervention and 26 post-intervention patients ($p<0.01$), of which 3 and 17 were implemented, respectively. Software malfunction hindered consistent use of the EMR-integrated tool.

Discussion Implementation of an EMR-integrated DBI calculator within clinical pharmacist workflow may increase identification of deprescribing opportunities among older patients with falls contributing to admission to a general surgery unit. Increasing consistent use of the tool and pharmacist presence on surgical ward rounds may increase uptake of pharmacist-led deprescribing recommendations.

076

The Role of Operating Suite Pharmacists in Optimising Preoperative Medication Management

Stephanie Drvodelic[1], Salwan Al-Saour[1]

[1]Monash Health, Melbourne, Vic

EMAIL sdrvodelic13@gmail.com

Background Suboptimal preoperative medication management is a recognised source of preventable harm, particularly in patients taking medicines considered high-risk (e.g. anticoagulants, antiplatelets, antihypertensives, oral hypoglycaemics, insulin, and glucagon-like peptide-1 receptor agonists). At a large metropolitan multi-site health service, pharmacists review patients who are triaged for anaesthetist-led pre-admission clinics (PAC). Consequently, the extent of unmet need among patients not seen in these clinics is unknown.

Objective(s) To identify elective surgical patients taking medicines considered high-risk in the preoperative period, and to evaluate preoperative medication management, pharmacist interventions, and patient understanding.

Action (Method) A prospective quality improvement study was conducted (November 2024-May 2025) across four hospital sites. Adult patients prescribed ≥1 high-risk medicine were identified via electronic medical records 3–7 days before elective surgery. Patients with previous pharmacist reviews in PAC were excluded. Pharmacists conducted pre-surgical telephone interviews assessing patient understanding of preoperative medication plans documented by surgical teams. Patient understanding and experience were assessed using structured questions and teach-back. Interventions included documentation accuracy, patient clarification, and plan optimisation. Data were analysed descriptively.

Evaluation Among 197 patients reviewed, pharmacist intervention was required in 171 (87%), most commonly for plan optimisation (n=132, 67%) and plan clarification (n=39, 20%). Documentation of preoperative medication plans was frequently absent, incomplete, or incorrect (n=140, 71%). Prior to pharmacist review, 112 (57%) patients demonstrated absent or partial understanding of preoperative medication plans. Following pharmacist intervention, 115 (79%) patients demonstrated improved understanding of preoperative medication management. Overall, 179 (91%) patients reported a positive experience.

Discussion Elective surgical patients taking high-risk medicines frequently required pharmacist intervention when reviewed preoperatively, highlighting unmet need for pharmacist review. Pharmacist-led telephone reviews identified gaps in preoperative medication management and improved patient understanding. Future studies could evaluate clinical outcomes and further define the role of pharmacists in preoperative care.

077

More than a Meds List: Rethinking Oncology Medication Support

Emma Dunham[1], Justine Ayre[1], Christopher Billing[1]

[1]*Launceston General Hospital, Launceston, Tas*

EMAIL emma.dunham@ths.tas.gov.au

Background Managing complex oncology medication regimens can be challenging and overwhelming for patients. Individualised Oncology Dosing Support Tables (ODSTs) were designed by the specialist oncology pharmacist to specifically support patients managing chemotherapy and supportive medications. Despite being used for seven years, the tables had not been formally reviewed by patients to assess satisfaction and to understand if improvements were required.

Objectives To obtain feedback from patients who use the ODSTs to understand if improvements could be made.

Action A survey was created to gain feedback from patients who received an ODST from a pharmacist following education in the Pre-Chemotherapy Clinic. Patients were approached by the principal investigator whilst receiving treatment at the Oncology Day Infusion Centre over a period of three weeks. Surveys were anonymous and voluntary. A total of twenty-six responses were received and analysed for common themes. The project was granted Ethics and Governance approval. Qualitative and quantitative data was collected.

Evaluation The survey results demonstrate a positive response to overall satisfaction with the ODST, with an average rating of 9.62 on a scale of one (not helpful) to ten (extremely helpful).

Positive feedback for the ODSTs include clear and easy to understand and follow; including pictures of the medication boxes; reminder of what to take and when; improved understanding.

The four suggestions for improvement are: the writing was too small; there was too much information; some medications were not on the table; and a reusable daily tick chart would be useful.

Discussion The ODSTs improve patients' understanding and confidence in taking medications for their oncology treatment. The current layout and use of pictures of medications were noted to be particularly helpful. Based on positive feedback, the ODST layout will remain the same. Considering suggestions were patient-specific, modifications for individual needs will be made at time of education.

078

Collaborative Pharmacist Medication Prescribing Enhancing Flow

Erin Dunn[1], Timothy Dunn[2], Martin Canning[3], Belinda Chappell[2], Michael Williams[1], Ross McDougall[1], Andrew Munns[1], Mika Varitimos[1]

[1]*The Prince Charles Hospital, Chermside, Qld,* [2]*Caboolture Kilcoy Woodford Directorate, Caboolture, Qld,* [3]*Metro North Clinical Governance, Herston, Qld*

EMAIL erin.dunn@health.qld.gov.au

Background Medication safety is a critical component of acute care, with prescribing errors contributing to morbidity, mortality, and increased length of stay (LOS). Collaborative Pharmacist Medication Prescribing (CPMP) was recently legislated in Queensland hospitals to reduce prescribing errors and improve quality use of medicines. CPMP enables pharmacists to confirm a medication management plan with a medical officer or nurse practitioner and then prescribe medicines for inpatients.

Objectives To implement and evaluate CPMP across two acute care facilities, comprising a digitally-enabled regional site and a paper-based tertiary referral hospital.

Method CPMP was implemented at each site for medical patients admitted via the Emergency Department. Retrospective chart audits were completed amongst CPMP and non-CPMP cohorts across a three-month period to compare LOS, medication safety indicators, clinical incidents and patient and staff experience.

Evaluation Both sites demonstrated reductions in LOS. LOS at the digital site reduced from 4.51 to 4.22 days (n=251) and the paper-based site reported a reduction from 3.41 to 3.12 days (n=201). The paper-based site reported significant improvements in the documentation of venous thromboembolism risk assessment (79% compared with 28% historical average), adverse drug reaction (ADR) documentation (88% compared with 30%) and confirmation of patient identification (90% compared with 33%). There were 26 prescribing incidents reported across the two facilities via the clinical incident management system for the non-CPMP cohort, including insulin dosing errors, ADR re-exposure and opioid toxicity. There were no prescribing incidents reported for the CPMP group. Both patient (n=38) and staff (n=37) feedback was overwhelmingly positive, with 100% of consumers indicating that they would be comfortable with a pharmacist prescribing their medicines in collaboration with their doctor.

Discussion CPMP improved medication safety, reduced LOS and was well accepted by patients and co-prescribers. These findings support CPMP as a valuable and sustainable enhancement to acute care services.

079

From Pens to Practice: A Systems Approach to Inpatient Insulin Safety

Hannah Dunn[1]

[1]*ACT Health, Digital Health Group, Canberra, ACT*

EMAIL hannah.dunn@act.gov.au

Background Insulin is a high-risk medicine, and recent changes in product availability introduced new risks in safe inpatient administration. Following discontinuation of several pre-filled insulin devices and introduction of reusable individual-use pen devices, a point prevalence audit of insulin products in use across adult inpatient wards (n=155) identified variation in labelling, storage, expiry documentation, and device access practices. These gaps reduced traceability and increased risks of incorrect administration, expired insulin use, and pen sharing. A pharmacist-led initiative was implemented to standardise insulin management processes across inpatient wards.

Objective(s) To improve the safety, traceability, and standardisation of inpatient insulin management through digital prescribing optimisation, storage and label redesign, standardised reusable pen device supply processes, and ward-based education.

Action A multimodal initiative was conducted across inpatient wards between June and October 2025. Interventions included collaboration with digital health and endocrinology teams to implement prescribing alternative alerts for discontinued insulins, redesigned insulin labels incorporating expiry prompts, a standardised reusable pen device supply and tracking workflow, redistribution of ward stock, and nursing education supported by visual reminders, quizzes, and microlearning resources. Follow-up audits and education surveys evaluated impact.

Evaluation Analysis of pre- (n=155) and post-intervention (n=130) audits of insulin demonstrated improvement across multiple insulin safety measures. Products labelled with three patient identifiers increased from 86% to 89%, barcode-scannable labels from 76% to 80%, barrel labelling from 62% to 71%, and expiry/opened-date documentation from 60% to 77%. Availability of reusable pen devices with insulin cartridges increased from 73% to 85%. Correct identification of insulin expiry requirements improved from 86% to 99% following education.

Discussion Integrating digital system changes, standardised supply workflows, and ward-based education improved insulin traceability and strengthened consistent medication safety practices across adult inpatient wards. This initiative demonstrated how pharmacy-led multidisciplinary system redesign can support scalable and sustainable improvements in inpatient insulin safety.

080

Smarter under pressure: paramedic-led redesign of out-of-hospital Drug Therapy Protocols

Jane Dunsdon[1]

[1]*Queensland Ambulance Service, Brisbane, Qld*

EMAIL jane.dunsdon@health.qld.gov.au

Background Medication errors in the out-of-hospital setting are often driven by cognitive load, calculation demands, and poor information architecture. Statewide jurisdictional Drug Therapy Protocols (DTPs) describe how pharmacological agents may be selected and administered by a paramedic depending on clinical scope of practice, but their design structure is currently mixed and inconsistent.

Objective(s) To co-design a restructured DTP format through iterative end-user engagement across two survey phases and determine whether the proposed concept was perceived as fit-for-purpose by paramedics.

Action (Method) Phase 1 (2024, 100% response rate, n=84): End-users were asked to report what information should be contained within each DTP. Overall, the most common elements were dosage calculators (70%; n=59/84), followed by standardised preparation instructions (43% n=36), and pregnancy/breast feeding information (58%, n=49). Results informed the development of a novel three-component format: (i) scene card; (ii) standardised preparation instructions; and (iii) expandable medication monograph. All DTP content was restructured into a standardised data content matrix to aid future downstream technology decisions. Phase 2 (2026, 35% response rate, n=28): artist impressions were distributed to paramedics and responses coded into in-scope (layout and content) and out-of-scope (application functionality) themes.

Evaluation All 28 respondents supported the new format, with 100% of respondents indicating they were fit-for-purpose. The dominant in-scope themes were visual hierarchy and colour coding (n=17), indication visibility (n=10), and preparation sequencing (n=7). Requirement for paediatric dose calculator was the strongest out-of-scope signal (n=16).

Discussion Iterative co-design produced a DTP format concept with strong workforce validation. Structuring content into a consistent matrix separated content governance from platform decisions, enabling downstream digital application integration. This updated format offers a replicable pharmacist-led approach to human factors informed clinical decision support redesign that may be applied in other high acuity environments.

081

Implementing Partnered Pharmacist Medication Charting (PPMC) using Kotter's change model

James Dwyer[1]

[1]*Mercy Health, Heidelberg, Vic*

EMAIL JDwyer@mercy.com.au

Background Partnered pharmacist medication charting (PPMC) has demonstrated benefits in reducing medication errors and improving workflow efficiency, but adoption and ongoing reinforcement can be challenging in general teaching hospital with paper-based medication charting. A structured change management approach was used to support implementation.

Objective To implement a PPMC service using Kotter's 8-step change model and evaluate its impact on workflow, staff engagement, and patient outcomes.

Action (Method) Kotter's framework guided implementation:

- Establishing urgency through external funding and unmet need;
- Building a multidisciplinary coalition including executive, finance, quality improvement, and consumer representatives;
- Developing a patient-centred vision focused on maximising clinical time and improving care delivery.
- Staff communication & engagement strategies included recruiting volunteer medical, nursing and pharmacists, and wider hospital opinion leaders.
- Barriers were addressed through targeted education to clinicians, communication of safety benefits, aligned with workforce efficiencies.
- Early wins were generated through piloting training and implementation in a high-impact clinical area of the adult Emergency Department.
- Continuous improvement was supported through Plan-Study-Do-Act (PDSA) cycles
- Consolidation of embedded process through quality & executive engagement, and workforce planning within pharmacy to sustain service delivery.

Evaluation Evaluation processes included monitoring implementation uptake, clinician feedback through qualitative deidentified surveys, Quality Improvement assessment of workflow improvements and medication safety benefits to patients through incident monitoring.

Early outcomes demonstrated improved timeliness of care, reduction in medication charting errors and reduced rework associated with partnered medication charting.

Discussion Applying Kotter's change model enabled structured implementation of PPMC in a paper-based setting in adult medical patients in Emergency Department in a general teaching hospital.

Key success factors included multidisciplinary engagement, alignment with organisational priorities, and demonstration of early benefits.

This approach supported sustainable practice change and provides a transferable framework for similar services.

082

Unlocking Safer, Sooner, Smarter Care: Evaluating Partnered Pharmacist Medication Charting in the Emergency Department

Lynette Ear[1], Christina Fellner[1], James Wei[1], Nicholas Jones[1]

[1]*Peninsula University Hospital, Frankston, Vic*

EMAIL lear@phcn.vic.gov.au

Background Medication error risk is highest at transitions of care, particularly in Emergency Departments (ED), where time-critical decisions and incomplete histories intersect. Partnered Pharmacist Medication Charting (PPMC) represents an expanded, credentialed scope of practice embedding pharmacists directly into prescribing workflows. This model offers an opportunity to unlock more timely, accurate, and multidisciplinary approaches to medication management.

Objective(s) To evaluate impact of PPMC on timeliness and accuracy of medication charting, and completion of venous thromboembolism (VTE) risk assessments, compared with doctor-led charting in high-risk patients admitted via ED.

Action (Method) A retrospective observational evaluation was conducted over 10 weeks (November 2025-January 2026) at a metropolitan hospital. Adult patients admitted to General Medicine via ED meeting predefined high-risk criteria were included. Outcomes included time to best possible medication history (BPMH), time to clinically appropriate medication charting, medication discrepancies, VTE risk assessment completion, and length of stay. Data were extracted from the electronic medical record and analysed descriptively.

Evaluation A total of 200 patients were included in the analysis. Median time to BPMH completion was shorter in the PPMC group (6.4 vs 28.5 hours), alongside reduced time exposed to inappropriate medication therapy (1.3 vs 9.4 hours). Medication discrepancies were markedly lower with PPMC (9 vs 279), particularly omissions and dosing errors. VTE risk assessment completion were higher in the PPMC group (97% vs 77%). An observed reduction in length of stay of approximately 24 hours was noted in the PPMC cohort, acknowledging other potential contributing factors.

Discussion Embedding pharmacists within prescribing demonstrates how expanded scope can transform care delivery – improving safety, accelerating treatment, and strengthening multidisciplinary workflow. While length of stay is multifactorial, these findings suggest meaningful system-level benefits. PPMC highlights a scalable, collaborative model that challenges traditional boundaries and unlocks more efficient, safer patient care.

083

The Sky is Not the Limit – Unmanned Aerial Vehicle Medicine Delivery Legislation and Policy

Michelle Edmonds[1,2], Bhavini Patel[2], Rebecca Henshaw[3], Professor Hamish Campbell[1]

[1]Charles Darwin University, Darwin, NT, [2]Medicines Management Team, NT Health, Darwin, NT, [3]Royal Flying Doctor Service South Australia & Northern Territory, Darwin, NT

Background Australia is characterised by vast and sparsely populated areas with significant transport challenges in supply chain logistics. Unmanned aerial vehicles (UAVs) are an emerging technology in the supply chain industry that can potentially provide innovative solutions in addition to the traditional healthcare supply chain. The current legislation, policy and standards may not be fit for purpose to facilitate transport of medicines and pathology samples by UAVs.

Aim/Objective(s) Using the Northern Territory (NT) as a case study to review current legislation, policy and standards for medicines and pathology samples delivery by UAV. Ultimately enabling recommendations to regulators, industry and peak bodies to improve and harmonize legislation and regulations to reduce barriers to facilitate this emerging technology.

Methods A literature review on current use of UAVs for medicine and pathology transport was undertaken to determine operations within existing legislation and policy. Subsequently, a desktop review was conducted of all current NT legislation, policy and standards that exist in the intersection between UAV transport and medicines and pathology.

Results The technical aspects of physically transporting medicines and pathology samples via UAVs was well described however, there is limited information regarding the intersection of aviation, medicine and pathology legislation, regulations, standards and policies, particularly within the Australian context. Current NT medicines and pathology legislation and standards are not fit for purpose with gaps in the security, chain of custody and end-to-end accountability requirements of these items.

Discussion There are clear gaps to enable the UAV transporters and health services to provide this service within the legal requirements required of their respective industries. Having clear and harmonized regulations can remove barriers to utilising this technology to overcome transport challenges in remote settings. Facilitation will require pro-active collaboration by regulators, industry and peak bodies consideration to enable UAVs in healthcare to operate safely in Australia.

084

Who You Gonna Call? A Data-Driven Approach to Optimising the On-Call Pharmacist Service

Catherine Ellis[1], Suzanne Olding[1]

[1]Royal North Shore Hospital, St Leonards, NSW

EMAIL catherine.ellis1@health.nsw.gov.au

Background Pharmacist on-call services provide essential out-of-hours medicines support. However, feedback at our major metropolitan facility highlighted service inefficiencies, including frequent low-value interruptions, limited after-hours utilisation of resources and practice variability. Given on-call enquiry data are routinely recorded, we applied a structured, data-driven approach to target service improvements.

Objective(s) To quantify and describe types of enquiries received by on-call pharmacists and identify opportunities to improve service value and efficiency.

Action (Method) A multi-phase project (Model for Improvement) was undertaken, with retrospective review of enquiries (January 2024-December 2025). Staged analysis, including preliminary analysis of 100 enquiries, informed early intervention design. Enquiries were classified by type, medication factors, caller characteristics, timing and outcome. Potentially preventable enquiries and contributing system factors (information access, handover, imprest availability) were identified using predefined criteria. Findings were grouped to identify key drivers of demand and prioritise co-designed interventions.

Evaluation A total of 831 enquiries were recorded, with mean (SD) duration 21.6 (25.4) minutes. Preliminary analysis (n=100) found 12% required pharmacist reattendance; 93% were medicine-specific; non-medicine enquiries included refrigeration (6%) and automated dispensing cabinet (1%) issues. Peak demand occurred in the early evening [16:30–20:29 (73%)]. High-risk medicines (APINCH) comprised 56% of enquiries, commonly anti-infectives (23%) and psychotropics (12%). Frequent medicines included parenteral nutrition (15%), clozapine (8%) and vancomycin (5%). Mifepristone represented 2% of enquiries but 7.9% of total enquiry time. Overall, 31% were potentially preventable (information access 19%, handover 11%, imprest availability 1%). Findings informed targeted interventions including imprest additions (clozapine), pharmacist education (mifepristone), nursing education and in-hours process improvements (handover, vancomycin monitoring). Full dataset evaluation is ongoing.

Discussion On-call pharmacists frequently provided support for high-risk medicines use, reinforcing clinical value. Identifying preventable demand highlighted opportunities to reduce low-value interruptions. Ongoing work will implement and evaluate interventions, alongside full dataset, cost and caller analyses to inform further redesign.

085

Unlocking the Potential of the Pharmacy Workforce: Development of a Pharmacy Credentialing Framework

Mary Etty-Leal, Joanne Young, Kerryn Griffett

[1]*Royal Melbourne Hospital, Parkville, Vic*

EMAIL mary.etty-leal@mh.org.au

Background At a large tertiary hospital, our pharmacy department reported to the Allied Health Credentialing Committee. Existing pathways and procedures for credentialing of advanced or extended scope roles of allied health practitioners did not suitably cover roles or activities undertaken by pharmacists and pharmacy technicians.

Objectives To develop a local Pharmacy Credentialing and Scope of Practice Framework that enables safe expansion to the vast potential of pharmacy practice within the hospital, whilst ensuring robust governance and safe delivery of patient care.

Action (Methods) A pharmacy working group was formed to develop the framework. This involved brainstorming sessions, review of national and state-based allied health and pharmacy-specific resources and benchmarking against other departments. Definitions were reviewed, with agreement to focus on 'credentialed activities' rather than 'advanced scope' to avoid ambiguity with advanced level practice. The framework was drafted with stakeholder consultation and approved through hospital governance processes.

The framework provides guidance on determining credentialing requirements for new roles and activities with options including:

- Local competency assessments: activities that are standard practice but due to inherent risk of activity require assessment before independent practice. Eg. Dispensing competency assessments
- Internally-validated credentialed activities: those needing additional pre-requisites, training requirements or assessment before independent practice. Pathway to credentialing is approved and monitored by department leadership. Eg. Pharmacist Pended Discharges
- Externally-validated activities: pathway to credentialing is approved and monitored by an external body. Eg. ClinCAT Trained Evaluator

Evaluation Since implementation in 2025 the framework has supported four activities requiring competency assessment, five internally-validated credentialed activities and three recognised externally-validated credentials.

Discussion The framework provides clear guidance for defining pharmacy activities, distinguishing between standard practice, competency-assessed activities, and formally credentialed practice. This has enabled the safe and structured unlocking of roles and activities for pharmacists and pharmacy technicians to advance their practice.

086

Audit of Pharmacists' Knowledge on the Latest Asthma Treatment Recommendations

Leah Fantastico[1]

[1]*Caboolture Hospital, Caboolture, Qld*

Background A critical change in the 2025 Australian Asthma Handbook update was the end of short-acting beta agonist (SABA) monotherapy for asthma in adults and adolescents. Recommendation has shifted toward the use of inhaled corticosteroid containing therapy with anti-inflammatory reliever (AIR) only therapy or maintenance and reliever therapy (MART). Effective asthma management with evidence-based therapies can reduce asthma exacerbations and improve patient outcomes. As pharmacists play a critical role in asthma treatment optimisation, it is important to assess their knowledge and awareness of the updated recommendations.

Objective(s) To evaluate knowledge and confidence of pharmacists regarding the current evidence-based recommendations for asthma management in patients aged ≥ 12+ years and identify possible gaps and education opportunities.

Action (Method) A cross-sectional survey was conducted using a structured questionnaire distributed to pharmacists working in various settings. The questionnaire consisted of knowledge assessment multiple-choice and 'true or false' questions, guideline awareness questions, and self-rated confidence scales. Data were analysed using descriptive analysis with results shown in frequencies, percentages, and average scores to summarise participant responses and overall knowledge performance.

Evaluation Among the 31 survey participants, 50% correctly answered that AIR therapy is the current recommended first line reliever therapy, 40% correctly identified the threshold of increased exacerbation risk with SABA overuse, 13% received asthma related education within the past year, and 35% were not aware of the asthma guideline updates. The overall self-rated confidence level was moderate (3 out of 5) across the key aspects of asthma management assessed. Variability in knowledge and awareness of the updated asthma treatment recommendations were observed.

Discussion The findings highlight the need for ongoing targeted pharmacist education that is aligned with the current evidence-based recommendations and greater dissemination of updated asthma guideline recommendations.

087

Impacts of Digital System Implementation on Prescribing, Administration, and Monitoring of Intravenous Iron Infusions

Leah Fantastico, Lily Hatt, Angela Feige, Maddison White, Daynney Aue-Douglas, Gabrielle Schaffer

[1]*Caboolture Hospital, Caboolture, Qld*

Background Intravenous (IV) iron administration is associated with significant adverse effects, including anaphylaxis and permanent skin staining. A local procedure outlines appropriate prescribing, administration and monitoring to promote safe and effective use of IV Iron. Implementation of integrated electronic Medical Records (ieMR) transformed medication management processes, prompting evaluation of its impact on IV iron management.

Objective(s) To evaluate IV iron infusion practices for hospital inpatients before and after ieMR implementation, assess alignment with the local procedure, and identify differences between paper-based and digital systems.

Action (Method) A retrospective review of inpatient medical records was conducted at a metropolitan hospital to compare IV iron practices pre- and post-ieMR implementation. Data collected included patient demographics, infusion details, consent documentation, monitoring, adverse events, and utilisation of a 'PowerPlan' (for digital prescribing). Descriptive analysis assessed adherence to standards and differences in practice.

Evaluation Documentation of cannula site (50% vs 83%) and provision of printed consumer information (15% vs 68%) improved substantially post-ieMR. Prescribing was standardised through use of PowerPlans, eliminating illegible or incomplete orders. However, documentation of administration and monitoring declined, with inconsistencies identified across ieMR sections. A limitation was that the audit occurred a month post-ieMR implementation, so findings may reflect early transition and workflow adaptation rather than established practice.

Discussion IeMR improved prescribing standardisation and selected documentation practices but introduced gaps in administration and monitoring documentation. These findings support targeted interventions to improve documentation quality, optimise ieMR workflows, and address inconsistencies in documentation processes to ensure safe and effective IV iron use.

088

Improving inpatient tapentadol prescribing through targeted formulary stewardship

Hovik Farghaian[1], Adriana Chubaty[1], Dr Sean Baldwin[1]

[1]*Royal North Shore Hospital, St Leonards, NSW*

EMAIL hovik.farghaian@health.nsw.gov.au

Background Tapentadol immediate release (IR) is increasingly being prescribed in inpatient setting by non-pain specialists for management of acute pain as alternative to oxycodone IR. As per the Australian and New Zealand College of Anaesthetists (ANZCA) acute pain management guideline[1], tapentadol achieves similar analgesic effect to oxycodone, with lower rates of overdose and adverse events. Current statewide formulary restricts use of tapentadol IR on the advice of a pain specialist or as per local protocols. Due to this restriction, access to tapentadol is challenging and often lacking pain specialist input.

Objective(s) To evaluate the appropriateness of inpatient tapentadol prescribing to assess compliance with statewide formulary.

Method A snapshot audit of inpatients (excluding ICU) prescribed tapentadol was undertaken to assess if prescribed with appropriate pain specialist oversight. An electronic medicines management report was used to undertake the audit. Findings were presented at a local opioid stewardship working group to obtain feedback.

Evaluation Of the 59 patients on tapentadol identified, 50 patients (84%) were newly initiated. Of these, 33 patients (66%) did not have documented pain service involvement suggesting inconsistent application of specialist input. Of patients aged >65, 29 patients (71%) were initiated tapentadol with no pain service input. Neurosurgery, n=10, Cardiothoracic, n=6 and spinal rehabilitation, n=5 patients were the top three tapentadol prescribing specialties.

Discussion Audit finding demonstrated a gap in pain specialist involvement in the majority of inpatients initiated on tapentadol IR. Further data is required to ascertain if tapentadol prescribing by identified specialties are in line with opiate stewardship clinical care standards. Furthermore, regular review of formulary is warranted given reliance on pain specialist referral can be resource intensive.

Reference [1]Acute Pain Management: Scientific Evidence 5th edition (2020). Australian and New Zealand College of Anesthetists and Faculty of Pain Medicine

089

Delay without Decay? Enhancing Pharmacy Decision-Making for inpatient Denosumab use

Sophia Fasone[1], Michael Williams[1]

[1]*The Prince Charles Hospital, Brisbane, Qld*

EMAIL sophia.fasone@health.qld.gov.au

Background From 2023 to 2024, non-formulary denosumab use increased at our metropolitan hospital, costing approximately $14,000 and becoming the second most frequently approved non-formulary medicine. Increased non-formulary use was thought to reflect administration to long-stay inpatients overdue for scheduled doses and at risk of rebound vertebral fractures. While outpatient denosumab is PBS-reimbursable, inpatient administration is fully hospital-funded.

Objective(s) To evaluate non-formulary denosumab use at our hospital. The primary aim was to determine the proportion of patients with valid approval for non-formulary use and the time from inpatient administration to discharge. Secondary aims assessed the time from last outpatient dose to admission, inpatient administration, and discharge.

Action (Method) A retrospective chart audit was conducted for all patients receiving non-PBS denosumab between 1 January and 31 December 2024. Data sources included inpatient notes, medication charts, AUSLAB, and discharge records. Variables collected included demographics, denosumab therapy status, admitting specialty, vitamin D levels, health profession initiating the administration request, and reason for admission. Descriptive statistics were analysed using SPSS.

Evaluation Nineteen patients were included (mean age 79 years; 78.9% female). Most patients used original packaging (52.6%) or dose administration aids (42.1%), and 94.7% were continuing therapy. The mean time from last outpatient dose to admission was 180 days. At inpatient administration, patients were on average 29 days overdue for denosumab, increasing to 41 days overdue by discharge if not administered during admission. The mean time from administration to discharge was 12 days. Most doses were administered in Geriatric (36.8%) and General Medicine (36.8%) units. Falls accounted for 74% of admissions.

Discussion Given the short average time from denosumab administration to discharge it may be clinically appropriate to delay administration until discharge for some patients. Supplying denosumab on discharge enables PBS reimbursement, reduces hospital expenditure, supports safe osteoporosis management, and enhances resource utilisation.

090

Enhancing Medication Safety Culture Through Collaborative Implementation of a Pharmacy Incident Management System

Claire Fitzgerald[1], Georgia Isaacs[1], Susana Pereira Marques[1]

[1]*Quality and Medication Safety Unit, Slade Pharmacy Services, South Brisbane, Qld*

EMAIL claire.fitzgerald@sladepharmacy.com.au

Background Prior to implementing Datix Cloud IQ (DCIQ), a national pharmacy provider relied on a legacy incident management system not tailored to pharmacy workflows and requirements, limiting usability, review efficiency and compliance oversight, with complexity commonly cited as a reporting barrier.

Objectives To co-design and implement a pharmacy-specific system with pharmacy team members, site managers and the quality and safety unit (QSU), to strengthen incident reporting, review processes and quality improvement.

Method A cause-and-effect analysis identified key limitations in the existing system and processes. Findings informed workshops with managers, floor staff and the QSU to design reporting and reviewer forms and workflows in the new system. Managers, reporters and QSU undertook user acceptance testing, and managers received implementation training through virtual sessions with prerecorded demonstrations.

Evaluation The redesigned system delivered pharmacy-aligned forms and workflows. The reporter form was simplified so any pharmacy team member could lodge an incident and suggest contributing factors and prevention ideas. The reviewer form guides managers through assessment of consequences, contributing factors and corrective actions. Incidents are now classified by type, process and issue, enabling improved trend analysis by classification and medication. In the six months after implementation, the incident rate per 10,000 prescriptions dispensed rose from 0.84 to 1.38, a 65% increase compared with the same period the prior year. Reporting engagement also improved, with the average number of sites submitting incidents increasing from 15.8 to 21.3 per month and 31 sites demonstrating improved reporting frequency.

Discussion The collaborative approach enabled development of a pharmacy-specific system that improved reporting access and better supported practice, governance and continuous quality improvement. Increased reporting suggests improved safety culture and data completeness, providing a stronger foundation for identifying system-level risks and driving corrective action. These findings are an early signal; longitudinal data are needed to confirm sustained engagement.

091

Appropriateness of meropenem prescribing in neonates and its association with carbapenemase-producing Enterobacterales

Sabina Asmaro[1], Lily Byun[1], Ian Fong[1], A/Prof Jonathan Penm[2]

[1]*Prince Of Wales Hospital / Royal Hospital for Women, Randwick, NSW,* [2]*School of Pharmacy, Faculty of Medicine and Health, The University of Sydney, Camperdown, NSW*

EMAIL Sabina.Asmaro@health.nsw.gov.au

Background Neonatal intensive care units (NICU) are high-risk settings for antimicrobial resistance, particularly with the increasing incidence of carbapenemase-producing Enterobacterales (CPE). Meropenem is frequently prescribed for suspected or proven multi-resistant infections; however, its use may increase the risk of CPE colonisation. Appropriate use is therefore critical in neonates, where therapeutic options are limited.

Objective To evaluate the appropriateness of meropenem prescribing in neonates and explore its association with the incidence of CPE.

Action (Method) A retrospective, observational study was conducted in a tertiary hospital NICU from November 2022 to April 2024. Meropenem orders (indication, dose, duration, microbiology match) were assessed for appropriateness using the National Antimicrobial Prescribing Survey criteria and alignment with the Australasian Neonatal Medicines Formulary and local guidelines. Patients were assessed for CPE colonisation after meropenem exposure.

Evaluation Among 42 neonates, the most common indications for meropenem were late-onset sepsis (48%), necrotising enterocolitis (19%), and severe sepsis with extended-spectrum beta-lactamase colonisation (17%). Meropenem was never initiated as first-line therapy, and Infectious Diseases advice was obtained in 69% of orders. The mean duration of therapy was 9 days. 74% of orders were appropriate, and 19% of orders were inappropriate due to suboptimal dosing. 4 neonates developed CPE following meropenem exposure, with 2 associated deaths. However, no clear association between meropenem exposure and CPE colonisation was observed.

Discussion Most meropenem prescribing adhered to guidelines. Suboptimal dosing was identified as a key area for improvement, which was attributed to variability in renal function assessment. This highlights the need for a more consistent approach such as estimation with the Brion Equation, and implementation of regular antimicrobial stewardship rounds in NICU to optimise prescribing. Future studies could involve a larger sample size and longer follow-up to evaluate the incidence of delayed CPE colonisation, and explore the optimal duration of meropenem in neonatal sepsis.

092

Interactive immersion days for high school students: Paving the way for pharmacy assistant/technician traineeships

Ian Fong[1], Mark MacIsaac[1], Declan Gibney[1], Jessica van Schreven[1], Klarissa Yeomans[1], Bella Eagles[1], Laren McConnel[1], Sejal Patel[1], Helen Deep[1], Carlos Yapin[1]

[1]*Prince Of Wales Hospital / Royal Hospital for Women, Randwick, NSW*

EMAIL ian.fong@health.nsw.gov.au

Background Recruitment for hospital pharmacy assistant/technician (HPAT) roles is a persistent workforce challenge, partly due to limited awareness of the role in hospital settings. Although vocational qualifications exist, they are not necessarily a requirement for entry, and the role is not widely recognised as a long-term career to the general public. This highlights the need for accessible pathways into these roles.

Objective To implement interactive immersion days for high school students to increase understanding of HPAT roles and interest in undertaking a school-based apprenticeship/traineeship (SBAT) during their Higher School Certificate (HSC).

Action (Method) A metropolitan hospital pharmacy department partnered with the Department of Education (DE) to deliver two immersion days in 2025 for students commencing their HSC in 2026. The program included presentations on HPAT roles and SBAT, tours of pharmacy and wards, interviews with pharmacy staff, and interactive activities to demonstrate key HPAT skills. Student feedback was collected using 5-point Likert scale questions. Qualitative feedback was obtained from career advisors and DE representatives.

Evaluation 30 students from 5 schools attended, with 25 providing feedback. 96% reported improved understanding of HPAT roles (mean=4.3) and enjoyment of the program (mean=4.2), particularly the interactive activities. Over half reported increased interest in pursuing a career as an assistant/technician (56%, mean=3.6) or pharmacist (60%, mean=3.5). 8 students (32%) expressed interest in undertaking a SBAT in 2026, and 2 have since commenced the program. Career advisors and DE representatives valued the opportunity to explore pharmacy career pathways.

Discussion This initiative demonstrates the value of proactively engaging high school students to increase awareness of pharmacy career pathways, particularly HPAT roles. Interactive immersion days provide a practical, scalable approach to workforce development through partnerships with education stakeholders, and can support recruitment into SBATs in pharmacy. Future work will evaluate long-term outcomes, including SBAT experience and workforce retention.

093

Discussion before decisions: Understanding the patient experience with antimicrobial use in hospital

Ian Fong[1], Daniel Chieng[1]

[1]*Prince Of Wales Hospital / Royal Hospital for Women, Randwick, NSW*

EMAIL ian.fong@health.nsw.gov.au

Background Effective communication is a key component of antimicrobial stewardship (AMS). According to the AMS Clinical Care Standard from the Australian Commission on Safety and Quality in Health Care, patients should receive clear information on the purpose, duration, side effects, and review of their antimicrobial therapy. Despite national guidance emphasised patient-centred communication, limited data exists on how effective hospitals meet these expectations from the patient perspective.

Objective To evaluate the provision of information to patients receiving antimicrobial therapy on the geriatric, surgical and respiratory wards at a tertiary metropolitan hospital.

Action (Method) Structured interviews were conducted with adult inpatients receiving antibiotics, antifungals or antivirals on the geriatric, surgical and respiratory wards. The interviews focused on whether information about indication, duration, and side effects had been provided, and whether patients or carers involved in treatment decisions.

Evaluation 57 participants (55 patients, 2 carers) were interviewed. All patients knew they were receiving an antimicrobial. 75% understood the indication, 60% were informed about treatment duration and 35% were informed about potential side effects. Shared decision-making was reported in 54%, however 37% of participants reported that the treatment decisions were made by the healthcare team without discussion with the patient. 4% felt they still had concerns that had not been addressed by the healthcare team.

Discussion This study reveals that there are communication gaps regarding treatment duration, side effects and shared-decision making with antimicrobial therapy. While patients often rely on clinicians to guide therapy, they value clear and consistent information. This highlights the need for targeted initiatives in AMS programs to enhance and standardise communication with patients to strengthen engagement, adherence, and ultimately quality use of antimicrobials in hospital.

094

Analysis of the Clinical Appropriateness of Antimicrobial Switch and Importance of Not Omitting Pharmacists

Siegfried Frattner, Lily Hatt, Maddison White, Lauren Timms, Sheng Lim, Dr Amy Legg

[1]*Queensland Health, Caboolture, Qld*

EMAIL siegfried.frattner@health.qld.gov.au

Background Antimicrobial Resistance (AMR) is a global health threat driven by inappropriate antimicrobial use. It contributes to increased morbidity, mortality, healthcare costs, and resistance to last-resort therapies. Antimicrobial Stewardship (AMS) aims to optimise antimicrobial prescribing through appropriate agent selection, dosing, and duration of therapy. Surgical patients often require intravenous (IV) to oral (PO) antimicrobial switch, and inappropriate switching practices may contribute to poor patient outcomes and AMR.

Objectives This study aimed to assess the appropriateness of intravenous-to-oral antimicrobial switching in surgical patients prior to hospital discharge, and the role of pharmacists in supporting this.

Action (Method) A retrospective analysis was conducted of surgical patients discharged over a 16-day period who received antimicrobial therapy during admission. Data collected included demographics, diagnosis, microbiology results, antimicrobial regimens, interventions by pharmacists, AMS or Infectious Diseases (ID) teams, and discharge documentation. Appropriateness was assessed against Therapeutic Guidelines (TG), local guidelines, and AMS pharmacist review. Quantitative data were analysed using Microsoft Excel pivot tables to identify prescribing trends.

Evaluation Of the 76 patients, 50 (66%) underwent IV-to-PO antimicrobial switching and were assessed for appropriateness. Of these, 34 regimens (68%) aligned with TG or AMS recommendations. The most common reason for non-compliance was excessive duration of therapy (n=8), followed by inappropriate spectrum (too narrow, n=4; too broad, n=3), and unnecessary therapy (n=2). Pharmacists made 16 interventions, with 12 accepted, while AMS and ID teams made 25 recommendations, of which 23 were accepted.

Discussion Opportunities to optimise IV-to-PO antimicrobial switching remains substantial in surgical patients. Pharmacists and AMS teams play a critical role in overcoming prescribing barriers and extending the impact of AMS beyond the inpatient setting. Strategies such as enhanced documentation, discharge duration calculators, and greater pharmacist involvement have the potential to drive continuous improvement in antimicrobial use and address the ongoing challenge of AMR.

095

Time to Take Control: Timesheets Improve Medication Adherence Confidence in a Home-based program

Bonnie Fung[1], Stephanie Gibson[1]

[1]*Monash Health, Melbourne, Vic*

EMAIL bonnie.fung@monashhealth.org

Background Medication adherence is essential for safe and effective treatment. In older patients where barriers include polypharmacy and memory changes, strategies to aid adherence are imperative. A visual medication timesheet placed in prominent areas of the home may be one strategy to support patients and carers to improve adherence.

Aim To evaluate whether medication timesheets improve self-reported confidence in medication adherence for patients at home.

Methods A prospective observational study was conducted in a geriatric evaluation and management home-based program (May 2025 to January 2026). Pharmacists offered patients a medication timesheet, educated on its use, and completed surveys at admission and discharge. Data collected included patient demographics, medication regimen, existing adherence strategies, timesheet feedback, as well as self-reported medication management confidence and adherence (Lickert-scale questions). Descriptive statistics were used to compare pre- and post-intervention responses.

Results Of 100 patients approached, 54 (54%) accepted a timesheet; 29 (54%) were female and 30 (56%) were aged ≥80 years. Polypharmacy was common, with 26 (48%) taking ≥11 regular medications and 24 (44%) requiring administration ≥4 times daily.

Twenty-six (48%) completed pre- and post-surveys with the remainder declining or lost to follow-up. Medication management confidence improved, with 7 (27%) pre- and 20 (77%) post-intervention reporting extreme confidence in remembering medication timings. Timesheet use was high, with 19 (73%) checking it multiple times a day. On discharge, 21 (81%) reported the timesheet was 'very effective' in supporting adherence and 'rarely forgot' medications, and 23 (88%) intended to continue its use. Minimal barriers were identified; one suggested enlarging the timesheet.

Discussion Medication timesheets were well received and associated with improved medication adherence confidence at home. Despite findings relying on self-reported outcomes (with potential for recall and social desirability bias), this easy and cost-effective intervention shows promise in supporting patients and carers with medication management at home.

096

A Cross-Sectional Study of Burnout and Psychological Distress among Australian Hospital Pharmacists

Wing Gi (Gigi) Fung[1], Jennifer Stidworthy[1]

[1]*Macquarie University Hospital Pharmacy, Macquarie Park, NSW*

EMAIL gigifung123@hotmail.com

Background Burnout is a well-recognised issue among healthcare professionals and is associated with reduced workplace engagement, increased staff turnover, and diminished productivity. These consequences may affect healthcare delivery and highlight the need for strategies to improve workplace mental health. However, limited research has specifically examined burnout and wellbeing among hospital pharmacists.

Aim To evaluate the prevalence of burnout and psychological wellbeing among Australian hospital pharmacists and their impact on workforce sustainability.

Methods Data were collected from Australian hospital pharmacists between October 2025 and May 2026 via an online survey. The survey included demographics, experiences of workplace inequity, coping strategies, and preferred workplace interventions. Burnout and psychological distress were assessed using validated scales: the Maslach Burnout Inventory (MBI) and the Patient Health Questionnaire-4 (PHQ-4).

Results Ninety completed responses were analysed. Participants were predominantly employed in public hospitals (87.8%), with most having over 10 years of experience. Findings demonstrated impaired wellbeing, with moderate burnout (median MBI score 27.5) and 76.7% of participants reporting burnout within the past 12 months. Over half reported intentions to reduce working hours, leave the profession, or retire within five years. PHQ-4 screening identified symptoms consistent with anxiety in 36.7% of participants and depressive symptoms in 48.9%, based on validated cut-offs (≥3). Key contributors to burnout included workload pressure, time pressure, and after-hours work. Workplace inequity was reported by 35.6% of participants, most commonly related to flexible work arrangements and carer responsibilities. Common coping strategies included peer support, social support, sleep, and spending time in nature. Preferred interventions to address burnout included dedicated time for professional activities (62.2%), flexible working arrangements (56.7%), and workload reduction (51.1%).

Discussion These findings demonstrate a high burden of burnout and significant workforce attrition risk among Australian hospital pharmacists. Addressing burnout will likely require system-level workplace changes rather than individual-focused interventions alone.

097

Automated 'patient prioritisation tool' development for pharmaceutical review in a paediatric and obstetric hospital

Dr Alka Garg[1], Natalie Storey[1], Michael Bakker[2], Sean Turner[1]

[1]SA Pharmacy, WCHN, North Adelaide, SA, [2]SA Pharmacy, Digital Health, Adelaide, SA

EMAIL alka.garg@sa.gov.au

Background With increasing demand for clinical pharmacy services and limited workforce resources, effective prioritisation of patients requiring pharmacist review is essential. Automated extraction of data from Electronic Medical Records (EMRs) can support this process by generating a weighted risk score based on predefined clinical criteria, enabling identification of patients most likely to benefit from pharmacist intervention.

Objective To develop and validate an automated Paediatric and Obstetric Patient Prioritisation Tool (PPT) to support pharmacist review of admitted patients.

Methods An automated PPT was developed using EMR data to generate a priority/risk score for admitted patients. Scores were based on weighted, predefined risk criteria selected by a panel of senior pharmacists drawing on their expertise in clinical pharmacy practice. Patients were categorised using a traffic-light system for priority: red (high), amber (medium), and green (low). The tool underwent multiple validation cycles, with iterative refinement of criteria and weightings until satisfactory patient selection and risk stratification were achieved.

Evaluation During each validation cycle, two senior clinical pharmacists independently reviewed all admitted patients over a 10-day period and assigned a priority rating for review. These pharmacist assessments were considered the gold standard and were compared with patients identified by the PPT as red or amber priority. Variations between these selections informed revisions to the risk criteria. This process was repeated until the proportion of patients classified as red or amber was ~50% of admissions, supporting workload management objectives, and the specificity of patient selection exceeded 90%, indicating strong alignment between pharmacist judgement and tool recommendations.

Discussion The PPT offers several benefits:

1. Directs pharmacist attention to patients most likely to benefit from their input.
2. Supports training of new pharmacists by highlighting factors associated with increased patient risk.
3. Assists pharmacy managers in effective resource allocation during periods of workforce shortage or increased demand.

098

A Medicine Use Evaluation of Moxifloxacin and its impact on QT Prolongation in Hospitalised Patients

Anika George[1]

[1]St George Hospital, Kogarah, NSW

EMAIL anika.george@health.nsw.gov.au

Background Moxifloxacin is associated with QT interval prolongation and an increased risk of torsades de pointes (TdP). Hospitalised patients are at increased risk due to electrolyte disturbances, cardiac disease, and concomitant QT prolonging medicines, requiring appropriate prescribing, risk stratification, and electrocardiogram (ECG) monitoring.

Aim/Objective(s) To evaluate the impact of moxifloxacin on QTc interval and whether at-risk patients received appropriate repeat ECG monitoring.

Methods A retrospective clinical audit was conducted. Adults initiated on moxifloxacin with a baseline ECG were included. Patients receiving fewer than two doses or admitted for less than 24 hours were excluded. Data collected included demographics, cardiac history, electrolyte levels, concomitant medications, and ECG results. QT interval and heart rate were assessed and plotted on the QT nomogram to identify patients at risk. Primary outcomes were change in QTc and the incidence of follow-up ECG monitoring at ≥48 hours.

Results A total of 44 patients were included. Follow-up ECG monitoring at ≥48 hours occurred in 25% (11/44), while 75% (33/44) did not receive repeat ECGs. Among patients without repeat ECGs, 88% (29/33) had at least one QT risk factor, and 18% (6/33) had borderline baseline QT values on the QT nomogram. Overall, 70% (31/44) had two or more baseline risk factors; however, only 26% (8/31) underwent repeat ECG monitoring. Among patients with follow-up ECGs, the mean QTc increase was 12.27 ms. The number of patients above the QT nomogram risk line increased from 1 to 2, and those below the line decreased from 8 to 7. The proportion of patients on the nomogram line remained unchanged.

Discussion Moxifloxacin was associated with modest QTc prolongation. However, ECG monitoring was inconsistent and not aligned with patient risk, suggesting missed opportunities to identify TdP risk. Targeted interventions, including risk stratification tools and education, may improve monitoring and safer prescribing practices.

099

Carbapenem and sodium valproate drug-drug interaction: 5 years at a tertiary hospital

Alyssa Gottardo[1], Emma Fox[1]

[1]*Fiona Stanley Hospital, Perth, WA*

EMAIL he196226@health.wa.gov.au

Background Concurrent administration of carbapenem antibiotics with sodium valproate can cause a rapid and profound reduction of valproate concentrations. This can result in undetectable valproate levels and clinically important adverse events related to the valproate indication including seizures or deterioration in behaviour or mental health.

Objectives The aim was to identify the incidence of carbapenem and sodium valproate concurrent inpatient usage at a tertiary hospital, to assess the clinical impact and to identify areas for improvement.

Methods A retrospective audit of all inpatients in a tertiary hospital admitted between 1/1/2020 and 31/12/2024 that received carbapenem antibiotics and sodium valproate within 24 hours. Digital medical records were assessed for relevant adverse events, such as seizures or deterioration in behaviour or mental health, documentation of the interaction and if mitigation strategies were implemented.

Results A total of 107 individual patients and 131 co-administrations were identified within the 5-year period. Relevant adverse events were identified in 25% of co-administrations. Seizures were experienced in 9% of co-administrations and a deterioration in mental health or behaviour in 16%. Valproate levels were taken during 36 different co-administrations with 100% of levels below the reference range (50–100 mg/L) and 39% had undetectable valproate levels (<5 mg/L). The interaction was documented in the medical record in 34% of co-administrations. Relevant adverse events were identified in 11.5% of co-administrations with no mitigation strategies, 4.6% with an additional antiseizure medication, 8.4% with an additional antipsychotic medication and 0.8% when the carbapenem antibiotic was changed to an alternative.

Discussion Co-administration of carbapenems and sodium valproate is a clinically important drug-drug interaction, with 25% of patients experiencing relevant adverse events. The most effective risk mitigation strategy is changing the carbapenem to an alternative antibiotic. Documentation rates of the interaction were low, highlighting the importance of increasing awareness of this drug-drug interaction through targeted education.

100

Beyond Boundaries: Leading a Pharmacy Technician Workforce Through Transformational Change

Nurel Goymen[1], James Polmear

[1]*Western Health, Footscray, Vic*

Background Hospital relocation to a technologically advanced facility presents significant barriers to change in the technician workforce. Developmental models grounded in psychological theory for this context are absent from the literature.

Self-Determination Theory (SDT) is a psychological theory that can be applied in workforce training frameworks. The department recently underwent significant organisational change, moving to a new hospital that brought with it the introduction of automated systems including a dispensing robot, Automated Medicine Cabinets (AMCs), and a pneumatic tube system. This scale of change created an identified need for a structured training model to support the workforce through this transition.

Objective To design, implement and evaluate an SDT-informed workforce development model built on individual perceived strengths and training needs. By implementing this model, practice standards were established to prioritise patient safety and operational efficiency.

Action (Method) A senior pharmacy technician led the transition. A strengths-based assessment using open-ended interviews identified each staff member's perceived strengths, areas requiring support, and training needs. Responses were reviewed to match technicians to rotations aligned with their strengths, supporting SDT principles of autonomy and competence, while ensuring targeted development in areas of need. Expectations were established collaboratively and monitored through check-ins. AMC training was tailored to individual needs with additional days for those needing more support.

Evaluation Competency was assessed through regular reviews, senior technician oversight, and staff check-ins. All 10 staff achieved independent practice within their allocated rotations. Staff were then developed to train their own colleagues, fostering role satisfaction and confidence. This approach enhanced enthusiasm, effectiveness, and perceived value, and created sustainable internal expertise.

Discussion This project delivers a replicable, SDT-informed model for technician workforce development that goes beyond onboarding. It builds teams capable of developing one another, transferable to any pharmacy navigating significant organisational change.

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Pneumococcal vaccine uptake in people living with HIV: a retrospective cohort study

Madeleine Grande[1], Ivette Aguire[1,2], Natali Jokanovic[1], Susan Poole[1], Professor Eric Chow[2]

[1]Alfred Health, Melbourne, Vic, [2]Melbourne Sexual Health Centre, Melbourne, Vic

EMAIL m.grande@alfred.org.au

Background People living with human immunodeficiency virus (HIV) are at increased risk of invasive pneumococcal disease. Since July 1st, 2020, The National Immunisation Program Schedule includes the 13-valent pneumococcal conjugate vaccine (Prevenar-13) at diagnosis, followed by the 23-valent pneumococcal polysaccharide vaccine (Pneumovax-23) 12 months later, and a further dose after five years. Understanding how these recommendations translate into practice is critical to improving pneumococcal protection for people living with HIV.

Aim To evaluate pneumococcal vaccine uptake among people living with HIV attending a metropolitan HIV clinic.

Methods A single-centered retrospective cohort study of patients aged ≥18 years with a new HIV diagnosis between Jul-2020 and Dec-2024 was conducted. Electronic medical records were reviewed to assess vaccination status and dosing intervals. Participant demographics, documented reasons vaccination did not occur and median time to first vaccination was calculated.

Results A total 251 patients were included (median [IQR] age 32 [IQR 29–37] years, 91.2% male). Prevenar-13 was given to 153 (61.0%) patients with 65/153 (42.5%) receiving subsequent administration with Pneumovax-23, representing 25.9% of the cohort receiving both doses. Eighty-seven patients (34.7%) were not vaccinated, with 23.0% declining after being offered (n=20), 21.8% deferred to next visit (n=19) and 16.1% lost to follow-up/transfer of care (n=14). Eleven patients (4.4%) received only Pneumovax-23, with 4 patients (36.3%) self-reporting administration of Prevenar-13 elsewhere and 7 (63.6%) received vaccination prior to Prevenar-13. Mean interval between administration of Prevenar-13 and Pneumovax-23 was 13.7 months (95% CI: 11.7–17.2). Median [IQR] time from first consultation to Prevenar-13 administration was 1.4 [IQR 0.3–6.6] months.

Discussion Despite funded access, only one quarter of patients received both recommended vaccines. Incomplete uptake in this cohort may be attributed to competing clinical priorities, comorbidities and social instability. These findings highlight an opportunity for pharmacist-led interventions to improve vaccine uptake in this high-risk population.

102

Peripheral Administration of Vasoactive MEDications in the Emergency Department: The PAVMED-ED Study (Noradrenaline)

Fallon Grieve[1], Jason Junjie Liang[2], Dr Liam Byrne[1], Dr Thomas Georgeson[1,2]

[1]The Canberra Hospital (Canberra Health Services), Garran, ACT, [2]Australian National University College of Science and Medicine, Acton, ACT

EMAIL fallon.grieve@act.gov.au

Background Despite pharmacodynamic and physiochemical properties favouring central venous administration, vasoactive medications are frequently administered via peripheral intravenous catheters (PIVCs) in the emergency department (ED), where central venous catheter insertion carries inherent delays and risks. Large-cohort ED safety data at higher vasopressor concentrations remain limited.

Aim To describe the incidence, severity and predictors of extravasation associated with peripheral noradrenaline administration in a tertiary ED.

Methods Single-centre retrospective observational cohort study conducted at a major tertiary referral hospital ED. Adult patients (≥18 years) administered noradrenaline (60–120 micrograms/mL) for ≥15 minutes via PIVC between November 2022-November 2025 were included. Extravasation was defined as a Visual Infusion Phlebitis (VIP) score ≥2. Associations between patient, cannula, infusion characteristics and extravasation were assessed using chi-squared, Mann-Whitney U and Fisher's exact tests as appropriate.

Results 226 patients met inclusion criteria (mean age 64.4 years; 64.6% male). Extravasation occurred in 13 of 226 patients (5.8%; 95% CI, 3.1%–9.7%). No extravasation events required pharmacological treatment. Clinical acuity was high: 65 (28.8%) did not survive to discharge. Of the 192 (84.9%) admitted to ICU, median ANZROD score was 0.091. Cannulas were predominantly sited at the cubital fossa or upper arm (197/226; 87.2%), with 6.6% ultrasound-guided. No significant association was found between extravasation and cannula size, inserting clinician, or pre-hospital placement. Lower arm sites had higher extravasation rates than cubital fossa/upper arm sites (16.0% vs 4.6%; p=0.061). Mean infusion duration was longer in patients with extravasation than without (9:33h vs 5:41h; Mann-Whitney U=1456.5; p=0.33).

Discussion An extravasation rate of 5.8% exceeded previously reported estimates for peripheral vasopressor administration. No predictor reached statistical significance, likely reflecting limited statistical power rather than true absence of effect. Distal forearm cannula placement and prolonged infusion duration warrant prospective investigation to inform safe peripheral vasopressor protocols in the ED.

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Co-Designing an Entrustable Professional Activities (EPA) Framework for Non-Medical Prescribers

Hayley Griffin[1], Wendy Ewing[1], Emily O'Halloran[1], Mark Sheppard[1], Samanta Wood

[1]*Monash Health, Clayton, Vic*

EMAIL Hayley.Fulton@monashhealth.org

Background In Australian hospitals, trained non-medical clinicians – including Nurse Practitioners (NPs), Pharmacists, and Podiatrists – are authorised to order/prescribe medicines within their scope of practice. At a metropolitan health service, all non-medical prescribers completed the same case-study-based prescribing assessment, which did not reflect discipline-specific requirements. Entrustable Professional Activity (EPA) frameworks offer a more appropriate approach by assessing real-world, role-specific prescribing through observable performance and entrustment scales.

Objectives To co-design an EPA–based assessment that reflects real-world practice to ensure non-medical prescribers can be entrusted to safely prescribe medicines using local prescribing systems.

Action A multidisciplinary working group was formed through an expression of interest process to co-develop an EPA framework. The group included non-medical clinicians, pharmacists, NPs, and podiatrists, who had recently completed or were preparing to undertake the existing case study–based prescribing competency.

Co-investigators developed an initial EPA tool that integrated medication safety principles with legal and electronic prescribing system requirements. This was refined through workshops iterative review of the draft tools with the working group. The workshops focused on defining essential prescribing elements, checklist structure, mandatory versus optional items, clarity of language and minimum requirements for main scopes of practice.

Evaluation The co-design process was evaluated through workshop reflections, and iterative review of draft tools. Working group members reported that the process was collaborative, transparent, and allowed meaningful contribution from all professions. Feedback indicated strong agreement that the final EPA tool was usable, relevant, and aligned with real-world prescribing practice across disciplines.

Discussion The co-design process resulted in an assessment aligned with real-world prescribing, adaptable across non-medical prescriber groups, and the EPA framework enhances assessment authenticity compared with the previous case-study model.

The EPA tool will be evaluated with learners and assessors once it has been embedded in practice.

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A Time and Motion Analysis of Dispensary Workflow in a Hospital Pharmacy

Claire Hadolt[1], Dr Fiona Warner[1], Christopher Macintyre[2], Jessica Day[1], Leah Di Guglielmo[1], Melanie Slater[1]

[1]*Statewide Hospital Pharmacy, Launceston, Tas,* [2]*Statewide Hospital Pharmacy, Hobart, Tas*

EMAIL claire.hadolt@ths.tas.gov.au

Background Efficient dispensary processes are critical to ensuring the safe and timely medication supply. Staff feedback at our regional public hospital pharmacy identified concerns relating to dispensary workflow inefficiencies, processing times, and delays in medication supply.

Objective To quantify prescription turnaround times and identify where delays occur within the dispensary workflow.

Action A targeted time and motion audit of dispensary processes was undertaken, capturing workflow data across key stages of prescription processing from order receipt to medication supply. Data collected included prescription type and time stamps for workflow stages including receiving, processing, checking, and supply. Statistical analysis (ANOVA with Tukey-Kramer post hoc testing) was performed to assess difference in turnaround time between prescription types, and waiting time analysis identified where delays accumulated within the workflow.

Evaluation Turnaround time varied significantly by prescription type (ANOVA, $p=0.017$), with outpatient prescriptions demonstrating significantly longer turnaround times compared with discharge, S8/S4D, and inpatient prescriptions. Waiting time analysis demonstrated that delays accumulated disproportionately while prescriptions were awaiting dispensing, accounting for approximately 67% of total waiting time.

Discussion This analysis provides a structured, data-driven description of dispensary workflow processes. Findings suggest delays are driven by system-level inefficiencies within the dispensing process rather than isolated workflow variation. While these delays are likely influenced by environmental, organisational, and system-related factors, these findings provide objective workflow data to inform targeted quality improvement initiatives, including workflow redesign, prioritisation strategies, and review of dispensing processes. By identifying where delays accumulate within dispensary workflow processes, this work provides a foundation for improving workflow efficiency and optimising prescription processing. The approach is practical and reproducible in similar hospital pharmacy settings.

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Psychometrics, Work Samples, and Interviews: The Triple Whammy for Intern Recruitment Success

Ibrahim Hamad[1], Stuart Binns, Eric Lau, Geoff Wills, Ian Fong

[1]*St George Hospital Pharmacy – SESLHD – NSW Health, Kogarah, NSW*

EMAIL Ibrahim.Hamad@health.nsw.gov.au

Background Recruitment of hospital pharmacy interns has become increasingly challenging, with candidates demonstrating similar experience and academic achievements. Traditional selection processes relying on written applications and structured interviews have limited capacity for holistic decision-making. Given the investment in intern training and high likelihood of workforce retention, more robust recruitment strategies are required to identify candidates who will contribute to high-performing teams, positive culture, and long-term workforce sustainability.

Objectives To implement a multimodal recruitment process incorporating targeted written responses, psychometric testing, and applied clinical assessments to enhance evaluation of cognitive, behavioural, and clinical capabilities.

Methods A recruitment process was implemented for seven intern positions across four hospitals. Components included: (1) targeted written application questions designed to elicit demonstrated capability; (2) pre-interview psychometric assessment of cognitive ability (Cognify) and emotional intelligence (Emotify), with results blinded and not used for exclusion; (3) a clinical presentation and linked case scenario to assess application of knowledge; and (4) candidate nomination of preferred location with panel blinding. Feedback from interview panel members was collected using 5-point Likert scale questions six months post-recruitment.

Evaluation Survey responses (n=5) showed strong support for the process, with 80% agreeing it improved selection quality (mean=4.2) and should be continued (mean=4.6). Targeted questions and integrated clinical tasks were rated highly effective (mean=4.7). Psychometric assessment was considered a useful adjunct (mean=3.7), with Emotify viewed as reassuring for team-fit, with low scores prompting reconsideration, while Cognify demonstrated mixed utility, with differing views regarding its influence and cost-effectiveness. Low Emotify scores showed stronger predictive value for poor outcomes, whereas high scores didn't predict selection.

Discussion This multimodal process enhanced assessment of attributes to support team fit and organisational culture, while reducing reliance on written applications. Psychometric testing, particularly emotify measures, provided behavioural insight, though further evaluation is required to define its role in selection decisions.

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The Standards Are Set – But Are They Being Met? Analysing Antipsychoticsin Delirium

Farheen Hameed[1], Rachael Worthington[1]

[1]*NSW Health, Sydney, NSW*

EMAIL farheen.hameed1@outlook.com

Background The Delirium Clinical Care Standard (DCCC) and the Psychotropic Medicines in Cognitive Disability or Impairment Clinical Care Standard (PMCDICCC) outline the role of antipsychotics in the management of delirium, with the DCCC stating the importance of non-drug strategies for behavioural and psychological symptoms in lieu of high-risk antipsychotic medications. The PMCDICCC describes 8 quality statements around antipsychotic use, including ethical issues with psychotropic medication use in influencing behaviour. State and local incident and intervention data around antipsychotic use revealed administration errors, dose-related errors, selection errors and adverse effects, informing the need for further analysis into the alignment of antipsychotic use with both DCCC and PMCDICCC, which subsequently supports implementation of the NSQHS Standards.

Objective To evaluate the alignment of antipsychotic use within our organisation against the PMCDICCC standards, including patient consent, appropriateness of treatment and non-pharmacological and pharmacological approaches.

Method An audit examining the use of antipsychotic medications was performed from January to May 2026 (inclusive) across the aged care cohort of our organisation. The use of antipsychotics was evaluated with the following key questions:

- Has informed consent been documented?
- Have non-medication strategies been implemented?
- Is there an appropriate reason for prescribing antipsychotic medication?
- Is a pharmacological plan in place?

Evaluation The audit demonstrated an improvement in documentation of consent, supported by the launch of the eMR Psychotropic Medication Powerplan and Patient Consent Powerform. A modest increase in the documented use of non-medication strategies was noted, but the number of implemented pharmacological plans remained low, resulting in ongoing medication incidents.

Discussion Whilst standards exist for the prescription of antipsychotics in delirium, gaps remain in translation into clinical practice. The ongoing focus to streamline workflows, embed clinical champions and integrate robust governance processes will be further evaluated to drive safer prescribing and improve patient outcomes.

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Prevalence and Cardiometabolic Monitoring of High-Dose Antipsychotic Therapy in Custodial Health Services

Harriet McGuiness[1], Caitlin Hardman[1,2]

[1]*West Moreton Health, Ipswich, Qld,* [2]*Sunshine Coast Health, Birtinya, Qld*

EMAIL harriet.mcguiness@health.qld.gov.au

Background Antipsychotic medications carry well-established cardiometabolic risks including dyslipidaemia, weight gain, QT interval prolongation, and type II diabetes mellitus. High dose antipsychotic therapy (HDAT), defined as exceeding 100% of the British National Formulary (BNF) maximum daily dose, is not routinely recommended due to limited efficacy evidence and an elevated side-effect burden. Despite the recognised risks associated with HDAT, the prevalence of its use and associated cardiometabolic monitoring practices within Australian custodial health services have not been well characterised.

Aim/Objectives To determine the prevalence of HDAT and assess the frequency of relevant physiological, haematological and cardiometabolic monitoring within custodial health services.

Methods A retrospective clinical audit was conducted of adult consumers prescribed antipsychotic medications at two custodial health facilities between 1 August to 31 October 2025. HDAT was identified using a validated BNF-based dosage factor calculator. Cardiometabolic monitoring data including weight, blood pressure, electrocardiogram, HbA1c, lipid profile, full blood count, and liver function tests were extracted from electronic medical records.

Results Of 300 consumers prescribed antipsychotic therapy, 58 (19.3%) met HDAT criteria, representing 4.1% of the total inmate population across both sites. 28 (48.3%) of the study cohort were Aboriginal and/or Torres Strait Islander. The mean dosage factor was 1.69 (±0.43), with 18 (31%) of HDAT consumers exceeding 200% of the recommended maximum dose. Olanzapine was the most frequently prescribed agent (69%). Over 60% of HDAT consumers had no documented HbA1c or lipid profile within the recommended six-monthly timeframe.

Discussion HDAT prevalence within custodial health settings was substantial and associated with gaps in recommended cardiometabolic monitoring. Findings highlight opportunities for targeted quality improvement initiatives including standardised monitoring pathways, clearer prescribing responsibilities and development of local HDAT guidance to support safer antipsychotic use in custodial health settings.

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Beyond naloxone: pharmacist-led prevention of opioid-induced respiratory depression

Sanaz Hashemi-nezhad[1], Nina Phan[1], John Turner[2]

[1]*Royal North Shore Hospital, Pharmacy Department, St Leonards, NSW,* [2]*Royal North Shore Hospital, Pain Management, St Leonards, NSW*

EMAIL sanaz.hasheminezhad@health.nsw.gov.au

Background Opioid-induced respiratory depression (OIRD) is a preventable cause of inpatient harm. The Australian Commission on Safety and Quality in Health Care Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard highlights the need for appropriate monitoring and management of opioid-related adverse effects, including naloxone use. Pharmacists are well positioned to identify high-risk patients and reduce opioid-related harm.

Aim/Objective(s) To evaluate compliance with Clinical Care Standard indicator 6a – the proportion of admitted patients who received opioid analgesics who were administered naloxone for respiratory depression – and to identify opportunities for pharmacist-led interventions to lower the risk of OIRD.

Action (Method) A retrospective audit was conducted at a large metropolitan facility over six months (December 2024–May 2025). Inpatients receiving both opioids and naloxone were reviewed using a structured audit tool. Data collected included naloxone indication, OIRD risk factors, sedation score, Acute Pain Service (APS) review, admitting specialty, and recent surgery within 72 hours.

Evaluation Of 1,935 patients receiving opioids, 21 (1.1%) were administered naloxone. Most were admitted under geriatrics, general medicine, and psychiatry. Three patients (14%) had recent surgery within 24–72 hours. Naloxone indication was documented in 12 (57%) and sedation scores in 10 (48%). Common risk factors included concurrent CNS depressants (14, 67%), opioid use disorder (6, 29%), respiratory disease (5, 24%), and age >70 years (8, 38%). Six patients (29%) received a long-acting opioid within 24 hours of naloxone. No patients received take-home naloxone on discharge, and APS review occurred in 4 (19%).

Discussion Documentation gaps and a high burden of risk factors highlight opportunities for earlier identification of high-risk patients and implementation of opioid stewardship strategies to reduce opioid-related harm. Targeted strategies include pharmacist-led risk stratification, rationalisation of sedatives, improved monitoring, and increased provision of take-home naloxone, particularly in high-risk specialties and post-surgical patients.

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Simulated Wards, Real Life Skills: A Simulation Collaboration for Intern Pharmacists and Medical Students

Emma Hatherley[1], Alexandra Camilleri[1], Dr Phillippa Wills[1,2], Jeff Khoshaba[1], Jier Nguyen[1]

[1]*Northern Health, Epping, Vic,* [2]*Northern Health Clinical School, University of Melbourne, Epping, Vic*

EMAIL emma.hatherley@nh.org.au

Background Working within a multi-disciplinary team is a vital role of health professionals within a hospital setting to optimise patient care. Currently at a metropolitan hospital, final year medical students undertake simulation scenarios as an additional component to prepare students for registration. However, intern pharmacists rely solely on supervised practice to gain equivalent experiences.

Objective(s) To prepare intern pharmacists to integrate independently onto the wards and increase their confidence interacting with their medical counterparts, by incorporating them into existing medical student ward simulations.

Action (Method) The simulation activities already undertaken by medical students were adapted to incorporate an intern pharmacist within the scenarios. Both medical students and intern pharmacists completed a variety of set tasks aiming to simulate realistic ward workflows, whilst also triaging incoming simulated phone-calls from within the hospital. The intern pharmacist was available to the medical students to provide medication information support needed within their cases. A post-simulation survey was conducted to evaluate the benefits and effectiveness of the activity.

Evaluation Of the five participating intern pharmacists, all found the experience beneficial and engaging. Prior to participating, interns rated their confidence when interacting with medical teams face-to-face an average of 4.2/5. Post-simulation this increased to 5/5. All participants either strongly agreed or agreed that the simulation improved their understanding of how pharmacists and doctors can collaborate in a clinical setting.

Discussion Upon debriefing with participants, the intern pharmacists identified that an understanding of available resources and clear patient handover were key skills which determined how easily they were able to navigate the simulated scenarios. It assisted them in developing time-management and prioritisation, all of which would be transferable skills when working as independent clinicians. This activity also provided participants with further insights into the role of the medical team, increasing confidence when interacting together in the future.

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Monitored Medication Management by the Subject Matter Experts

Brooke Jeffriess[1], Leah Wirth[1], Anna Hendy[1]

[1]*Surgical Treatment and Rehabilitation Services, Brisbane, Qld*

EMAIL Brooke.Jeffriess@health.qld.gov.au

Background In Queensland, all Schedule 8 and designated Schedule 4 medications must be ordered to clinical areas from the pharmacy department by an authorised staff member, typically a registered nurse, using a locally approved order form.

Objective To describe the workflow and potential cost benefit of a pharmacy technician-led monitored medication management initiative in a subacute inpatient clinical service.

Action Advanced-scope pharmacy assistants (as authorised staff) managed and ordered all imprest and non-imprest monitored medications via Pyxis automated dispensing machines. Imprest medications were maintained using minimum and maximum stock levels. Non-imprest medications were identified on patient admission, loaded into Pyxis with zero minimum and maximum levels, and reviewed every eight weeks to reduce wastage.

Evaluation A retrospective analysis of the 2024–2025 financial year showed 2,407 monitored medications across 768 distributions from pharmacy to subacute inpatient areas. Each distribution required approximately five minutes of documentation. There were no requests to the on-call pharmacist. The cost of five minutes of pharmacy assistant time ranged from $3.17 to $3.42, while nursing time ranged from $4.08 to $5.48. The estimated annual cost benefit ranged from $1,558 to $5,557.

Discussion This initiative demonstrates the value of pharmacy assistant-led medication management in reducing nursing workload, improving operational efficiency, and achieving measurable cost savings. By centralising the ordering and monitoring of Schedule 8 and designated Schedule 4 medications, pharmacy assistants gain a holistic view of ward requirements and patient usage patterns. This insight enhances coordination, minimises wastage, and supports safer medication practices. The model promotes sustainable workforce utilisation and presents a scalable solution for broader implementation across subacute and similar clinical settings.

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Escaping the Bermuda Triangle: A technician-led approach to reclaiming pharmacy stock, space, and savings

Brooke Jeffriess[1], Caitlyn McRobbie[1], Georgina Pike[1], Leah Wirth[1], Benita Suckling[1]

[1]*Surgical Treatment and Rehabilitation Service, Metro North Health, Brisbane, Qld*

EMAIL brooke.jeffriess@health.qld.gov.au

Background Ensuring a ward imprests are consistently stocked in a way which considers both cost and space is a significant element of pharmacy core business. Upon facility opening, limited pharmacy floorspace led to a decision to adopt a 'direct-for-ward' (DFW) ordering model from the supplier at a cost to the ward. Over time, with adjustments to available pharmacy space and to have more resilient base of stock on hand, ordering practices gradually diverged from their original intent towards a holding a buffer of ward stock in pharmacy, introducing unintended inefficiencies and inaccuracies, mitigating the benefit of the DFW model.

Objective(s) To map and review intended and current workflow to transition to a system which meets the changed resources and requirements of the facility.

Action (Method) Technician staff engaged with pharmacist Team Leaders to highlight the range of inefficiencies (nicknamed a 'Bermuda Triangle' of stock) and invited the pharmacist to shadow the imprest process to gain an appreciation of the issue. This enabled a collaborative process mapping exercise for consultation with the Pharmacy Director, and clear planning of a phased changeover that would ensure correct stock distribution and rotation from stockpiled ward stock to standard pharmacy inventory.

Evaluation This change resulted in a reduction in stock handling by technicians (saving approximately 4hrs/day of technician time), enabled traceability of stock holdings with benefits for those on-call or completing DUE, and saved an estimated $50,000/year for the facility in eliminating DFW costs (based on 12 wards). Space used to store stock as pharmacy inventory was comparable to space which was being used to unload and check DFW orders (~5 m^2).

Discussion This provides real-world considerations for sites considering a DFW model, and a case study of technician-led review and escalation of procurement decisions to eliminate low-value activities.

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From Publication to Practice: Improving the Reach and Impact of Pharmacy Publications and Communications

Shan Heynes[1], Erin Musgrave

[1]*Slade – Pharmacy Services, Mount Waverley, Vic*

EMAIL shan.heynes@sladepharmacy.com.au

Background The organisation's quality and medication safety team regularly produce a range of publications and communications for medical, nursing, and pharmacy staff to support education and promote safe practice. However, the extent to which these resources are accessed, utilised, and translated into practice is often unclear. Understanding end-user engagement is essential to ensure resources are meaningful, accessible, and effective.

Objectives To evaluate the usability, accessibility, and perceived value of publications and communications produced by the organisation's quality and medication safety team, and to identify opportunities to optimise their impact on clinical practice.

Action A cross-sectional survey was distributed to pharmacy staff across multiple sites nationwide, including pharmacists, technicians, and managers. The survey assessed awareness, usage, perceived usefulness, readability, accessibility, and preferred delivery methods of resources such as clinical articles, medication shortage notices, hospital memos, medication safety alerts, and case studies. Quantitative and qualitative data were analysed, with free-text responses reviewed to identify key themes.

Evaluation Ninety responses were received. Publications were generally perceived as useful and well presented, with over 90% indicating that resources supported practice. However, gaps in accessibility and utilisation were evident, with materials not consistently discussed in meetings or displayed within facilities as intended. Key areas for improvement included the timeliness of communications, visibility of actionable information, and awareness of available resources. Respondents also emphasised the need for concise, clinically relevant content, particularly incident-based learning.

Discussion While pharmacy publications and communications are valued, their impact depends on effective dissemination and integration into practice. In response, targeted improvements have been implemented, including clearer visibility of key actions and target audiences, streamlined content, and expanded access through digital and cloud-based platforms. Ongoing evaluation will assess the effectiveness of these strategies in improving engagement and practice outcomes.

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Beyond Borders: Catalyst for Professional Development through International Pharmacy Volunteering in Low to Middle-Income Countries

Hillarie Ho[1], Dr Judith Coombes[1,4], Prof Ian Coombes[1,4], Brooke Bullock[2,4], Ms Hannah Knowles[1,4], Victoria Rutter[3,4]

[1]*School of Pharmacy and Pharmaceutical Sciences, University Of Queensland, Brisbane, Qld,* [2]*Queensland Health, Brisbane, Qld,* [3]*Commonwealth Pharmacy Association, London, UK,* [4]*Collaboration of Australians and Sri Lankans for Pharmacy Practice, Education and Research (CASPPER), Brisbane, Qld*

EMAIL hohillarie@gmail.com

Background CASPPER (Collaboration of Australians and Sri Lankans for Pharmacy Practice, Education and Research) facilitates pharmacy education and training initiatives in Sri Lanka involving volunteer pharmacists from Australia and the United Kingdom, visiting in person to co-deliver education and training programs in collaboration with local staff. International healthcare volunteering in low to middle-income Countries (LMIC) encourages the development of transferable leadership skills, including adaptability, cultural awareness and decision-making.

Aim/Objective(s) To develop and pilot a study to explore whether and how participation in pharmacy volunteering projects associated with CASPPER initiatives in LMIC fosters perceived professional growth, reflective learning, and development of professional skills among pharmacists.

Methods This study will use a mixed-methods exploratory design involving pharmacists who have participated in CASPPER volunteering activities in Sri Lanka. Quantitative data will be collected using a Likert-scale questionnaire adapted from the Measuring the Outcomes of Volunteering for Education Tool (MOVE-iT). Qualitative data will be obtained through think-aloud interviews to explore participants' experiences and reflections in greater depth. Quantitative data will be summarised descriptively, while qualitative data will undergo thematic analysis using NVivo software.

Results The protocol was piloted in two stages. The first stage involved face-to-face think-aloud interviews with two participants to assess interview structure and question clarity. The second stage involved two participants completing the online questionnaire, followed by a think-aloud interview to evaluate the integrated data-collection process. Feedback from pilot participants informed refinements to the questionnaire and interview guide. With these refinements a larger participant recruitment and data collection will be conducted.

Discussion This pilot study provided insights into the professional leadership development outcomes associated with international pharmacy volunteering in LMIC settings. Findings may help inform and support participation in the development of and participation in volunteering and education initiatives that support reflective learning, transferable skill development, and professional growth among pharmacists.

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Pharmacist-led discharge prescription planning (PDPP): evaluating the impact of a service relaunch and expansion

Marisa Hodgkinson[1], Sylvia Andrew[1], Karen Rui Wen Ong[1], Joshua Wong[1]

[1]*Monash Health, Melbourne, Vic*

EMAIL Marisa.Hodgkinson@monashhealth.org

Background Delayed or inaccurate discharge prescriptions can adversely affect patient safety, patient flow, and patient and clinician experience. Pharmacist-led Discharge Prescription Planning (PDPP), where pharmacists prepare discharge prescriptions before doctor review and sign-off, has demonstrated benefits. Despite implementation in the hospital network in 2020, PDPP uptake remained limited to early adopter sites.

Objective(s) To evaluate PDPP uptake and impact on patient flow and clinician experience following a network-wide relaunch and expansion.

Action (Method) Stakeholder consultation identified PDPP barriers and enablers, informing a relaunch strategy involving workflow redesign, governance updates, education and target clinical units for expansion. A mixed-methods retrospective evaluation was conducted across eight hospitals. Uptake was assessed by comparing proportions of PDPP-prepared discharge prescriptions over two 12-week periods in 2024 and 2025. Patient flow was evaluated by reviewing electronic medical record time stamps from purposive samples of discharge prescriptions (n=240 PDPP and n=240 non-PDPP). Clinician experiences were explored using a cross-sectional survey. Statistical analysis used Chi-square (proportions) and Mann-Whitney-Wilcoxon (medians) tests.

Evaluation PDPP uptake increased from 1.6% (269/17,252) of discharge prescriptions to 11.5% (1,954/16,675) ($p<0.0001$). Service expanded from three to eight hospital sites and 11 to 55 clinical units. Pharmacists performing PDPP increased from 15% to 72% (N=200; $p<0.0001$). Patient flow improved, with median times between patient discharge and doctor e-signing discharge prescription occurring 58 minutes earlier (186 vs. 244 minutes; $p=0.16$) and pharmacist discharge medicine counselling 51 minutes earlier (114 vs. 165 minutes; $p=0.007$). Survey responses (N=54) demonstrated strong clinician agreement (>90%) that PDPP reduced prescribing errors, minimised discharge delays, and enabled proactive workload planning.

Discussion The relaunch and expansion achieved substantial PDPP uptake and strong clinician support, highlighting PDPP as an effective strategy to improve discharge efficiency and patient safety. Future efforts will focus on addressing remaining systemic barriers through enhanced multidisciplinary collaboration and timely discharge communication.

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Pharmacists on ward rounds: implementation and evaluation of a multimodal strategy to improve pharmacist participation

Marisa Hodgkinson[1], Graham Rivers[1], Bronwyn Allan[1], Samanta Wood[1,2]

[1]Monash Health, Melbourne, Vic, [2]Monash University, Melbourne, Vic

EMAIL marisa.hodgkinson@monashhealth.org

Background Ward rounds are central to hospital multidisciplinary team (MDT) care but are challenged by competing clinical priorities, workforce gaps, and limited training for complex MDT practice. Pharmacists add significant value to ward rounds through real-time clinical input, MDT decision-making and interprofessional learning. However, sentinel event reviews in the study hospital network identified inconsistent pharmacist participation across sites and medical specialties.

Objectives To evaluate the impact of a coordinated, multimodal improvement strategy to increase pharmacist participation in multidisciplinary ward rounds.

Action (Method) Barriers, enablers, and perceived benefits of pharmacist ward round participation were identified through focus-group workshops and surveys of 20 pharmacist team leaders, and six 2-week ward round quality improvement sprints over 2023–4. Findings informed a multimodal strategy commenced in July 2025 that included prioritising pharmacist participation based on practicality and impact, implementing electronic medical record functionality to document pharmacist ward round attendance, and setting clear expectations for participation. This was supported by a pharmacist ward round training program incorporating Entrustable Professional Activity assessment to build workforce capability and confidence.

Evaluation Key barriers identified by participants included competing demands, logistical challenges related to ward round timing, and limitations in workforce skill and confidence. Enablers identified included aligning shift times and providing workforce training, and perceived benefits included enhanced MDT collaboration, patient care, efficiency, professional development and job satisfaction. Between August 2025 and February 2026, the total number of patients seen by pharmacists on ward rounds increased by 68%, from 1881/month to 3158/month. During this period, over 95 pharmacists participated across 93 medical specialties and 61 ward locations.

Discussion A network-wide, multimodal strategy can sustainably embed pharmacists into multidisciplinary ward rounds by addressing logistical barriers, strengthening workforce capability, and establishing clear expectations. This approach provides a transferable framework for improving pharmacist ward round participation for wider implementation.

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Sustaining Reduced Modified-Release Opioid Prescribing at Discharge Following Pharmacist-Led Stewardship Interventions

Wassi Hossain[1], Maria Guirguis[1], Rayan Nahas[1], Irene Stafidas[1], Adriana Nyunt[1], Lily Ronzon[1]

[1]St George Hospital, Kogarah, NSW

EMAIL wassi.hossain@health.nsw.gov.au

Background Inappropriate prescribing of modified-release (MR) opioids at hospital discharge is associated with prolonged opioid use and poor weaning practices. A pharmacist-led quality improvement initiative at a 650-bed tertiary metropolitan hospital (March to June 2025) incorporating education, audit and feedback, and multidisciplinary engagement successfully reduced MR opioid prescribing across surgical units from 6.9% at baseline to 0%. However, the sustainability of these improvements beyond the intervention period remains uncertain.

Objective(s) To evaluate whether reductions in MR opioid prescribing at discharge were sustained in opioid-naive postoperative patients and identify opportunities to optimise opioid stewardship in concordance with ANZCA guidelines.

Action (Method) A retrospective audit was conducted in April 2026 across the same surgical units. Opioid-naive postoperative patients with opioids documented on their discharge summaries were included. Data collected included opioid type (IR vs MR), prescribing patterns, PRN opioid utilisation in the preceding 24 hours, and documentation of a pain management plan.

Evaluation Among 46 patients audited, low MR prescribing was sustained, with 2/46 (4.3%) patients discharged on MR opioids, both with appropriate weaning plans. Among patients discharged on IR opioid, 27.3% (12/44) had no PRN opioid use in the preceding 24 hours. Documented pain management plans were present for 65.2% (30/46) of patients.

Discussion Sustained improvement in the reduction of MR opioid prescribing demonstrates successful integration of pharmacist-led stewardship into routine care. The supply of opioids to patients who had not required them in the 24 hours prior to discharge identifies a further target for optimisation. Ongoing audit and evaluation may facilitate continued refinement of discharge prescribing practices.

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Impact of electronic medical record implementation on adverse drug reaction reporting

Harmony Huang[1], Kee Lin Lim

[1]*The Royal Children's Hospital Melbourne, Parkville, Vic*

EMAIL Harmony.Huang@rch.org.au

Background Adverse drug reactions (ADRs), defined as unintended or harmful responses to medications at normal doses, are a significant contributor to patient morbidity and healthcare burden. Under-reporting remains a persistent challenge in pharmacovigilance systems. Integration of electronic medical records (EMRs) into clinical workflows may enhance reporting by streamlining identification and notification processes.

Objective To evaluate the impact of EMR implementation on ADR reporting at a tertiary hospital in Australia.

Methods A retrospective pre-post audit was conducted, comparing ADR reports during a 12-month pre-EMR period and a 12-month post-EMR period, excluding a 3-month washout period. Institutional reporting systems were used to extract data on total ADR reports, reporting clinician type, reaction category and time to submission. Historical ADR reporting data from 2020 to 2024 were reviewed to assess baseline trends.

Evaluation A total of 52 ADR reports were recorded pre-EMR compared with 192 post-EMR, representing a 3.7-fold increase. A Mann-Whitney U test demonstrated a statistically significant difference in monthly ADR reporting between periods ($p < 0.001$). Reporting increased across all clinician groups, including pharmacists (24 to 79), doctors (21 to 73) and nurses (7 to 40). Median monthly reporting increased from 4.5 to 16.5 reports, while median time to reporting decreased from 6 to 2 days. The proportion of itch/rash reactions decreased from 64% to 54%, while neurological and gastrointestinal reactions increased proportionally. Baseline reporting volumes were stable prior to EMR implementation.

Discussion EMR implementation was associated with increased ADR reporting and improved timeliness across all clinician groups. These findings suggest EMR integration enhances pharmacovigilance by embedding reporting within routine workflows. However, as a retrospective audit, results reflect reporting behaviour rather than true ADR incidence and may be influenced by unmeasured confounders.

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Overcoming treatment refusal: intramuscular clozapine to enable initiation in treatment-resistant schizophrenia

Helena Huynh[1], Jessie Chen[1]

[1]*Hornsby Kuring Gai Hospital, Hornsby, NSW*

EMAIL helena.huynh@health.nsw.gov.au

Objective To describe the use of intramuscular (IM) clozapine to facilitate initiation of oral clozapine in a patient with treatment-resistant schizophrenia (TRS) with persistent treatment refusal.

Clinical Features A 46-year-old male with chronic schizophrenia and extensive prior psychiatric admissions was brought in by police and admitted to an inpatient mental health unit for disorganised and psychotic behaviour. Mental state examination demonstrated tangential thought processes, florid psychosis with grandiose and histrionic themes, impaired insight, aggression, and behavioural dysregulation. The patient had a history of unpredictable assaults and incarceration associated with psychiatric relapse. Previous treatment with depot antipsychotics failed to adequately control symptoms.

Literature Review Clozapine remains the gold standard treatment for TRS and has demonstrated benefits in reducing aggression and rehospitalisation. However, treatment refusal is a major barrier to initiation. Published evidence regarding IM clozapine is limited but suggests it may facilitate engagement and transition to oral therapy in selected patients.

Pharmacist Interventions, Case Progress and Outcomes Pharmacists contributed to clozapine monitoring, dose titration recommendations, adverse effect surveillance, medication education, and coordination of IM clozapine supply and governance processes. Following multidisciplinary review, IM clozapine was initiated under close monitoring. The patient showed gradual improvement from baseline with a reduction in psychotic symptoms, aggression, and behavioural disturbance. While residual psychotic symptoms and concrete thinking remained evident, overall functioning and engagement with care improved. The patient was successfully transitioned to oral clozapine, with no significant side effects reported. Requirements for lorazepam were progressively reduced during the admission without major difficulties.

Discussion This case highlights the potential role of IM clozapine in overcoming treatment refusal in TRS. Pharmacist involvement was key in ensuring safe initiation, monitoring, and continuity of clozapine therapy in this high-risk patient. IM clozapine may be a valuable option when refusal limits access to gold standard therapy.

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Project PHARM: Prioritising High-risk Admission Reconciliation of Medications

Suzanne Olding[1], Marissa Iannuzzi[1], Hovik Farghaian[1], Mellissa Batger[1], Rachelle Johns[1], Amanda Kassis[1], Adriana Chubaty[1]

[1]*Royal North Shore Hospital, St Leonards, NSW*

EMAIL suzanne.olding@health.nsw.gov.au

Background Medication reconciliation (MedRec) on admission is essential in preventing medication misadventure. Our tertiary referral centre introduced an electronic risk stratification tool into the medical record in 2024, to assist pharmacists in identifying high-risk patients. However, a median of 45% (IQR 41–48%) of high-risk patients received a pharmacist MedRec prior to discharge between April-July 2025, indicating a significant medication safety gap.

Objectives 1)To understand barriers to high-risk MedRec, 2)To prioritise and develop interventions to improve high-risk MedRec completion, 3)To implement and evaluate the impact of interventions on the proportion of high-risk patients who receive MedRec prior to discharge.

Action Improvement Science methodology was utilised. 1)To understand barriers, clinical pharmacists were surveyed, a time-in-motion analysis was conducted, and quantitative MedRec data was collected. 2)To prioritise and develop interventions, pharmacist surveys and focus groups were conducted and literature reviewed. 3)To implement and evaluate interventions, changes were introduced using a 'Plan, Do, Study, Act' approach and quantitative data analysed.

Evaluation 1)Barriers included limited pharmacist team collaboration, insufficient capacity due to focus on discharges, and computer availability. 2)Prioritised interventions included a team-based approach to MedRec, criteria to exclude low-risk discharges not requiring pharmacist review, technician MedRec and patient medication list training, and increased computer availability. 3)Implemented interventions included a team-based approach (August 2025) and increased computer availability (February 2026). The proportion of high-risk patients with a MedRec increased to a median of 60% (IQR 55–66%) between August-November 2025, decreased over the holiday period, and was sustained at 56% (IQR 47–65%) between March-May 2026.

Discussion Optimising pharmacist capacity to perform timely MedRec remains critical in reducing preventable medication-related harm. This project demonstrates strategies and challenges in prioritising high-risk inpatients. The modest improvement in high-risk MedRec completion highlights the benefit of implemented interventions. Future directions include implementing discharge review criteria and technician training with ongoing monitoring.

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Challenging Limits in Safer Prescribing: Retrospective Review of Valproate Use in Adults of Reproductive Potential

Vincent Zagari[1], Gillian Oates[1], Leng Cam[1], Julius Pangjaya[1], Dr. Kerryn Rubin[1], Professor Richard Newton[1]

[1]*Bayside Health Peninsula Care Group, Frankston, Vic*

EMAIL vincentzagari4@gmail.com

Background Valproate is a medication with proven mood stabilisation effect used to manage mental health and neurological disorders. Valproate is harmful to foetal development in pregnancy (teratogenic) with 40% of babies likely to be affected by neurodevelopmental (intellectual, behavioral, and cognitive) disorders. Up to 10% of babies will experience a birth defect. One in twenty babies are likely to experience neurodevelopmental effects if valproate is taken at the time of conception in men.

Aim Evaluate the documentation of teratogenic risks and subsequent pregnancy prevention plans in adults of reproductive potential prescribed valproate for mental health conditions.

Method Retrospective study of patients prescribed valproate and admitted to the acute mental health facilities from 2022 to 2024. Data was provided by hospital management information service following ethical approval. Convenience sampling was used to capture most at-risk patients; all females aged 18 to 55 years, and a sub-sample of males in order of ascending age. The primary objective was the proportion of at-risk patients with documentation and education of teratogenic risk with pregnancy prevention plans. Data analyses were via descriptive statistics in Excel.

Results A total of 128 patients were sampled with 63 meeting the criteria. The mean age of patients was 43 (females) and 39 (males) years. Seven (28%) of the 25 females had documented education on teratogenic risks of valproate, and six (24%) had pregnancy prevention plans. No males had education or contraceptive planning documented.

Discussion There is sub-optimal management of risks and planning for adults prescribed valproate with mental health conditions, indicated by low rates of documentation of teratogenic risks and pregnancy prevention plans. A campaign to raise awareness of valproate's teratogenic risks and the development of a risk register are practical strategies to minimise harm. Local action can strengthen risk mitigation pathways through audit and education.

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Role of a Pharmacist in Outpatient Allograft Transplant Care

Sally Ip[1], Jim Siderov[1], Tim Tran[1], Dr Eric Wong[2]

[1]*Pharmacy Department, Austin Health, Heidelberg, Vic,*
[2]*Haematology Department, Austin Health, Heidelberg, Vic*

EMAIL sally.ip@austin.org.au

Background Allograft transplant recipients require individualised and complex medication regimens. Management is complicated with ongoing dose adjustments, medications with narrow therapeutic indices, and significant drug interactions. With most of the care delivered in the outpatient setting, pharmacists are uniquely positioned to identify, prevent and resolve medication-related problems, as well as to provide education that supports adherence and the safe use of medicines.

Objective(s) To evaluate the prevalence and types of pharmacy-led clinical interventions in the outpatient allograft transplant setting.

Action (Method) Pharmacist resourcing was allocated to support medication management for outpatient allograft recipients at a large metropolitan teaching hospital. The pharmacist participated in outpatient medical rounds alongside physicians and nurses, with the aim of optimising medication safety, conducting comprehensive medication reviews and addressing medication queries.

A retrospective audit was undertaken between October 2025 to March 2026. Medication related problems were classified in accordance with the 'Guidelines for pharmacists performing clinical interventions' by Pharmaceutical Society of Australia.

Evaluation 165 medication reviews were conducted, involving 46 patients. Of these, 89 interventions (54%) were identified. Common interventions were provision of education (27%), compliance-related issues (22.5%), undertreatment (12.5%), and inappropriate dosing (13.5%). Other interventions included the identification of adverse drug reactions (5.5%), medication selection issues (6.5%), unmet monitoring requirements (3.5%) or non-classifiable (9%).

Common interventions included:

- incorrect dosing in relation to blood tests or food
- incorrect dosage of medications due to miscommunication
- self-cessation of medications
- sub-optimal used of 'as-required' medications

Discussion Medication-related problems are prevalent in the outpatient setting. The involvement of a pharmacist in post-allograft transplant care enhances medication safety, improves patient education, and optimises clinical outcomes.

The role of the pharmacist has been well received by both patients and the medical team. Future work will focus on targeted stakeholder surveys to assess the value of the pharmacist in outpatient transplant care.

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Limitless potential: developing an outpatient haematology and palliative care pharmacist role

Sally Ip[1], Tim Tran[1], Jim Siderov[1]

[1]*Pharmacy Department, Austin Health, Heidelberg, Vic*

EMAIL sally.ip@austin.org.au

Background Haematology and palliative care patients are often prescribed complex medication regimens, require frequent medication changes and rapidly transition between inpatient and ambulatory care. Traditional pharmacy models do not adequately support continuity of care for these patients. In 2025, funding was obtained at a large metropolitan hospital to broaden the care into an outpatient setting.

Objective(s) To describe the development of an outpatient pharmacist role tailored to local service needs through stakeholder engagement, prioritising high-impact areas and carefully planned implementation.

Action (Method) A stepwise approach was taken to develop the role.

Stakeholder engagement To identify service gaps and maximise impact of pharmacy input, meetings were held with haematology and palliative care unit stakeholders.

Identification of priority areas Haematology stakeholders identified allograft transplant, myeloma clinic and post-discharge follow-up being key areas of focus due to polypharmacy, variable organ functions and complex medication regimens. Palliative care stakeholders identified pharmacy support at outpatient clinics and post-discharge follow-up as priority activities.

Service implementation Resources were allocated to support various pharmacist services including medication management, medication reviews, post-discharge follow-ups, adherence support, answering clinician queries and attending multidisciplinary outpatient rounds.

Service refinement ongoing meetings with stakeholders have taken place to ensure the role continues to evolve based on changes in clinical need, referrals and feedback.

Evaluation Between October 2025 and April 2026, 606 patient interactions were undertaken across the outpatient setting. Overall, 47% of medication reviews resulted in positive pharmacy interventions, increasing to 54% in the allograft transplant cohort. These findings demonstrate pharmacists' contribution to medication optimisation, safety and continuity of care. The role progressively expanded beyond medication review into education, workflow support and service improvement opportunities.

Discussion This stepwise approach allowed efficient prioritisation of resources to areas requiring attention. It demonstrated the limitless potential of pharmacists to expand involvement in a dynamic manner.

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Getting Severity Right: Improving Severity Classification of Medication Incidents Following Transition from RiskMan to DCIQ

Susana Pereira Marques[1], Claire Fitzgerald[1], Georgia Isaacs[1]

[1]*Slade Pharmacy, Auchenflower, Qld*

EMAIL susana.pereiramarques@sladepharmacy.com.au

Background Review of incident severity classification in the legacy RiskMan system identified challenges in applying shared guidance across clinical contexts and jurisdictions. Implementation of Datix Cloud IQ (DCIQ) provided an opportunity to address these challenges through a revised severity matrix, standardised language and updated guidance.

Objective(s) To examine changes in Severity Assessment Code (SAC) 3 and SAC 4 classification following transition from RiskMan to DCIQ, and describe implementation of revised guidance to improve consistency.

Action (Method) Medication incidents classified as SAC 3 or SAC 4 in the final six months of RiskMan were compared with SAC 3 and SAC 4 incidents reported in the first six months following implementation of DCIQ. During implementation, pharmacy teams reviewed classification practices across jurisdictions and introduced a revised severity matrix and updated guidance to improve consistency of SAC assignment.

Evaluation Evaluation compared the number and classification of SAC 3 and SAC 4 medication incidents across the two reporting periods. In the final six months of RiskMan, 167 SAC 3 and SAC 4 incidents were reported, including 72 SAC 4 incidents (43%) and 95 SAC 3 incidents (57%). In the first six months following implementation of DCIQ, 239 SAC 3 and SAC 4 incidents were reported, including 202 SAC 4 incidents (85%) and 37 SAC 3 incidents (15%). These findings demonstrate a marked shift towards SAC 4 classification following implementation of DCIQ and targeted education on incident severity assessment.

Discussion Improved severity classification supports more appropriate incident triage and helps ensure urgent responses are prioritised for higher-severity events. The revised severity matrix, consistent language and updated guidance appear to have improved consistency of SAC assignment and reduced inappropriate escalation. These findings support more targeted organisational responses and further analysis of SAC 4 incidents to identify common themes and opportunities for system improvement.

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Lithium Monitoring and Toxicity Assessment in Hospitalised Patients: Identifying Gaps in Care

Julia Jacobson[1]

St George Hospital, Kogarah, Sydney, NSW

EMAIL julia.jacobson@health.nsw.gov.au

Background Lithium is an effective mood stabiliser with a narrow therapeutic index and significant toxicity risk, particularly in the elderly, those with renal impairment, infection, or interacting medicines. Although guidelines recommend regular metabolic, renal, thyroid and serum lithium monitoring, adherence in inpatient settings is poorly characterised.

Aim/Objective(s) To evaluate baseline monitoring in patients initiated on lithium and assess the investigation of suspected lithium toxicity in maintenance patients presenting with features suggestive of toxicity and/or recognised toxicity risk factors.

Methods A retrospective review included inpatients admitted for >3 days who were initiated on lithium or continued maintenance therapy. Monitoring parameters assessed were renal and thyroid function, metabolic measurements, and lithium concentration. Maintenance patients were classified as 'at risk' if ≥1 toxicity risk factor was present on admission.

Results Thirty-four patients met inclusion criteria: 44% initiated lithium (15/34) and 56% continued maintenance therapy (19/34). In the initiated group, baseline monitoring completion varied. Renal function was assessed in 93% (14/15), while metabolic parameters, thyroid function and lithium concentrations were each completed in 73% (11/15). Only 40% (6/15) received all baseline investigations. In the maintenance group, features suggestive of lithium toxicity were documented in 74% (14/19), most commonly neurological (14/14), gastrointestinal (6/14) and cardiac symptoms (2/14), with variable monitoring. Independent of symptoms, 58% (11/14) had ≥1 toxicity risk factor, most commonly older age, interacting medicines and infection, and were classified as 'at risk'. Among those 'at risk', monitoring remained inconsistent: renal function was assessed in 100% (11/11), metabolic parameters in 91% (10/11), and both thyroid and lithium levels in 64% (7/11). Only 64% (7/11) received all recommended monitoring.

Discussion Concordance with monitoring recommendations was suboptimal for both initiation and high-risk maintenance patients. Persistent gaps, particularly in thyroid and lithium monitoring, highlight the need for standardised monitoring and pharmacist-led interventions to reduce preventable lithium-related harm.

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Limitless Pharmacy: Maximising Specialised Pharmacy Capacity to Address Unmet Palliative Care Needs

Emma Booth[1], Muhammad Nashrudin Bin Jamaludin[1]

[1]*Canberra Health Services, Garran, ACT*

EMAIL emma.booth@act.gov.au

Background Specialist Palliative Care (SPC) teams manage patients with complex medication-related needs and had identified a need for greater pharmacy involvement within their multidisciplinary team (MDT). Concurrently, within the health service, newly established Voluntary Assisted Dying (VAD) pharmacist roles were mainly operational, creating an opportunity to address this gap while maintaining advanced clinical pharmacy practice.

Objective(s) To describe the establishment and impact of a clinical pharmacy service within a SPC MDT, leveraging capacity within the existing VAD pharmacist role.

Action (Method) In early 2026, a Palliative Care Clinical Pharmacy Service Model of Care was developed to embed a pharmacist within the SPC MDT at a tertiary teaching hospital. The pharmacist attends weekly MDT meetings, reviews medication regimens, provides advice on complex symptom management and supports deprescribing in patients approaching end-of-life. The role also facilitates access to Special Access Scheme and non-formulary medications and collaborates with the Formulary Management pharmacist to improve access to palliative care medicines across the jurisdiction. These activities are undertaken alongside VAD operational responsibilities.

Evaluation The service established a consistent pharmacy presence within the SPC MDT and improved access to medication expertise. Outcomes included streamlined access to palliative care medicines, support for complex prescribing decisions and formulary improvements. Informal feedback from MDT members highlighted the value of dedicated pharmacy input.

Discussion This model arose from two concurrent needs: an identified gap in pharmacy support within the SPC MDT and the need to maintain advanced clinical pharmacy practice within a predominantly operational VAD pharmacist role. Leveraging capacity within the VAD service addressed both challenges. The model enhanced support for complex medication management, deprescribing and formulary initiatives while maintaining clinical skills. This approach may provide a practical framework for integrating clinical practice opportunities within specialised operational pharmacist roles while addressing unmet service needs.

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Pharmacist-Led Universal Vancomycin Area Under the Curve Modelling: Practice Change Implementation and Outcomes

Melinda James[1], Dr Kiernan May[2], Dr Joel Dulhunty[3,4], Ann Whitaker[1], Dr Anna Brischetto[2], Dr Kevin O'Callaghan[2], Nicholas Ah Yui[1]

[1]*Pharmacy Department, Redcliffe Hospital, Redcliffe, Qld,* [2]*Infectious Diseases Department, Redcliffe Hospital, Redcliffe, Qld,* [3]*Research Services and Medical Administration, Redcliffe Hospital, Redcliffe, Qld,* [4]*Faculty of Medicine, The University of Queensland, Herston, Qld*

EMAIL melinda.james@health.qld.gov.au

Background Vancomycin area under the curve (AUC) therapeutic dose monitoring (TDM) has been shown to reduce acute kidney injury (AKI) compared to trough-level monitoring. To date, the impact of a model of care utilising pharmacists in an Australian hospital to perform universal AUC-guided TDM (AUC-TDM) and advise dose adjustments has yet to be described.

Aim/Objective(s) To describe the implementation of a model utilising pharmacists to perform vancomycin AUC-TDM for all adult inpatients receiving intravenous vancomycin at an outer-metropolitan, secondary public hospital, determine its impact on AKI incidence, and identify other clinical and functional outcomes.

Methods A local procedure and clinician training package for vancomycin AUC-TDM was developed and implemented. A retrospective review was conducted, comparing AKI incidence during vancomycin treatment or within 5 days of cessation, during a 6-month period prior to, and post-model implementation. Times to first serum vancomycin level and therapeutic target attainment, and incidence of uninterpretable serum vancomycin levels, were also compared. Data was analysed using descriptive statistics, univariable analyses and multivariable logistic regression.

Results AKI incidence reduced from 26.0% to 13.3% (p=0.073), a relative risk reduction of 48.8%. The median time to first vancomycin level reduced by 19 hours and the median time to therapeutic target attainment reduced by 32.5 hours (both p <0.001). The proportion of courses with one or more uninterpretable serum vancomycin level reduced from 28% to 19.3%, with an unchanged number of levels per course.

Discussion Successful implementation of pharmacist-led universal AUC-TDM facilitated a clinically relevant, but not statistically significant reduction in AKI incidence. Statistically significant reductions in time to first serum vancomycin level and time to therapeutic target attainment were observed, as was an increase in utilisable serum vancomycin levels. The positive patient safety and process functionality improvements demonstrated have potential to be replicable in other facilities.

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Measuring Momentum: Four Years of Change in Opioid Stewardship Practice

Breanna Neary[2], Nerida Jenkins[1], Kristen Thessman[1]

[1]*Slade Pharmacy Services, Brisbane, Qld,* [2]*Slade Pharmacy Wesley Hospital, Auchenflower, Qld*

EMAIL breanna.neary@sladepharmacy.com.au

Background After the 2022 release of the Australian Commission on Safety and Quality in Health Care Opioid Analgesic Stewardship (OAS) Clinical Care Standard, a baseline survey across a national hospital group assessed opioid stewardship activities to guide resource development. An automated report was subsequently implemented to benchmark and track trends in oral morphine milligram equivalents supplied per patient at discharge, serving as the initial performance metric.

Objective(s) To assess changes in opioid stewardship activities, including pharmacist involvement, four years after implementation of the OAS Clinical Care Standard and associated reporting tools.

Action (Method) A repeat cross-sectional survey was conducted in 2026 and compared with baseline data from 38 sites in 2022.

Evaluation Responses were received from 25 sites in 2026. Stewardship practices improved across several domains. The proportion of sites reporting opioid dose review prior to discharge as 'often' or 'always' increased from 48% to 80%. Reported pharmacist involvement in discharge opioid review showed minimal change (23% to 24%). Based on pharmacy respondents' knowledge, provision of a pain management or opioid de-escalation plan at discharge increased from 14% to 36%. Use of pharmacy-developed patient education materials remained high (80%), representing the most widely adopted intervention.

Governance structures strengthened, with 57% of sites reporting pharmacist representation in opioid stewardship discussions (primarily medication safety committees), compared to a single site in 2022. Dedicated funding for OAS pharmacist roles (1 site), and pharmacy-led research and quality improvement activities (6 sites) remained unchanged.

Reporting capability was expanded to include the proportion of oral modified-release opioids supplied at discharge, with data available for 46 hospital sites.

Discussion Opioid stewardship practices have improved across participating sites, particularly in discharge review processes, care planning, and governance. Continued expansion of pharmacist involvement and dedicated resourcing represents a key opportunity to further strengthen these gains.

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Centralised Analytics to Strengthen Medicines Stewardship Across Hospitals

Nerida Jenkins[1], Kristen Thessman[1], Bettina Kirk[1]

[1]*Slade Pharmacy Services, Brisbane, Qld*

EMAIL nerida.jenkins@sladepharmacy.com.au

Background Quantitative reporting is fundamental to medicines stewardship, enabling identification of prescribing trends, evaluation of interventions, detection of safety risks, and provision of prescriber feedback, one of the most effective drivers of behaviour change. In Australia, access to comprehensive patient-level electronic medication data is inconsistent, particularly in paper-based private hospitals. As a result, surveillance using combined aggregated and patient-level pharmacy dispensing and distribution data remains essential for monitoring.

Objective(s) To design and implement a centralised reporting framework for high-risk stewardship medicines including antimicrobials, anticoagulants, and opioids, across a national hospital network.

Action (Method) Pharmacy-accessible data sources were evaluated through collaboration between pharmacy and data analytics teams to define key data elements. Medicines were mapped using the World Health Organisation Anatomical Therapeutic Chemical (ATC) classification system. Standardised metrics included defined daily doses (DDD) for antimicrobials and oral morphine equivalents (OME) for opioids. Additional mappings included antimicrobial traffic light classification, and high-risk (APINCH) medicines. Dispensing and occupancy data were integrated to support utilisation analyses, and interactive dashboards were developed with rigorous validation processes.

Evaluation A suite of automated population-level trending reports was established, including OME per patient at discharge, the proportion of slow-release oral opioids supplied at discharge, and antimicrobial utilisation (DDD) for outpatient oncology, aligned with national reporting. These reports enable benchmarking at peer and national levels. Clinical review reports include identification of high-risk prescribing (e.g. 'red' antimicrobials, anticoagulant duplication) allowing sites to flag patients for medicine review, and monitoring of bleeding reversal agent utilisation. Visualisations support longitudinal trending, stratified by hospital, ward, and prescriber, with drill-down capability by class, drug, and formulation.

Discussion Although less precise than patient-level data, population-level surveillance remains a practical approach for monitoring medicine use. Centralised reporting strengthens stewardship, supports national safety and quality standards, and builds capacity for smaller and regional services through shared analytics.

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Two Shots at Stability: Outcomes of Dual Long-Acting Injectable Antipsychotic Use in psychotic disorders

Ollie Johnson[1], Cathy Ngo[2], Carolyne Miller[1]

[1]*Eastern Health Pharmacy Program, Ringwood, Vic,* [2]*Allied Health Mental Health & Wellbeing, Practice Capability Eastern Health Institute, Ringwood, Vic*

EMAIL o.m.johnson@outlook.com

Background Prescribing guidelines recommend antipsychotic monotherapy for psychosis, with antipsychotic polypharmacy reserved for patients who have not responded to sequential monotherapy, including clozapine. Although evidence remains limited, emerging studies suggest dual long-acting injectable antipsychotics (LAIA) may improve patient outcomes.

Aim To compare hospitalisation rates and antipsychotic tolerability 12 months pre- and post-initiation of dual LAIA.

Method This retrospective audit included patients discharged with ≥2 LAIAs from six mental health inpatient units within a single organisation between June 2023 and June 2024. Data were collected on patient demographics, LAIA regimens, treatment duration, number of hospital admissions in the 12 months pre- and post-initiation, and medication tolerability (e.g. cardiometabolic parameters, QT intervals, and sedation) at baseline, 6 and 12 months following dual-LAIA initiation.

Results Twenty-seven patients met inclusion criteria and were treated with combinations of LAIAs: 10% typical–typical, 30% atypical–atypical, and 60% typical–atypical pairings. The most common pairing was paliperidone with zuclopenthixol (n=7). Aripiprazole was the most frequently used LAIA (44% of regimens). Following discharge, 70% remained on dual-LAIA treatment for ≥12 months. Mean hospitalisation rates reduced from 2.4 to 1.7 admissions/person-year, though the difference was not statistically significant (p=0.169). Confounders such as external and non-mental health admissions were not captured. Six patients reported adverse-effects including sedation (n=4), jaw stiffness (n=1), and skin hypersensitivity (n=1). Baseline electrocardiograms were obtained in 89% of patients, decreasing to 50% at 6 months and 35% at 12 months among those remaining in care.

Discussion Overall, dual-LAIA was well tolerated, with few documented adverse effects, contributing to its increasing use for long-term management within this cohort. However, monitoring for high-risk adverse effects declined among patients retained in care. Larger studies are required to confirm preliminary findings on the potential role of dual-LAIA in relapse prevention and evaluate long-term safety monitoring requirements.

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Perioperative Management of GLP-1 Receptor Agonists and Dual GLP-1/GIP Receptor Co-Agonists

Devesha Joshi[1], Kiranjeet Dhillon[1]

[1]*Ramsay Pharmacy Greenslopes Private Hospital, Brisbane, Qld*

EMAIL deveshajoshi@hotmail.com

Background Glucagon-like peptide 1 (GLP-1) receptor agonists and dual GLP-1/glucose dependent insulinotropic polypeptide (GIP) receptor co-agonists are increasingly prescribed for type 2 diabetes and weight management. These agents delay gastric emptying, potentially increasing the risk of pulmonary aspiration during anaesthesia. Current hospital policy, based on Australian and New Zealand College of Anaesthetists (ANZCA) guidelines, recommends continuation of therapy whilst enforcing a 24-hour clear fluid diet to mitigate aspiration risk and support management of co-morbidities. However, clinical observations indicate inconsistent adherence to fasting recommendations, exposing gaps in preoperative patient education. Earlier pharmacist involvement in the pre-admission pathway may improve patient education and safety.

Objectives This audit aimed to evaluate current practice, assess compliance with fasting guidelines, determine the impact of non-compliance on perioperative workflow, and identify opportunities within perioperative pharmacy practice to enhance patient safety.

Action Over a 5-week period, surgical patients prescribed GLP-1/GIP receptor agonists were identified during routine perioperative nursing assessments and pharmacist led medication reviews. Data collected included the prescribed medication and adherence status to the 24-hour clear fluid diet. Information was recorded on a standardised datasheet and transcribed into a secure, de-identified spreadsheet.

Evaluation In total, 104 patients were included, 56 adhered to the fasting recommendations, while 48 did not. Among the non-compliant patients, 38 proceeded to surgery, 6 experienced delays, and 4 had procedures cancelled. These disruptions reduced theatre efficiency, increased perioperative workload, and generated additional administrative and financial impacts.

Discussion Non-adherence to fasting requirements was common and contributed to avoidable perioperative inefficiencies. The development of a business case for a dedicated pre-admission pharmacist, for discussion at a future multidisciplinary team meeting, alongside implementing a standardised patient information leaflet, based on ANZCA guidelines, may improve patient understanding of fasting requirements, reduce preventable cancellations and enhance pharmacy led perioperative care by promoting consistent adherence to evidence-based practice.

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Comparison of Medical Doctors and Pharmacists' Assessments of Medical Intern Prescribing: A Descriptive Pilot Study

Marianne Jovanovic[1], Dr Sudha Raghunath[1], Dr Ambika Wakhlu[1], Samuel Shepherd[1], Professor Christina Johnson[1,2], Samanta Wood[1]

[1]Pharmacy Department Monash Health, Melbourne, Vic, [2]Monash Health, Melbourne, Vic, [3]Faculty of Medicine, Nursing and Health Sciences, Monash University, Melbourne, Vic

EMAIL Marianne.Jovanovic@monashhealth.org

Background Entrustable Professional Activities (EPA) are units of professional practice that can be entrusted once competence is demonstrated. Although widely used across health professions, evidence on interprofessional EPA assessments – where one profession assesses another – is limited.

Aim This study aimed to provide comparative insights into the assessment practices of pharmacists and supervising doctors evaluating medical interns undertaking prescribing assessments in clinical practice.

Methods This multi-site pilot study evaluated an interprofessional EPA assessment model for medical intern prescribing. The study was conducted across 11 clinical units encompassing medical, emergency, surgical and mental health specialties. Assessments were conducted by pharmacists, consultants, and registrars. Data were collected on the prescribing tasks assessed, entrustment levels, case complexity, and duration and frequency of assessments. Data were analysed using Kruskal-Wallis, Fisher's exact, and chi-square tests, incorporating Bonferroni corrections for multiple comparisons.

Results From June to October 2024, 114 prescribing EPA assessments were conducted: 28 (25%) by 10 pharmacists, 16 (14%) by 14 consultants and 70 (61%) by 35 registrars. There were no differences between assessor groups in prescribing tasks ($p=0.408$) and case complexity ($p=0.071$). Entrustment decisions varied significantly ($p<0.001$), with pharmacists (19/28, 68%) and registrars (56/70, 80%) selecting the highest trust level more frequently than consultants (5/16, 31%). Assessment duration also varied ($p<0.001$), with median (interquartile range [IQR], Q1, Q3) durations of 12.5 (10,15) minutes for pharmacists, 10 (5,15) minutes for consultants, and 6.5 (5,10) minutes for registrars. Median (IQR) assessment frequency per assessor over five months was 1.5 (1,4.75) for pharmacists, 1 (1,1) for consultants, and 1 (1,2) for registrars.

Discussion These findings indicate that pharmacists can feasibly act as assessors for medical intern prescribing EPA assessments alongside supervising doctors. The longer assessment durations and higher entrustment levels observed with pharmacists provides valuable insight into assessment dynamics and differences in approach that merit further investigation.

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Mixing It Up: Matching Skills, Mastering Practice

Amy Le[2], Rebecca Judd[1], Natalie Tasker[1], Nicola Harper[2], Anna Hendy[2], Heidi Wong[1]

[1]QEII Jubilee Hospital, Qld Health, Brisbane, Qld, [2]Surgical, Treatment and Rehabilitation Service (STARS) Hospital, Brisbane, Qld

EMAIL amy.le@health.qld.gov.au

Background Restricted cross-site movement and limited role diversity contribute to reduced staff retention and constrained clinical growth. A cross-site pharmacist exchange program was implemented to address this, providing exposure to diverse models of care while maintaining organisational stability and supporting workforce capability, knowledge transfer, and service improvement.

Objectives To implement a cross-site pharmacist exchange program to enhance clinical capability, enable learning from diverse models of care, provide exposure to different hospital environments, facilitate bidirectional knowledge transfer, support identification of transferable service improvements, and strengthen collaboration between two hospital pharmacy teams.

Action A collaboratively governed exchange program was co-designed across two hospital sites. Rotations were mapped to each site's clinical strengths and shared across both teams. Pharmacists and pharmacy assistants submitted expressions of interest outlining their learning goals and preferred areas, including clinical, operational, and leadership exposure. Placement options included short observational experiences and extended swaps, where staff move across human resources (HR) delegations.

Evaluation Analysis of expressions of interest demonstrated strong motivation to broaden clinical exposure, address skill gaps, and experience alternative models of care. Key drivers include exposure to services not available at the home site (e.g. emergency, ICU), developing specialty knowledge (e.g. geriatrics, cardiology, antimicrobial stewardship), gaining insight into different workflows such as pharmacist-led clinics and rehabilitation services, and observing leadership and service delivery approaches. Participants expressed intent to translate learning into service improvements at their home site, particularly in emerging or expanding clinical areas. Exposure to varied team structures, multidisciplinary practices, and leadership styles was valued, alongside opportunities for professional growth, networking, and expanded scope of practice without requiring permanent relocation.

Discussion As the program remains in its early implementation phase, exchanges are yet to commence; however, early engagement and feedback indicate a positive trajectory, with anticipated benefits for workforce retention, collaboration, and service innovation.

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Learning, Leading and Leveling-Up

Amy Le[1], Vu Nguyen[1], Rebecca Judd[1], Natalie Tasker[1]

[1]*Queen Elizabeth II Jubilee Hospital, Brisbane, Qld*

EMAIL amy.le@health.qld.gov.au

Background Variability in clinical practice, workflow inefficiencies, and medication-related risks among ward pharmacists highlight the need for structured, practice-integrated education. Traditional models rely on passive learning and lack real-time application, peer feedback, and reflective practice. There is also limited focus on developing feedback skills and psychological safety. Creating a culture where pharmacists can openly discuss errors, challenge decisions, and 'fail safely' is essential for improving capability and medication safety. This project embedded peer learning, feedback, and reflection into a sustainable ward-based education model.

Objectives To establish a ward-based model that enhances clinical decision-making, standardises medication safety teaching, integrates simulation for high-risk scenarios, promotes peer learning, builds feedback confidence, and supports supervision skills.

Methods A needs assessment identified practice variation and medication risks. A structured program was piloted over four months, consisting of weekly ward-based case reviews and simulation-based group sessions focused on high-risk and escalation scenarios. Sessions were embedded into workflow using mock-up patient cases to improve feasibility and relevance. Facilitators guided discussion to strengthen clinical reasoning and communication. Peer learning and feedback were central, fostering a psychologically safe environment for open discussion, reflection, and learning from errors.

Evaluation Eight pharmacists participated. Confidence in self-assessment increased (12.5% to 25%). Confidence in providing peer feedback improved, with neutral responses decreasing from 50% to 0%, and 87.5% reporting 'somewhat confident'. Confidence in supporting interns showed the greatest improvement (25% to 62.5% 'extremely confident'). Qualitative feedback highlighted improved engagement, practical relevance, teaching confidence, and value of a safe learning environment. Minor feedback related to timing and workload integration.

Discussion This model improved clinical capability and fostered a culture of peer learning and psychological safety. Normalising feedback and 'failing safely' strengthened medication safety and team performance. It is a scalable approach for integrating education into clinical practice.

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One Year On: Did the Clinical Educator bottom out or is the sky the limit?

Rebecca Judd[1], Amy Le

[1]*Qld Health, Brisbane, Qld*

EMAIL rebecca.judd2@health.qld.gov.au

Background A Clinical Educator (CE) position was established at a mid-sized metropolitan public hospital in April 2025. A survey was conducted at commencement to identify priority areas and activities valued by the team. One year on, the CE team re-surveyed the pharmacy team to see if the opportunities offered were embedded and embraced.

Objectives To determine if the learning opportunities, activities and expectations created by the CE team are valuable and align with departmental needs.

Method An anonymous online survey was distributed to all pharmacists in the department. This survey mirrored the baseline survey sent one year ago, to enable direct comparison. Question formats included Likert scales, multiple-choice, and open-ended responses. The surveys were advertised to staff through email, newsletters, team chat, QR codes and staff check ins.

Evaluation 14 responses were received from 28 possible staff (50% response rate). Overall, results demonstrated strong positive trends across all domains. The most notable improvement was a 45% increase in satisfaction with education opportunities. The addition of CE involvement in staff orientation emerged as a newly recognised responsibility. Open ended responses were highly favourable with comments including: 'I wish they could do more, could we have more evaluations and check-ins, expectations exceeded'.

Discussion The CE role has overall been successful in improving staff satisfaction with their professional development opportunities and exposure to education. The introduction of clinical evaluations such as Mini-Cex's and case-based discussions has been so well embedded that staff want to increase these. Future goals of the role are to continue to expand the scope of what the CE role can offer. Survey feedback included Journal Clubs, support applying for conferences, career development (e.g. resume writing), and opportunities to take on other senior tasks, such as writing work instructions.

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Beyond Conventional Limb-its: Exploring Memantine for Refractory Phantom Limb Pain

Maya Kashiwagi[1], Duncan Long[1]

[1]*Princess Alexandra Hospital, Brisbane, Qld*

EMAIL maya.kashiwagi@health.qld.gov.au

Objective Phantom limb pain (PLP) is an often debilitating complication following amputation, and treatment remains challenging due to the multifactorial and poorly understood pathogenesis. N-methyl-D-aspartate receptor (NMDAR) antagonists such as memantine have been explored as a potential therapeutic strategy, although evidence for memantine in chronic PLP remains limited and conflicting. This case describes the use of memantine in a patient with refractory PLP and explores its potential role in clinical practice.

Clinical Features A 55-year-old male underwent a right above-knee amputation following trauma. One year post-amputation, he continued to experience severe PLP despite multimodal analgesia, including antidepressants, gabapentinoids, opioids, and salmon calcitonin. Pain intensity remained 6–9/10 and contributed to functional impairment and reduced rehabilitation engagement. Memantine was therefore initiated at 5 mg daily and titrated to 10 mg twice daily.

Literature Review The evidence for oral memantine in chronic PLP remains limited and conflicting, with existing studies predominantly involving patients with upper limb amputations and focusing on the acute post-amputation phase, in contrast to the lower limb amputation and sub-acute to chronic presentation described in this case.

Pharmacist Interventions, Case Progress and Outcomes Following initiation of memantine, the patient reported a reduction in pain severity, decreased frequency of PLP episodes, and reduced reliance on opioid analgesia. Functional improvements were observed, including increased engagement in rehabilitation and prosthesis use. Memantine was well tolerated, with no reported adverse drug reactions.

Discussion This case highlights memantine as a potentially effective, and well-tolerated, adjunct in refractory PLP, when initiated in the sub-acute to chronic phase. While causality cannot be inferred from a single case and spontaneous improvement over time cannot be excluded, the temporal association with memantine initiation and the stability of background analgesic therapy support a potential therapeutic role. This case highlights that memantine may offer meaningful benefit where conventional therapies have failed.

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Limiting the Rate of Hypertonic Saline

Maya Kashiwagi[1], Yi Ming Chiang[2], Karl Winckel[1,3]

[1]*Princess Alexandra Hospital, Brisbane, Qld,* [2]*School of Pharmacy, Queensland University of Technology, Brisbane, Qld,* [3]*School of Pharmacy and Pharmaceutical Sciences, University of Queensland, Brisbane, Qld*

EMAIL maya.kashiwagi@health.qld.gov.au

Background Severe hyponatraemia is a life-threatening condition. Treatment involves careful and gradual correction of serum sodium to prevent osmotic demyelination syndrome (ODS), a complication associated with rapid correction. ODS risk is minimised through administration of small volumes of hypertonic saline (3% sodium chloride), with repeat serum or venous blood gas sodium levels guiding further treatment. Concerns have been raised at our institution regarding potential overcorrection of hyponatraemia.

Aim/Objective(s)

1. To describe the cohort of patients receiving hypertonic saline.
2. To determine the rate of correction of serum sodium in patients with severe hyponatraemia receiving hypertonic saline.
3. To determine the proportion of patients with severe hyponatraemia receiving hypertonic saline who have sodium overcorrected.

Methods This retrospective observational study was conducted at a large, tertiary Queensland hospital. Medical records were reviewed for patients whom received hypertonic saline for hyponatraemia between January 2022 and December 2024.

Results Over three years, 68 patients were identified as receiving hypertonic saline for hyponatraemia and met inclusion criteria. The mean baseline nadir sodium was 114.1 mmol/L (range 103–123). The mean and median sodium increases over 24 hours were 9.97 mmol/L (SD 4.23) and 10 mmol/L (IQR 7–13), respectively. Correction exceeded the maximum recommended rate in 33/68 (49%) patients. Overcorrection at 24 hours was less common among patients who received an endocrine consultation pre-treatment and among those with fewer neurological symptoms pre-treatment: 3/33 (9%) versus 14/35 (40%), and 18/33 (55%) versus 11/35 (31%), respectively.

Discussion Overcorrection of hyponatraemia is common at our institution. This likely reflects concern regarding the severity of hyponatraemia among patients receiving hypertonic saline, many of whom presented with seizures or other significant neurological symptoms. No cases of ODS were observed, likely because clinicians frequently implemented sodium-lowering strategies, including 5% glucose or desmopressin. Pharmacist involvement in hypertonic saline prescribing and monitoring, may reduce the frequency of overcorrection.

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Right Medicine, Right Mind: Evaluating Cognitive Impairment Psychotropic Prescribing Standards in Acute Mental Health Care

Seniha Kasif[1], Shivani Patel[1], Carmen Ng[2]

[1]*Mental Health Services, Sydney Local Health District, Sydney, NSW,* [2]*Sydney Local Health District, Sydney, NSW*

EMAIL seniha.kasif@health.nsw.gov.au

Background Published in 2025, the Psychotropic Medicines in Cognitive Disability or Impairment Clinical Care Standard (CCS) promotes safe and appropriate psychotropic prescribing in this cohort. However, it's relevance within inpatient mental healthcare remains unclear, where psychotropics are often clinically indicated for acute mental illness.

Objective(s) To assess the applicability of the CCS within an acute psychogeriatric mental health inpatient unit and evaluate psychotropic prescribing practices against CCS indicators.

Action (Method) A CCS-based audit tool was developed on the Microsoft Forms platform and implemented to review psychotropic prescribing practices among all current inpatients in a 30-bed psychogeriatric unit. Medication orders, clinical records and cognitive screening results using the 4 A's Test (4AT) were reviewed by a single auditor against CCS quality indicators to evaluate psychotropic prescribing.

Evaluation Thirty inpatients were reviewed; with 20% lacking a 4AT screen. Of the nine consumers (30%) with a 4AT suggestive of cognitive impairment and/or delirium, all had diagnosed mental illness and were prescribed regular psychotropics deemed clinically appropriate for their diagnoses. Eight consumers had 'as needed' (PRN) psychotropics prescribed, all with documented review of effectiveness and adverse effects. However, prescribing documentation gaps were identified, with minimum dosing intervals and/or maximum 24 hour doses absent for at least one PRN order in six of the eight cases.

Discussion Although rates of cognitive impairment appeared low within the unit; incomplete 4AT cognitive screening limited interpretation. Regular psychotropic prescribing aligned with mental illness diagnoses, but interpreting PRN use was limited by the overlap between symptoms of mental illness and cognitive disability or impairment. The CCS was not directly applicable to the acute mental health context, where psychotropics are frequently indicated for treatment of severe mental illness. However, the CCS indicators did provide a useful framework for identifying prescribing safety and documentation gaps, particularly relating to PRN psychotropic prescribing.

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Safe Early Adoption of Droperidol for Acute Behavioural Disturbance in an Inpatient Mental Health Service

Seniha Kasif[1], Carolyn Woods[2], Shivani Patel[1]

[1]*Mental Health Services, Sydney Local Health District, Sydney, NSW,* [2]*Sydney Local Health District, Sydney, NSW*

EMAIL seniha.kasif@health.nsw.gov.au

Background Droperidol has been widely used in emergency departments since 2015 to manage acute behavioural disturbance (ABD) following evidence of its safety and efficacy. However, its use within inpatient mental health has been limited by the lack of mental health-specific evidence-based research and clinician familiarity. Local consultation and data analysis identified a need for better pharmacological options for ABD, alongside clinician interest in its use. Structured evaluation was imperative to support safe and early implementation.

Objective(s) To evaluate early uptake, prescribing practices and safety outcomes following the introduction of droperidol for ABD management in an inpatient mental health service.

Action (Method) Staff received education on a clinical guideline with droperidol embedded in a clear ABD treatment algorithm. A PowerPlan was developed to support standardised prescribing in the electronic medical record (eMR). Prescribing and administration data were extracted using Discern Analytics to assess utilisation and dosing appropriateness. Additional review included monitoring benzatropine use as a surrogate marker for extrapyramidal side effects (EPSE) and screening the incident management system for episodes of medication related clinical deterioration.

Evaluation Between November 2025 and January 2026, 318 droperidol orders were prescribed across 298 presentations with 234 resulting in administration. PowerPlan utilisation was 81%. No episodes exceeded the recommended maximum dose or minimum dosing interval. Only one consumer (0.4%) required benzatropine for suspected droperidol related EPSEs. No droperidol-related clinical deteriorations were reported during the evaluation period.

Discussion Early adoption of droperidol demonstrated strong clinician uptake, adherence to guideline-recommended prescribing, and safe administration when supported by an electronic PowerPlan. Safety pharmacovigilance identified a low incidence of droperidol-related EPSEs and no clinical deteriorations, supporting a favourable safety profile. Our findings support droperidol as a safe option for managing ABD in inpatient mental health settings and underscore the value of structured implementation and monitoring frameworks supported by eMR tools.

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Reaching Patients Across Settings: Development and Multimodal Dissemination of a VTE Consumer Education Video

Laura Kavanagh[1], Molly Whitney[1], Andrew Ward[1]

[1]*Barwon Health, Geelong, Vic*

EMAIL laura.kavanagh@barwonhealth.org.au

Background Venous thromboembolism (VTE) is a leading cause of preventable death in hospitalised patients in Australia. Evidence shows explainer videos improve knowledge and increase consumer activation, and most patients want VTE education delivered through multiple formats. Despite this, resources remain limited in many settings.

Objective(s) To develop and disseminate a plain-language consumer education video on VTE prevention, integrated across multiple delivery platforms to reach inpatients and consumers planning a hospital admission.

Action (Method) The video was developed by an interprofessional team as part of a collaborative VTE project. The script was developed by the project pharmacist, based on an existing written resource. Content was designed to be applicable across medical and surgical patient groups and multiple care settings. The video was filmed by an in-house videographer featuring nursing staff and underwent multidisciplinary and consumer review prior to release. The video is available across multiple platforms including inpatient televisions, via QR code on ward and waiting room posters, and the written consumer resource (which is included in surgical pre-admission paperwork, and bedside in selected wards). Integration into the health service website is planned. Sharing of the video has been approved, for use by other healthcare services.

Evaluation Distribution has occurred across multiple avenues. In the first two months of availability, the video was viewed 74 times via online access. View counts via inpatient televisions are not captured by the current system, representing a limitation of evaluation.

Discussion An interprofessional team produced a plain-language video supporting consistent, multimodal VTE consumer education across inpatient and pre-admission settings. The video's availability across multiple platforms and approval for use by other healthcare services strengthens its potential for broad impact. Future work is planned to explore consumer preferences for written versus video education resources and their experiences with VTE resources provided during hospitalisation.

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Testing Written Consumer Resources to Improve Patient Understanding of Venous Thromboembolism: a PDSA Approach

Laura Kavanagh[1], Molly Whitney[1]

[1]*Barwon Health, Geelong, Vic*

EMAIL laura.kavanagh@barwonhealth.org.au

Background Venous thromboembolism (VTE) is a leading cause of preventable death in hospitalised patients in Australia. Despite existing written consumer resources, patient education regarding VTE is often inadequate and patient understanding remains poor. Plan-Do-Study-Act (PDSA) methodology offers a structured approach to test consumer interventions in clinical settings.

Objective(s) To assess existing written consumer resources (the resource) for appropriateness and ability to improve patient understanding of VTE, using iterative PDSA cycles.

Action (Method) A baseline assessment was conducted with three general surgical inpatients to measure existing understanding using a single self-rated item: 'I understand how to reduce my risk of getting a blood clot' (1–5 scale). Two PDSA cycles were subsequently conducted on the same ward. In Cycle 1 (N=3), the pharmacist provided the resource directly to consumers. In Cycle 2 (N=6), nursing staff provided the resource, testing a more scalable delivery model. Consumer understanding scores and qualitative feedback were collected following each cycle. Findings should be interpreted in the context of the small sample size.

Evaluation At baseline, all three consumers recalled receiving only verbal information from nursing staff; none had received the resource. Mean consumer self-rated understanding increased from 2.0 at baseline to 4.3 following Cycle 1 and 4.0 following Cycle 2. Qualitative feedback indicated the resource was perceived as useful and provided new information. Key lessons included that written resources are not universally suitable for all consumers and that engaging clinical staff in delivery is essential for scalability.

Discussion PDSA methodology enabled structured, iterative testing of an existing consumer resource, demonstrating improvements in self-rated VTE understanding. Findings informed wider implementation of the resource including bedside availability and inclusion in surgical pre-admission paperwork and the development of a VTE consumer education video. This approach is readily transferable to other healthcare services seeking to optimise consumer education delivery.

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Risk-Stratified Medication Migration During Digital Health Record Cutover

Julie Khalil[1], Wendy Hoey[1], Neville Board[1], Nerissa Pedrigal[1], Jason Yung[1], Dr Teresa Anderson[2], Selvana Awad[2], Dylan Watkins[2]

[1]Justice Health and Forensic Mental Health Network, Malabar, NSW, [2]Single Digital Patient Record Implementation Authority, St Leonards, NSW

EMAIL julie.khalil@health.nsw.gov.au

Background Medication migration during implementation of a new Electronic Medical Record (EMR) represented the highest clinical safety risk within a large correctional and forensic healthcare network. More than 43,500 active medication orders for 10,500 patients required transfer while maintaining continuity of therapy and minimising prescribing errors. A comprehensive EMR-to-EMR medication migration of this scale has not previously been reported in Australia, making this a novel, high-risk undertaking.

Objective To develop and implement a safe methodology for large-scale migration of medication orders into a new EMR.

Action A Health Level Seven (HL7)-enabled transfer process replaced manual transcription by migrating medication data from a legacy EMR into a new platform. Pharmacists clinically mapped medications between EMRs and developed a medication-level risk framework to allocate orders. Green orders contained complete prescribing information; Orange orders required clarification; and Red orders contained critical gaps requiring clinical review.

Pharmacists, nurses, and prescribers completed migration activities within scope of practice, with mandatory prescriber co-signature for higher-risk orders. Pharmacy-led coordination included zonal accountability, daily discrepancy reporting, and reconciliation of ongoing medication changes during dual maintenance.

Three simulation exercises informed workforce planning, identifying a requirement for 60 pharmacists or nurses and 10 prescribers during the ten-day pre-cutover period. Following data extraction, over 16,000 medication order changes occurred in the legacy EMR and required updating in the new system.

Evaluation A pharmacist-led, risk-stratified hybrid migration model enabled safe and efficient transfer of medication orders in a previously untested environment. Risk stratification supported targeted clinical review and efficient use of prescriber resources. Fourteen migration incidents were identified and corrected, predominantly due to post-extraction medication changes, with no patient harm reported.

Discussion Risk-stratified, pharmacist-led hybrid migration enabled safe large-scale EMR medication transfer in a novel, high-risk setting, transforming a manual transcription process into a scalable and controlled model for complex healthcare systems.

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Drug-Related Presentations in a Paediatric Emergency Department: A Prospective Study

Nashrah Khan[1], Sean Turner[1], Dr Amit Kochar[2], Dr Alka Garg[1]

[1]SA Pharmacy, WCHN, Adelaide, SA, [2]Paediatric Emergency Department, WCHN, Adelaide, SA

EMAIL nashrah.khan@sa.gov.au

Background While Drug Related Presentations (DRPs) in Emergency Department (ED) have been extensively investigated in adult populations, contemporary Australian data describing the incidence, characteristics and preventability in children remains limited. Better understanding of the extent and nature of these presentations will help identify opportunities for interventions to keep children out of hospital.

Aim To determine the incidence, characteristics and preventability of DRPs in a tertiary paediatric ED.

Methods A prospective observational study was conducted in the ED of a tertiary Australian children's hospital. A pharmacist/intern pharmacist visited ED at a pre-determined time every day for six weeks. All patients in ED at that time were reviewed. The presenting reason, medication/allergy history and clinical documentation were assessed using a standardised data collection tool. Suspected DRPs were discussed with a medical consultant and classified according to predefined drug-related problem categories. Data were de-identified and analysed using descriptive statistics.

Results 400 paediatric ED presentations were reviewed. 43 (10.8%) of these were identified as drug-related, 83.7% were considered preventable.

Overdoses or medication use without a valid indication was the most common DRP category (n=17, 39.5%) of which 94% were intentional. The most common medication for intentional overdosing was paracetamol. Overdosing was followed by under-dosing (n=9, 20.9%), non-compliance (n=7, 16.3%) and allergic reaction (n=4, 9.3%) as a reason for presentation. None of the allergy/ADRs were to already known, allergens.

Discussion DRPs accounted for 10.8% of paediatric ED presentations, the majority of which were considered preventable. This incidence was comparable to previously reported Australian prospective studies, confirming that DRPs continue to account for substantial and persistent ED utilisation. The high proportion of preventable presentations highlights an opportunity for pharmacist-led interventions to reduce medicine-related harm and improve patient outcomes in the paediatric population.

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Obinutuzumab as alternative treatment: Off-label use in Anti-neutrophil cytoplasmic antibody (ANCA)-associated vasculitis (AAV)

Ken Khaw[1]

[1]*NSWHealth, Sydney, NSW*

EMAIL ken.khaw@health.nsw.gov.au

Objective Describe Obinutuzumab use in patient with granulomatosis with polyangiitis (GPA) resistant to standard treatment

Clinical feature A 37 year old female presented with lung lesion, gingival hyperplasia, fever, rash, lacrimal involvement and hearing disturbance. The test for ANCA positive with cANCA titre of 1:160 (>1:20), suggesting GPA. PR3 antibody level was 53 IU/mL (>2). Initially being treated with daily prednisolone 12.5 mg and 2 doses of Rituximab 1g about 4 weeks apart, patient developed new proteinuria, rash, fever and raised CRP 3 weeks after the second dose of rituximab, indicating uncontrolled inflammation from ANCA. Prednisolone dose was increased to 50 mg daily with addition of Avacopan 30 mg twice daily. Although PR3 level is stabilised, this combination did not lower PR3 level with patient experiencing ongoing fever. Eventually, Rituximab and Avacopan were ceased after 3 weeks, and Obinutuzumab was introduced with Prednisolone dose reduction to 12.5 daily.

Literature review A 2025 retrospective review assessed the use of obinutuzumab 1000 mg in 16 patients. Complete remission was achieved in 50% of patients at week 24 and 81.3% at week 76. Although it demonstrated sustained remission in refractory or relapsing AAV, the small sample size limited the generalizability of findings to bigger population.

Pharmacist interventions, Case progress and Outcomes Ward pharmacists supported the IPU application process and undertook literature review to evaluate the evidence. Ward pharmacists discussed with Rheumatology on prescribing paracetamol, loratadine and hydrocortisone as supportive medications and worked with nurses on the appropriate infusion rate and monitoring. The patient was eventually discharged home with significantly improved cANCA and PR3 antibody.

Discussion This case offers valuable guidance for utilisation of Obinutuzumab 1g in patients with relapsed or refractory AAV. Further research is required to establish standardised, effective and safe treatment protocols of Obinutuzumab for AAV due to a lack of evidence-based dosing framework

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The impact of advanced documentation tools in the Electronic Medical Record (EMR) on Pharmacist Workflows

Kenneth Khoo[1], Dr Hamish Rodda[2], Jeffrey Van[1], Sam Maleki[1], yun xie[1]

[1]*Eastern Health Pharmacy Program, Box Hill, Vic,* [2]*Eastern Health eHealth Department, Box Hill, Vic*

EMAIL kennethliqin.khoo@easternhealth.org.au

Background Pharmacist-led medication reconciliation at admission improves patient safety and reduces downstream pharmacy and medical workload. Electronic Medical Record (EMR) systems have significantly improved both completion rates and timeliness of medication reconciliation. It is unclear whether advanced documentation tools within EMR improve the efficiency of pharmacists' workflows during admission process.

Objective(s) To evaluate the time to complete the Pharmacy Admission Reconciliation process using advanced documentation tools compared to existing auto-text workflows.

Action (Method) A Pharmacy Admission Note was developed using Oracle Health's Dynamic Documentation™ (DynDoc™) solution within EMR to consolidate the existing medication reconciliation form and medication management plan auto-text, and leverages data within the EMR, reducing duplicated work. A pre–post evaluation study conducted in a tertiary health service used system timestamps to compare time from inpatient admission episodes to pharmacist completion of admission documentation in the baseline period (January to March 2025) and after implementation (January to March 2026).

Evaluation A total of 5,483 episodes of care were evaluated, 2,826 in the pre-evaluation phase and 2,657 in the post-evaluation phase. The data was analysed using a Mann-Whitney U test. For all admissions, there was an absolute reduction of 15.47 hours in median completion time observed following implementation, decreasing from 39.75 hours (IQR 23.54–61.47) to 24.28 hours (IQR 18.15–42.43; $p < 0.001$).

Completion timeframes of the admission note were also statistically improved, from 26.6% to 49.1% within 24 hours, 64.1% to 80.6% within 48 hours, and 82.1% to 91.3% within 72 hours (all $p<0.001$).

Discussion Implementation of a custom DynDoc™ note demonstrated improved efficiency in admission medication reconciliation, with a significant reduction in time to completion and earlier visibility of pharmacy recommendations in the EMR. Future research should evaluate if improved documentation contributes to positive clinical outcomes and sustainable reallocation of pharmacist time to direct patient care.

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Closed System Transfer Devices Reference Tool for Investigational Medicinal Products in Clinical Trials

Yoke Lynn Lee[1], Emilia Kim[1], Eugenia Hong[1]

[1]*The Royal Melbourne Hospital, Parkville, Vic*

EMAIL YokeLynn.Lee@mh.org.au

Background Closed System Transfer Devices (CSTDs) are used to protect healthcare workers from hazardous medications while maintaining sterility and integrity of the final product. In clinical trials, limited safety data for new investigational medicinal product (IMP) often necessitate a conservative risk-management approach, with many institutions opting to use CSTDs for dose preparation and/or administration. However, pharmaceutical companies are often hesitant to support the use of CSTD for IMP preparation due to the limited information on device-drug compatibility, highlighting the need for a better understanding of CSTD characteristics.

Objective(s) To develop a reference tool to support recommendations for selecting CSTDs for the preparation and administration of potentially hazardous new IMPs in clinical trials by comparing characteristics of CSTDs that are available in Australia.

Action (Method) Data on five commonly used CSTDs – BD PhaSeal®, ChemoClave™, ChemoLock™, EQUASHIELD® and Chemfort® were collated from multiple sources, including Medline, web-based searches, Australian Injectable Drugs Handbook, manufacturer data sheets and expert input from manufacturing pharmacy teams. Key characteristics such as materials, residual volume, cost, compatibility with registered medicines and administration sets were evaluated.

Evaluation All five CSTDs were incorporated into the reference tool. Materials varied between devices, with residual volumes ranging from 0.04 ml to 3 ml. All CSTDs were compatible with standard Luer-Lock syringes and infusion sets, with or without the use of an adaptor. Some devices contained polycarbonate, which is incompatible with certain medications while others contained no adsorptive materials and may therefore be more suitable for new IMPs to minimise the risk of drug loss or binding.

Discussion The reference tool provides a decision-support framework for clinical trials pharmacists and pharmaceutical companies to select compatible CSTDs when handling potentially hazardous IMPs, supporting occupational safety while maintaining product integrity. Further development of the tool may allow broader application to registered medicines in routine pharmacy practice.

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An Eye for Safety: A Pharmacist's Role in Humanitarian Eye Surgery in Phnom Penh

Cindy Kim[1,4], Tania Hoang[4], Dr Daniel Kim[2,4], Dr William Trinh[3,4]

[1]*St Vincent's Hospital, Pharmacy Department, Sydney, NSW,* [2]*Bringelly Family Medical Practice, Sydney, NSW,* [3]*Will's Eyecare, Sydney, NSW,* [4]*Australian Humanitarian Health Aid (AHHA), Sydney, NSW*

EMAIL cindy.kim@svha.org.au

Background Despite growing pharmacist participation in humanitarian health missions, this role remains largely undescribed. A multidisciplinary program in Phnom Penh, Cambodia screens up to 180 patients and performs up to 110 ophthalmic surgeries daily over three to seven 12-hour days, serving communities where this may be their only opportunity for free healthcare. Clinical activity spans two hallways, a shared room, and theatre, with pharmacists simultaneously dispensing, administering, counselling, managing patient flow, and responding to ad hoc requests.

Objective(s) To describe the pharmacist's contribution to medication safety within a resource-limited humanitarian ophthalmic program and document quality improvement initiatives across five years.

Action Safety gaps were identified through longitudinal observation across five field trips, with one pharmacist contributing across all perioperative roles over five years. Risks spanned the medicines management cycle: disorganised storage risking selection errors; informal prescribing; undocumented administration; and communication barriers across language and health literacy – with consequence for patients travelling hours for their annual opportunity. Structured storage, stocktake, and communication tools (pictograms, instruction sheets, Vietnamese counselling, and Khmer student interpreters) have been implemented. A standardised medication chart is proposed to address the outstanding prescribing and administration gap. Limitations include single-observer design and no outcome measurement.

Evaluation Implemented improvements demonstrate sustainable low-cost change within resource constraints. The medication chart remains pending, with a forthcoming field trip providing opportunity to operationalise and evaluate.

Discussion Ophthalmic surgery restores independence and transforms lives. Where medication safety is ungoverned, errors that cancel surgery or compromise outcomes carry consequences far beyond the operating table. Pharmacists contribute across the perioperative medicines pathway, collaborating with surgeons, anaesthetists, general practitioners, and optometrists as integral team members. Medication safety in humanitarian missions depends on individual commitment rather than governance – an opportunity for pharmacists to implement a sustainable and safe system.

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Pharmacist-Led Anticoagulant Education to Improve Nursing Knowledge and Confidence

Andrew Kim[1]

[1]*Caboolture Hospital, Caboolture, Qld*

EMAIL andrew.kim@health.qld.gov.au

Background Anticoagulants are high-risk medicines associated with preventable medication incidents, including bleeding and thromboembolic complications. Between March 2024 and February 2025, anticoagulants were the second most reported APINCH medication class locally. Administration errors, documentation issues and duplication remain causes of anticoagulant-related harm. Targeted education is an important strategy to improve medication safety and reduce nursing knowledge gaps.

Objective(s) To evaluate the impact of a pharmacist-led educational intervention on nurses' anticoagulant knowledge and confidence, and to explore behavioural and system-related factors influencing safe anticoagulant administration.

Action (Method) A prospective educational intervention involved enrolled and registered nurses in inpatient and emergency settings. Participants attended a 30-minute pharmacist-led education session addressing anticoagulant pharmacology, safe administration practices, documentation requirements and common medication incidents. Participants completed pre- and post-intervention knowledge quizzes, confidence surveys, and a feedback survey. Quantitative data were analysed using paired t-tests.

Evaluation Sixteen participants met the inclusion criteria. Mean knowledge quiz scores increased from 5.4 to 7.8 (maximum score 10), while mean confidence scores increased from 21.1 to 24.5 (maximum score 35) post-intervention. Large effect sizes were observed for both knowledge (Cohen's d=1.46) and confidence (Cohen's d=1.17). Participants identified lack of knowledge and confidence (n=7, 44%) and insufficient ward staffing (n=6, 38%) as primary barriers to safe anticoagulant administration. The education session received a mean feedback score of 8.31/10.

Discussion This pilot study suggests that pharmacist-led education improves nurses' anticoagulant knowledge and confidence. This supports improved individual preparedness for safe medication administration. However, system-level barriers including staffing constraints and limited educational opportunities continue to affect practice. Regular pharmacist-led education within nursing in-service programs enhances anticoagulant safety; however, sustainable improvement will require system-level changes. The anticoagulant education resource will be incorporated into local nursing in-service materials, with the knowledge quiz implemented annually as a nursing quality improvement activity.

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Enhancing antimicrobial therapeutic drug monitoring uptake in private hospitals: a centralised support and credentialling approach

Bettina Kirk[1]

[1]*Slade Pharmacy Services, Brisbane, Qld*

EMAIL bettina.kirk@sladepharmacy.com.au

Background Bayesian therapeutic drug monitoring (TDM) software is recommended over traditional antimicrobial TDM methods due to improved correlation with clinical efficacy and more timely target attainment. However, reliance on model-based dosing recommendations without adequate understanding or application of clinical judgement may lead to inappropriate dosing and potential patient harm. A biennial survey of 64 hospital pharmacies within a national group demonstrated inconsistent TDM practices and low utilisation of dose optimisation software, despite availability of freely accessible online calculators or hospital-based TDM software. Limited knowledge and access to suitable tools were identified as key barriers.

Objectives To improve pharmacists' knowledge, confidence and utilisation of Bayesian TDM software across a national private hospital pharmacy group through centralised access, a structured training and credentialling program and a peer support network.

Action A national TDM Support Team evaluated Bayesian platforms to inform software selection and group licensing. A structured training package was developed, including pre-reading, a training video, user guide, case-based learning and live mentoring with feedback to achieve credentialling. A pharmacist support network was established via Microsoft Teams. Pre- and post-training surveys evaluated program impact.

Evaluation Prior to implementation, 77% of respondents (37/48) identified limited knowledge/experience as a barrier, and 94% (45/48) reported lack of appropriate software access. Median confidence scores increased from 4.5/10 pre-training (n=48) to 8/10 post-training (n=13). Among paired respondents (n=12), a statistically significant improvement in confidence was observed (Wilcoxon signed-rank test, p=0.008), with a median increase of 3 points. Participants valued one-on-one mentoring, case-based learning and software demonstrations.

Discussion Centralised access to gold-standard TDM software, combined with structured training, credentialling and peer support, improved pharmacists' confidence and capability in antimicrobial TDM across private hospitals nationally. Ongoing refinement, including virtual workshops and expanded case-based learning, will support further uptake . Future evaluation will assess changes in utilisation and clinical practice.

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Pharmacological Management of Delirium in Hospitalised Patients with Parkinson's Disease

Amanda Kirollos[1], Emily Ristovski, Dr Sarah El-Naggar, Samantha Botta, Jeff Khoshaba, Jier Nguyen

[1]Northern Health, Epping, Vic

EMAIL amanda1kirollos@icloud.com

Background Patients with Parkinson's Disease (PD) are at an increased risk of developing delirium resulting in prolonged hospital stays and worsening motor symptoms. While various pharmacological treatments are routinely used to manage delirium, many of these medications can exacerbate PD symptoms. Research suggests that certain medications should be avoided in patients with PD, but no comprehensive guidelines exist to provide prescribers with clear recommendations on managing psychotic symptoms of delirium in this population.

Aim/Objective(s) This research aims to identify medications commonly administered to manage psychotic symptoms of delirium in hospitalised patients with PD.

Methods Psychotropic medications used for the management of delirium in patients with PD were analysed over a 12-month period (January to December 2024). Data on medications administered as when required, immediate and once only doses were extracted from electronic medical records. Clinical notes and charts were reviewed and only doses administered to manage delirium were included. Data was compared to existing hospital delirium guidelines. This project was ethically approved by the governing research unit (QA 33.2025).

Results Out of 227 patients assessed (males n=133 (58.6%), median age 79 years), 32 patients received pharmacological therapies for the management of delirium. Most patients were administered medications orally (84% n=26) whereas 16% (n=5) of patients received medications parenterally. Eleven (35.5%) patients received the preferred agent, quetiapine. Diazepam (n=7) and oxazepam (n=6) were the second most utilised medications. Of clinical concern, one patient experienced worsening PD symptoms following administration of two doses of droperidol highlighting the significant risks which may eventuate without clear guidelines.

Discussion Psychotropic medications known to exacerbate motor symptoms of PD were administered to manage delirium in the hospital inpatient setting. To safely manage delirium in patients with PD, it is prudent to develop clear guidelines specifying optimal management and support appropriate prescribing.

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Improving Allergy Labels Through a Multidisciplinary Adverse Drug Reaction Ward Round

Georgia Koutsaplis[1,2,3], Dr Caius Martin[1], Dr Duaa Gaafar[1,2,3], Kee Lin Lim[1], Hannah Ayres[1], Tracey Lam[1], A/Prof Amanda Gwee[1,2,3]

[1]The Royal Children's Hospital, Parkville, Vic, [2]Murdoch Children's Research Institute, Parkville, Vic, [3]The University of Melbourne , Parkville, Vic

EMAIL Georgia.Koutsaplis@rch.org.au

Background Inaccurate or unverified adverse drug reaction (ADR) labels are common in the paediatric population and may result in suboptimal therapy, an increased risk of antimicrobial resistance, and increased healthcare costs. Structured assessment of reported drug allergies is essential to improve medication safety and optimise treatment options.

Objective(s) To implement and evaluate a multidisciplinary ADR ward round aimed at improving the accuracy of allergy documentation and facilitating appropriate delabelling or referral pathways.

Action (Method) A weekly ADR ward round was established involving a clinical pharmacologist and at least one pharmacist. Patients with documented ADRs or drug allergy labels were identified for review. A standardised assessment was conducted using a structured line of questioning embedded within the electronic medical record, capturing detailed allergy history, reaction characteristics, timing, and evaluation of current and prior drug tolerance, including re-exposure history. Based on clinical evaluation, patients were categorised as suitable for delabelling, requiring further assessment (e.g. specialist review or allergy testing), or requiring retention of the ADR label. Recommendations were documented and communicated to the treating team for final decision.

Evaluation Five ADR ward rounds were conducted over a one month period, during which nine patients were reviewed, comprising of 20 documented ADRs. Of these, four medications were identified as suitable for delabelling, ten required further specialist assessment, and the remaining labels were deemed appropriate to retain. The intervention improved the quality and completeness of allergy documentation and supported targeted referral and management pathways, enhancing clinical decision-making.

Discussion A multidisciplinary ADR ward round incorporating a standardised assessment tool is an effective and feasible strategy to optimise allergy labelling and enhance medication safety. This model supports accurate documentation, promotes appropriate antimicrobial and medication use, and is transferable to other healthcare settings. Future work will focus on quantifying clinical, safety, and antimicrobial stewardship outcomes.

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PerTWOzumab – two bags are better than three

Madeleine Kruize[1], Catherine Ellis[1]

[1]*Royal North Shore Hospital, St Leonards, NSW*

EMAIL maddie.kruize@hotmail.com

Objective Pertuzumab is a key monoclonal antibody in the treatment of HER2-positive breast cancer; however, hypersensitivity reactions may limit its use. Desensitisation protocols enable therapy continuation when alternatives are unsuitable. This case demonstrates successful implementation of a two-bag pertuzumab desensitisation protocol and highlights the pharmacist's role in medication safety, protocol development, cost containment, and multidisciplinary care.

Clinical Features A 56-year-old female presented with de-novo metastatic HER2-positive breast cancer with extensive breast infiltration, bilateral axillary lymphadenopathy, pleural effusion, and hepatic metastases with ascites. Baseline investigations showed impaired renal function (eGFR 49 mL/min CKD-EPI) and elevated liver enzymes. During cycle 2, she developed an erythematous rash, shortness of breath and lip swelling 15 minutes into pertuzumab infusion, necessitating desensitisation to continue HER2-targeted therapy.

Literature review Pertuzumab hypersensitivity occurs in approximately 5 to 11% of patients and may disrupt treatment continuity . Evidence for desensitisation is limited, with reported stepwise three-bag protocols incorporating corticosteroid and antihistamine premedication. Close monitoring and multidisciplinary coordination are essential due to the risk of breakthrough reactions.

Pharmacist Interventions, Case Progress and Outcomes Production and oncology pharmacists led literature evaluation, protocol verification, aseptic compounding, infusion sequencing, and premedication coordination. A two-bag, nine-step protocol using graduated infusion rates was implemented following cetirizine, ranitidine, promethazine, and methylprednisolone premedication. The patient completed desensitisation without significant reactions, enabling uninterrupted therapy and use of a single pertuzumab vial.

Discussion This case highlights pharmacist-led adaption of a traditional three-bag desensitisation model to a two-bag protocol maintaining access to first-line HER2 treatment enabling completion of 5 cycles. The protocol reduced compounding complexity, preparation time, and resource use while maintaining safety. Pharmacists ensured aseptic preparation and standardised administration , minimising medication error risk. Use of a single vial avoided additional drug costs, saving approximately $2800 per treatment and demonstrating the pharmacist's role in safe, cost-effective oncology care.

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Implementation and Operational Evaluation of a Pharmacist-Led Beta-Lactam Therapeutic Drug Monitoring Pilot in Paediatrics

Zahra Sakr[1], Tony Lai[1], Michael Stokes[1,2], Mohammad Irfan Azeem[1], Sophie Brown[1]

[1]*Pharmacy Department, The Children's Hospital at Westmead, Westmead, NSW,* [2]*University of Sydney, School of Pharmacy, Camperdown, NSW*

EMAIL Zahra.Sakr@health.nsw.gov.au

Background Beta-lactam pharmacokinetics in critically ill children are highly variable, increasing the risk of inadequate exposure with empirical dosing. Therapeutic drug monitoring (TDM) can support precision dosing but is constrained by assay capacity, turnaround times, and the need for specialist interpretation.

Objective To describe the implementation, utilisation, and operational constraints of a pharmacist-led pilot beta-lactam TDM service in a tertiary paediatric setting.

Action A pilot beta-lactam TDM service commenced in 2022 with pharmacist-led review of all reported concentrations. An institutional pharmacokinetic/pharmacodynamic target was standardised to a free concentration 100% time above the MIC. Target attainment was operationalised using trough concentrations to support feasibility and consistent interpretation. AMS and PICU Pharmacists coordinated candidate identification, advised on sampling timing, interpreted levels, and provided prescriber-facing dosing recommendations (dose/interval modification and infusion strategy optimisation). Due to assay capacity constraints, testing was delivered as a weekly batch run (Thursdays).

Evaluation From 2022 to 2026, the service supported 124 patients and generated 306 reported beta-lactam concentrations. Utilisation was highest among critically ill children, with cefotaxime (13.0%), cefepime (12.6%) and meropenem (11.6%) the top 3 most-ordered concentrations. Pharmacists reviewed all results and provided dosing advice to treating teams, integrating clinical context (including changing renal function and severity of illness) with TDM findings.

A key operational limitation identified during the pilot was assay cadence. While weekly batching enabled service establishment and high-volume processing, turnaround time limited responsiveness for time-sensitive dose optimisation in paediatric intensive care, where exposure and physiology can change rapidly between assay runs. Determining an appropriate monitoring frequency remained a challenge during implementation.

Discussion This pilot demonstrates sustained demand and the feasibility of a pharmacist-led beta-lactam TDM model at scale. The principal implementation gap was assay frequency/turnaround rather than clinical engagement, supporting staged service expansion toward more responsive testing for critically ill children.

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How should we implement digital risk prediction tools in our hospitals? A multisite qualitative study

Dr Jonathan Yong Jie Lam[1,2], Professor Michael Barras[1,2], Professor Ian A. Scott[3,4], Assistant Professor Ahmad Abdel-Hafez[5], Dr Nazanin Ghahreman-Falconer[1,2]

[1]The University of Queensland, Woolloongabba, Qld, [2]Princess Alexandra Hospital, Woolloongabba, Qld, [3]Centre for Health Services Research, Woolloongabba, Qld, [4]Metro South Digital Health and Informatics Division, Woolloongabba, Qld, [5]University of Doha for Science and Technology, Doha, Qatar

EMAIL jonathan.lam3@health.qld.gov.au

Background Risk prediction tools (RPTs), developed using machine learning (ML), use clinical data to estimate the likelihood of adverse events, such as medication harm, and support preventive strategies. However, their adoption in hospitals remains limited by challenges related to workflow integration, user trust, and technical constraints.

Aim/Objective(s) This study aimed to determine clinicians' and informaticians' perspectives on the requirements and factors influencing adoption of digital RPTs for medication harm in hospitals, and to identify effective implementation strategies.

Methods Semi-structured interviews were conducted with clinicians and informaticians across three digital public hospitals within an Australian health service in 2025, using purposive and snowball sampling to capture diverse perspectives. The interview guide was informed by the Integrated Promoting Action on Research Implementation in Health Services (i-PARIHS) framework. Data were analysed using inductive thematic analysis to identify themes, then mapped to the i-PARIHS framework using a deductive approach.

Results Twenty-two interviews were conducted with six doctors, eleven pharmacists, and five informaticians. Five themes were identified: trust, desired features, clinical suitability, organisational readiness, and implementation enablers. Trust was linked to clinicians' perceived predictive performance and transparency of model outputs. Desired features such as automation, workflow compatibility, and the ability to override risk scores were deemed essential for adoption. Clinical suitability depended on alignment with workflows and appropriate risk thresholds. Key enablers included effective system integration, responsive feedback mechanisms, early stakeholder involvement, strong leadership support, and ongoing monitoring of tool reliability.

Discussion Digital RPTs for medication harm must be clinically meaningful and embedded in routine clinical care, complementing rather than replacing clinician decision-making. Successful integration requires technical interoperability, organisational readiness, and feedback mechanisms. These findings provide guidance for implementing digital RPTs to support patient prioritisation in hospital settings. Learnings are crucial to patient safety in the context of increasing development and use of ML/AI tools.

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Dose Error Reduction Software Compliance Validation – A Prospective Audit

Nikki Lam[1], Aiden Stalker[1], Yingqi Teh[1]

[1]Royal Hobart Hospital, Hobart, Tas

EMAIL nikki.lam@ths.tas.gov.au

Background Smart infusion pumps with Dose Error Reduction Software (DERS) are known to improve safe administration of intravenous (IV) medication when appropriately used. A wildcard protocol is available for clinicians to access where a genuine clinical need arises. Such a protocol, termed 'Drug X' has no DERS safety embedded, and best practice recommends less than 5% use. Monitoring systems show variable Drug X compliance and to date no interrogation of the accuracy of Drug X reporting has been conducted.

Objective Evaluate smart pump drug library compliance, verify the accuracy of Drug X use rates reported within the drug protocol.

Method At a single site tertiary hospital, infusion documentation was audited across adult medical, surgical, and the emergency department inpatient wards for comparison with previously reported Drug X use data.

Evaluation A total of 103 infusions were observed across clinical areas. Overall DERS compliance was 76.7% (n=79) with the remaining 23.3% (n=24) using an incorrect DERS protocol. Non-compliance was highest in surgical and medical wards. IV fluids accounted for 75% (n=18) of all non-compliant cases, with compound sodium lactate (CSL) representing the largest proportion (n=12). The 'aaMaintenance' protocol was used in 14 of 24 non-compliant infusions, most commonly for CSL.

Drug X was used in four non-compliant cases, involving potassium chloride, acetylcysteine, desmopressin and magnesium sulfate. Several selection errors, including infusion volume and dose were also observed (25%, n=6).

Discussion This audit somewhat validated that Drug X use rate reported in vigilant. Drug X uses rate are on target. However, there are potentials where non-compliance may be hidden through alternative protocols. The key limitation is the small number of observed infusions, collected over limited time periods, which may not fully represent broader practice patterns.

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Timing Matters: Early Pharmacist Intervention Reduces the Incidence of Medication-Related Hospital-Acquired Complications

Isabella Lasrado[1], Dr Libby McCourt[1], Alessandra Rose[1], Danielle Ironside[1], Hannah Knowles[1]

[1]*Royal Brisbane And Women's Hospital, Qld*

EMAIL bellalasrado@gmail.com

Background In October 2025, a metropolitan hospital integrated a pharmacy team at admission to improve medication safety. Preliminary evaluation demonstrated reduced time to first medication history and fewer omitted medications on admission. Whether these improvements translated into a reduction in medication-related Hospital Acquired Complications (mr-HACs) had not yet been evaluated.

Aim To compare the incidence, severity, and preventability of mr-HACs within 72 hours of admission between patients reviewed by the intervention team and a matched parallel cohort receiving usual care.

Methods An intervention cohort was matched to a parallel cohort based on age, treating team, and diagnosis. Mr-HACs investigated included: hypoglycaemia, alteration to conscious state, haemorrhagic disorders, respiratory depression, DVT/PE, and unplanned ICU admission. HACs occurring from November 2025 to March 2026 were identified via coding and verified through clinical notes and chart review. Severity and preventability were independently assessed by a panel using Safety Assessment Code (SAC) matrix and Schumock and Thornton Preventability Scale respectively.

Results The overall HAC rate was 5.7%(59/1031) in the intervention cohort and 4.2%(105/2501) in the parallel cohort, consistent with the recognised rarity of these events. The mr-HAC rate was lower in the intervention cohort at 0.1%(1/1031) compared to 0.2%(5/2501) in the parallel cohort. Parallel cohort mr-HACs trended toward greater severity and preventability; however, these findings are limited by the small number of total mr-HACs that occurred.

Discussion Early pharmacist intervention at the point of admission was associated with a lower mr-HAC rate, suggesting that early pharmacist review mitigates the downstream consequences of medication-related harm. While the overall HAC rate was higher in the intervention cohort, the proportion attributable to medication-related causes was lower, highlighting the specificity of the intervention team's impact. While larger prospective studies are required to confirm these findings, this study supports investment in similar pharmacy admission team models across Australian hospitals.

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Mind the Gap: Enoxaparin Dosing in Moderate Renal Impairment vs Local Guideline Recommendations

Isabella Lasrado[1], Kate Ross[2], Karl Winckel[1,2]

[1]*University of Queensland School of Pharmacy and Pharmaceutical Sciences, Brisbane, Qld,* [2]*Princess Alexandra Hospital, Brisbane, Qld*

EMAIL bellalasrado@gmail.com

Background Therapeutic enoxaparin requires dose adjustment in renal impairment to reduce bleeding risk. At a metropolitan public hospital, local guidelines recommended enoxaparin 1mg/kg twice daily for 24–48hours, followed by 0.5–0.6 mg/kg twice daily in patients with moderate renal impairment (eGFR=30–50 mL/min/1.73 m^2), based on evidence supporting improved safety outcomes with individualised dosing in renal impairment. This audit was conducted to inform guideline updates by a newly established anticoagulant stewardship service.

Aim To describe adherence to local enoxaparin dosing guidelines, anti-Xa monitoring practices, and adverse drug events (ADEs) in patients with moderate renal impairment.

Methods A retrospective audit of therapeutic enoxaparin orders prescribed between 01/01/2024–31/05/2025 was undertaken. Patients with moderate renal impairment receiving four or more doses of therapeutic enoxaparin for atrial fibrillation stroke prevention, venous thromboembolism, or acute coronary syndromes were included. Data collected included dosing, anti-Xa monitoring, and ADEs.

Results Of 1,822 therapeutic enoxaparin orders screened, 86 patients met inclusion criteria. Only 6%(5/86) were dosed according to local guidelines, while 94%(81/86) received 1mg/kg twice daily. Anti-Xa monitoring occurred in 20%(17/86), with 47%(8/17) of results being supratherapeutic and prompting dose adjustment. ADEs occurred in 13.5%(11/81) of patients not dosed according to guidelines and none in the guideline-dosed group. The most common ADEs were haematoma(5/11) and haematuria(2/11).

Discussion Fixed dose-reduction strategies were inconsistently applied, while dose adjustments were primarily guided by anti-Xa results. Supratherapeutic anti-Xa levels were detected when monitoring was performed, including in one guideline-dosed patient, suggesting exposure-based monitoring may better detect accumulation than fixed dose reduction alone.

These findings informed local guideline revisions, which now recommend routine anti-Xa monitoring with dose adjustment in moderate renal impairment and fixed dose reduction only for patients at high bleeding risk. An anticoagulant dashboard has also been implemented to identify patients with renal impairment receiving therapeutic enoxaparin for review by the anticoagulant stewardship pharmacist service.

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The Cardboard Comeback: A Quality Improvement Initiative for Cardboard Spacers

Gena Lee[1], Jessica Strachan[1], Belinda Chappell[1]

[1]*Caboolture Hospital Pharmacy, Caboolture, Qld*

EMAIL gena.lee@health.qld.gov.au

Background Cardboard inhalation spacers were introduced to the Emergency Department (ED) of a secondary hospital in April 2025 as an alternative to plastic spacers for the administration of inhaled medications. The initiative aimed to promote an environmentally sustainable and cost-effective alternative for use by adult patients within the ED setting. Cost saving of transitioning from plastic to cardboard spacers is $2.24 per unit. Initial observations identified limited staff awareness regarding the location, availability, and appropriate use with an average conversion rate from plastic to cardboard spacer usage of 14% across 12 months.

Objective(s) To assess Emergency department staff awareness of the availability of cardboard inhalation spacers to increase knowledge and obtain feedback.

Action (Method) An educational poster outlining the purpose, benefits, and correct use of cardboard inhalation spacers was developed and displayed in all ED medication rooms where the spacers were stored. A survey for nursing staff was developed and performed in person across April 2026 to assess baseline awareness, utilisation, and perceptions of the cardboard spacers.

Evaluation Sixteen survey responses were collected and analysed. Only 50% of nurses surveyed were aware of their availability. Feedback included a range of positive and negative experiences. 75% of nurses felt they were suitable for their designed short-term use with some reporting that elderly patients struggled to use them.

Discussion This review of the introduction of cardboard inhalation spacers into the ED has identified the potential for future sustainability initiatives. Compared with plastic spacers, cardboard spacers can provide a more cost-effective option and a reduction in environmental waste. Their compact design also supports their use in the fast-paced ED environment. This project also demonstrated that simple educational strategies improve staff awareness and supports the integration of both environmentally sustainable and cost saving healthcare practices into routine emergency care.

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Limitless Insights: Advancing Hazardous Medicines Safety in Aged Care Facilities

Penny Lee[1]

[1]*Wellness Partners Foundation*

EMAIL penny@choiceagedcare.com.au

Background Occupational exposure to hazardous medicines poses a significant risk to healthcare workers. Appropriate storage, handling, and disposal must be embedded within policy and practice across all healthcare settings, including residential aged care facilities (RACFs). When residents are admitted, systems should identify hazardous medicines and provide guidance on safe handling, management of bodily fluids post-administration, and disposal. Although hazardous medicine lists are periodically updated, maintaining current and consistent practices in RACFs remains a challenge.

Objectives Evaluate existing alert and flagging systems within an electronic application utilised by a RACF for identification of hazardous medicines and develop a practical quick-reference guide of commonly used hazardous medicines to support nursing staff.

Methods A review of available literature and resources was conducted to define hazardous medicines and identify those commonly used in RACFs. Existing flagging systems within electronic medication management platforms focusing on one facility was evaluated to determine current capabilities for identifying hazardous medicines and associated precautions.

Evaluation Findings identified variability and inconsistency in definitions, classifications, and recommended handling procedures for hazardous medicines across different applications. Guidance was limited and at times conflicting, contributing to uncertainty in clinical practice within RACFs.

Discussion Onsite aged care pharmacists are well positioned to provide leadership in the safe management of hazardous medicines through staff education and development of practical resources. Standardised guidance, supported by regularly updated evidence, is required to ensure consistent best practice. Ongoing research and organisational commitment to updating policies and clinical systems are essential to minimise risk and support safe medication practices in RACFs.

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Penicillin Allergy Assessment in the Pre-Admission Clinic: Pharmacist-Led Opportunities for Oral Challenge and Delabelling

Caitlyn Li[1], Louise Lord[1,2], Dr Jack Godsell[3], Catherine Fitzpatrick[1]

[1]Pharmacy Department, the Royal Melbourne Hospital, Melbourne, Vic, [2]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Melbourne, Vic, [3]Immunology and Allergy Department, the Royal Melbourne Hospital, Melbourne , Vic

EMAIL caitlyn.li@mh.org.au

Background Penicillin allergy labels (PALs) are frequently inaccurate and contribute to suboptimal antimicrobial prescribing. Pre-admission clinic (PAC) encounters provide an opportunity to assess and delabel low risk PALs before surgery. The extent to which this occurs in a hospital with on-site Immunology services and embedded PAC pharmacists has not been well characterised.

Objectives To quantify delabelling opportunities in PAC pharmacist-reviewed patients with a PAL, and to characterise practices in allergy documentation, delabelling, oral challenge, and surgical antibiotic prophylaxis.

Methods A retrospective audit was conducted of patients with a PAL who attended PAC between January and March 2025. Eligibility for delabelling or oral challenge was assessed using a risk assessment rule for penicillin allergy, the PEN-FAST score, or the Antibiotic Allergy Assessment Tool when PEN-FAST was unable to be calculated.

Results A total of 105 encounters met inclusion criteria. Fifty-nine patients (56%) had a PEN-FAST score <3, indicating low risk of true allergy and eligibility for delabelling or oral challenge. Sixteen patients (15%) were considered suitable for direct delabelling, and 56 (53%) for oral challenge. Comprehensive allergy histories were documented in 47 encounters (45%). One patient underwent direct delabelling, and none completed an oral challenge following PAC assessment. One patient was referred to Immunology. Cefazolin was administered intra-operatively in 60% of cases, while non-beta lactams were used in 15%.

Discussion A high proportion of PAC patients with a documented PAL were low risk for true allergy and appropriate candidates for either direct delabelling or oral challenge. Incomplete allergy histories and limited immunology involvement were key barriers to delabelling, underscoring the need to explore opportunities to improve pathway utilisation and expand structured, pharmacist-led delabelling approaches.

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Complex Antimicrobial Optimisation in Mycobacterium abscessus Pulmonary Infection: A Case Report

Fang Yun Lim[1], Thu Nguyen[1], Dr Iftah Amith[2]

[1]Eastern Health Pharmacy Program, , Vic, [2]Eastern Health Hospital In The Home Program, , Vic

EMAIL limfangyun1@gmail.com

Objective To describe pharmacist-led optimisation of complex antimicrobial therapy in Mycobacterium abscessus pulmonary infection (MAPI), including transition to inhaled liposomal amikacin following aminoglycoside nephrotoxicity.

Clinical Features A 73-year-old male was admitted under HITH (Hospital-in-the-Home) for initiation of antimicrobial therapy for progressive MAPI. Initial therapy comprised of intravenous (IV) amikacin 1500 mg three times weekly, IV cefoxitin 9g/24-hour infusion, oral azithromycin 500 mg daily and oral clofazimine 100 mg daily. Progressive aminoglycoside-associated nephrotoxicity (eGFR 81 to 40 mL/min/1.73 m^2) rendered amikacin unsafe and threatened continuation of effective multidrug therapy.

Literature review Guidelines recommend macrolide-based combination therapy incorporating an aminoglycoside and beta-lactam for MAPI; however, aminoglycoside nephrotoxicity frequently necessitates regimen modification. Inhaled liposomal amikacin achieves high pulmonary concentrations with minimal systemic absorption, representing an alternative to IV aminoglycosides. In Australia, access relies on compassionate access pathways, with off-label use in M. abscessus.

Pharmacist Interventions, Case Progress and Outcomes Following literature review, inhaled liposomal amikacin 590 mg daily was recommended as a salvage option and pharmacists coordinated compassionate access procurement. Oral linezolid 600 mg daily replaced IV amikacin while cefoxitin continued as bridge therapy, pending access to inhaled amikacin.

Therapeutic drug monitoring (TDM) informed amikacin and oral linezolid dosing, while renal function monitoring enabled timely identification of aminoglycoside nephrotoxicity and safe regimen modification. Pharmacists corrected TDM sampling errors (delayed amikacin level and falsely supratherapeutic linezolid level) and completed a cefoxitin infuser stability assessment.

The patient was discharged from HITH and remained on inhaled amikacin for four months with improved symptoms and minimal sputum production.

Discussion This case demonstrates the role of clinical pharmacists in optimising antimicrobial therapy for rare and complex infections. Progressive aminoglycoside nephrotoxicity threatened multidrug therapy; however, pharmacist-led transition to inhaled liposomal amikacin enabled treatment continuation while limiting further toxicity. These interventions maintained treatment efficacy and patient safety, highlighting the value of proactive pharmacy involvement within multidisciplinary teams.

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VTE-STOP: Improving VTE Prevention in a Paper-Based Hospital Through Scalable Stewardship Interventions

Ashleigh Lawrence[1], Dr Denise Doan[2], Dr Harvinder Hans[3], Dr Tasvinder Hans[3], Breigh Ridley[1], Sharon Selvanayakam[1], Dr Jasmine Singh[4]

[1]Pharmacy Department, Murdoch, WA, [2]Acute Medical Unit, Murdoch, WA, [3]Oncology Department, Murdoch, WA, [4]Haematology Department, Murdoch, WA

EMAIL ashleigh.lawrence@health.wa.gov.au

Background Hospital-acquired venous thromboembolism (VTE) remains a significant cause of preventable morbidity and mortality. Despite established guidelines, compliance with VTE risk assessment and appropriate thromboprophylaxis prescribing is often suboptimal, particularly in non-electronic medical record (non-EMR) settings.

Objective(s) To improve VTE and bleeding risk assessment documentation and appropriate thromboprophylaxis prescribing across paper-based inpatient settings, targeting ≥85% compliance in line with VicTAG Anticoagulation Stewardship indicators.

Action VTE-STOP was a quality improvement initiative (October 2025–January 2026) in the Acute Medical Unit (AMU) of a tertiary metropolitan hospital using paper-based prescribing. A pre-implementation survey identified key barriers, including time constraints, limited clinician confidence, and unclear responsibility for VTE risk assessment, which informed intervention design. Interventions included a simplified decision support tool (lanyard cards and patient-folder inserts), revised admission documentation with embedded prompts, targeted education, and multidisciplinary engagement led by a medical registrar VTE champion. Baseline audit data were compared with post-implementation audits using a standardised VTE prevention audit tool, and statistical analysis was conducted using two-proportion z-tests. VTE-STOP was extended to Haematology and Oncology services (March–June 2026).

Evaluation In the AMU, VTE risk assessment documentation increased from 2.9% to 61.1% ($p < 0.001$), with completion within 24 hours improving from 2.9% to 58.3% ($p < 0.001$). Appropriate thromboprophylaxis increased from 74.3% to 91.7% ($p=0.057$), and staff awareness reached 100%. Following expansion, combined Haematology and Oncology results showed improvement in risk assessment documentation from 14.5% to 70.0% ($p < 0.001$), and prescribing appropriateness from 77.0% to 95.0% ($p=0.017$).

Discussion A co-designed, stewardship-led and behaviourally informed intervention significantly improved VTE prevention in a paper-based setting. Sustained improvements across specialties demonstrate scalability and highlight the effectiveness of low-resource interventions in overcoming system barriers. These findings are informing statewide anticoagulation chart redesign, with ongoing expansion into geriatric and surgical cohorts to support broader implementation.

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Thrombo Thursday: a pharmacist-led point prevalence survey assessing VTE risk documentation across multi-site non-EMR hospitals

Ashleigh Lawrence[1], Breigh Ridley[1], Sharon Selvanayakam[1], Dr Jasmine Singh[2]

[1]Pharmacy Department, Murdoch, WA, [2]Haematology Department, Murdoch, WA

EMAIL ashleigh.lawrence@health.wa.gov.au

Background In hospitals without an electronic medical record (EMR), monitoring compliance with venous thromboembolism (VTE) prevention practices is resource-intensive and limited in scope. Scalable and efficient methods for system-wide surveillance are needed to support quality improvement in paper-based environments.

Aim/Objectives To evaluate the feasibility and effectiveness of a pharmacist-led, EMR-independent point prevalence survey (PPS), branded 'Thrombo Thursday' to measure compliance with VTE risk assessment documentation across a multi-site hospital network.

Methods A cross-sectional PPS was conducted across one tertiary and two secondary hospitals within a metropolitan health service without an EMR. All adult inpatients listed on the electronic patient journey board at the commencement of the audit were eligible. Pharmacists performed simultaneous reviews of medication charts and clinical records. Compliance was assessed against local VTE prevention policy, including documentation of risk assessment within 24 hours of admission and reassessment every seven days or following significant clinical change. Descriptive statistics were used to summarise results.

Results A total of 1,089 inpatients were identified, of whom 1,065 (98%) were reviewed. 244 patients (23%) had VTE risk assessments documented in accordance with policy. Compliance varied across specialties, with higher rates observed in intensive care (100%) and obstetrics (75%). Broad pharmacist participation enabled rapid, hospital-wide data collection and facilitated immediate feedback to clinical teams.

Discussion Thrombo Thursday proved to be a feasible and efficient method for collecting network wide data from paper based medical records, enabling regular monitoring of risk assessment practices across multiple sites. The approach supported rapid data collection, multidisciplinary engagement, and immediate feedback to clinical areas, facilitating evaluation of VTE prevention initiatives. The survey will now be undertaken biannually, with future iterations expanding to include anticoagulant prescribing. The model has been shared through the THANZ Anticoagulation Stewardship Network, with emerging interest in broader adoption, analogous to established national point prevalence methodologies.

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Tocilizumab as a cost-effective alternative to siltuximab for severe idiopathic multicentric Castleman disease (iMCD)

Evelyn Shao Yi Lim[1], Dr Marija Nedeljkovic[2], Sam Maleki[1]

[1]*Eastern Health Pharmacy Program , Box Hill, Vic 3128,* [2]*Eastern Health Cancer Services , Box Hill, Vic 3128*

EMAIL evelyn.lim13@gmail.com

Objective To describe the use of tocilizumab as a cost-effective and accessible alternative to siltuximab for idiopathic multicentric Castleman disease (iMCD) in the absence of Pharmaceutical Benefits Scheme funding.

Clinical Features A 49-year-old female, with complex iMCD (HHV-8 negative) and lymphadenopathy, had multiple admissions for refractory anasarca and fluid overload, despite maximal diuretic therapy. Prior to admission, siltuximab 825 mg (11 mg/kg 3-weekly intravenously) maintained biochemical stability (ESR 2 mm/hr, IgG 10.8 g/L). During admission, despite dialysis and two doses of siltuximab, she remained fluid overloaded with pitting oedema, hyponatremia (Na 127 mmol/L) and acute kidney injury (eGFR 10 mL/min/1.73 m^2). The haematology team requested further siltuximab; however, access was limited due to hospital formulary restrictions.

Literature review Siltuximab, an IL-6 monoclonal antibody, is TGA approved first-line therapy for iMCD, however its high cost (~$7,078 per dose) and hospital formulary restrictions limited inpatient access. Evidence suggests tocilizumab, another IL-6 inhibitor, may serve as an effective off-label alternative when siltuximab is unavailable.

Pharmacist Interventions and Outcomes Following review of the non-formulary request, the Medicines Evaluation Pharmacist revisited prior discussions with the haematology consultant regarding tocilizumab as a lower-cost alternative (~$641 per dose). A literature review supported its efficacy and safety in iMCD, and a dose of tocilizumab 640 mg was administered intravenously (8 mg/kg 2-weekly). The patient experienced no adverse effects and demonstrated clinical and biochemical improvement alongside dialysis, including renal recovery (eGFR 23 mL/min/1.73 m^2), improved fluid balance, and correction of hyponatraemia (Na 136 mmol/L), facilitating discharge within seven days.

Discussion This case highlights tocilizumab as a viable alternative to siltuximab in iMCD, enabling timely treatment when access to first-line therapy is limited. As both agents target the IL-6 pathway, tocilizumab may provide a practical inpatient option in resource-constrained settings. This case also demonstrates the role of pharmacists in evidence-based decision making, balancing clinical needs with resource constraints to support timely care.

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Lead to Last: Building a Culture to Enhance Engagement with Medication Safety Standards

Komal Lodhia[1], Dr Catherine McVeigh[1], Gretel Hickling[1], Charlotte Birchall[1], Declan Gibney[1], Jessica van Schreven[1]

[1]*Prince of Wales Hospital, Sydney, NSW*

EMAIL komal.bagadia@health.nsw.gov.au

Background Engagement with the National Safety and Quality Health Service (NSQHS) Standards, including the Medication Safety Standard is essential to improving practice and achieving accreditation requirements. However, staff engagement with this Standard can be variable. The transition to the Short Notice Accreditation Assessment Program (SNAAP) provided an opportunity to implement targeted strategies to improve engagement and address medication safety risks.

Objective To improve staff engagement with the Medication Safety Standard and increase awareness of high-frequency incident trends.

Action (Method) A multidisciplinary working group consisting of the Medication Safety Pharmacist, Patient Safety Improvement Officers and members of the Medication Safety Committee designed a four-week targeted engagement program based on incident data. Strategies included executive-led ward walkarounds, interactive educational, gamified activities with incentives, pop-up stalls, and integration of medication safety content into existing clinical forums with pharmacists, doctors and nurses.

Evaluation Staff feedback was collected via QR code (n=8). Respondents reported that the activities were enjoyable and stimulated engagement with the Medication Safety Standard. Nurses (n=5/8) reported increased awareness of high-risk medicines and how the Standard supports their safe use in clinical practice. Barriers to engagement were also identified, such as executive-led walkarounds initially being perceived as intimidating. Other members of the Patient Safety Improvement Unit and Medication Safety Committee reported it was a positive experience that enabled further discussion with frontline staff about high-frequency incident trends.

Discussion The four-week targeted engagement program increased staff awareness of the Medication Safety Standard and identified key barriers to address in the future to enhance engagement. This scalable approach has since been adopted with other NSQHS standards, forming a 'Standard of the Month' model across the hospital. Future improvements should focus on promoting psychological safety prior to commencing the executive-led walkarounds and evaluating SNAAP readiness amongst staff after the engagement program.

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Drop in to prevent drop out: building research capacity through accessible support

Louise Lord[1,2]

[1]*Pharmacy Department, Royal Melbourne Hospital, Melbourne, Vic,* [2]*Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Melbourne, Vic*

EMAIL louise.lord@mh.org.au

Background Limited research capability and access to timely support remain key barriers to practice-based, pharmacy-led research. Traditional mentorship models may not meet the diverse and immediate needs of clinician researchers. To address this gap, an informal drop-in Research Support Session (RSS) was introduced as an accessible, real-time model of research support.

Objective To introduce and evaluate a pharmacy-led drop-in RSS.

Action A monthly RSS was implemented from September 2025, providing on-demand, individualised research support. The service was open to all pharmacy staff across two campuses. It was refined iteratively in response to user feedback and utilisation. A mixed-methods service evaluation was initiated. Immediate post-session data were collected using structured questions assessing issue resolution and participant empowerment to progress, alongside informal qualitative feedback.

Evaluation Across seven sessions, 28 attendances were recorded from 23 pharmacists, ranging from residents to leads, and one pharmacy technician. All participants (28/28) reported feeling empowered to progress. Issues were fully resolved in 24/28 (86%) encounters, with the remainder partially resolved. Queries predominantly related to early-stage research development (methodology and feasibility), alongside navigation of governance processes and progression to outputs (manuscript preparation and dissemination). Support also extended to supervisory challenges and research-related uncertainty. Qualitative feedback was positive, highlighting the value of protected time and real-time access to expertise. Regular scheduling was valued, although some participants expressed a preference for booked appointments.

Discussion This early evaluation demonstrates that a drop-in RSS is a feasible, acceptable, and responsive model for addressing barriers to research. The high rate of issue resolution and universal empowerment to progress suggest a meaningful immediate impact on research activity and confidence. Importantly, this low-resource model can be readily implemented within existing structures. Its flexibility, including cross-site virtual delivery, supports scalability across health services. Ongoing evaluation will assess longer-term impacts on research confidence, outputs, and sustained engagement.

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Implementing Professional Supervision and Support for Pharmacy Student Staff in Hospital Practice

Sarah Lucas[1], Divya Raveenthiran[1], Lee House[1], Chastina Heck[1,2], Chen Foo[1]

[1]*Pharmacy Department, Logan Hospital, Logan, Qld,* [2]*Office of the Executive Director Allied Health, Metro South Health, Eight Mile Plains, Qld*

EMAIL sarah.lucas@health.qld.gov.au

Background Opportunities for pharmacy students to undertake cadetship and trainee roles in hospitals have expanded, supporting development of knowledge and skills alongside university study. The cadetship program also provides an important pathway for Aboriginal and Torres Strait Islander workforce development. Within our department, structured training and professional supervision for pharmacy student cadets and trainee staff were limited. While formal supervision frameworks are established in allied health, they are relatively new in pharmacy, highlighting the need to embed structured supervision early to support practice, career development, and workforce sustainability.

Objective To implement a professional supervision model supported by a structured training workbook for pharmacy student staff.

Action (Method) A structured workbook was developed by clinical educator pharmacists, a workforce development officer and the Assistant Director of Pharmacy (Operations). It included university information, therapeutic areas studied or in progress, and personalised six monthly learning goals developed collaboratively with supervisors. Content covered clinical and operational activities (e.g. dispensing, discharge facilitation) and experiential learning (e.g. medication histories, patient counselling). Educational tools included Entrustable Professional Activities, reflections, and case-based discussions.

Professional supervisors were recruited via an Expression of Interest process targeting pharmacists early in hospital practice, providing opportunities to build supervision skills while supporting workforce development. Six supervisors were paired with pharmacy student staff. Training for supervisors outlined supervision expectations, followed by initial meetings between supervisors and pharmacy student staff to establish goals and individual learning plans.

Evaluation Initial feedback from supervisors, pharmacy student staff, and management was positive, noting improved role clarity, engagement, and perceived support. Further structured evaluation will assess usability, learning outcomes, and supervision effectiveness. The model has been integrated into the pharmacy student staff orientation checklist.

Discussion This initiative established a structured approach to training and supervision, supporting learner engagement, supervisor development, and workforce sustainability, with potential for broader implementation.

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Evaluation of depot antipsychotic medication wastage in a regional community mental health service

Mirasol Sastado[1,2], Kirsty Luck[1], Amy Chin[1,2], Cherise Daiyi[1], I-Chia Chen[1,2], Adele Northwood[1], Amali Ford[2], Jo Wallace[2], Teana Brewster-O'Brien[3]

[1]Top End Mental Health and Alcohol and Other Drugs Service, Darwin, NT, [2]Pharmacy Royal Darwin and Palmerston Hospital , Darwin, NT, [3]Clinical Innovation and Research, Darwin, NT

EMAIL Mirasol.Sastado@nt.gov.au

Background A regional metropolitan mental health service (MHS) provides long-acting first-(FGA) and second-(SGA) generation injectable antipsychotics (LAI-As) to 310 clients. LAI-As are high-risk medicines, differing in preparation, administration and monitoring requirements. Supply is outsourced to a contracted pharmacy. Avoidable wastage of unused LAI-As has financial and operational implications and is an emerging concern for the MHS. Service delivery occurs within a population with a high proportion of Aboriginal and Torres Strait Islander clients; the national Closing the Gap (CTG) strategy seeks to improve health equity, access, and outcomes for these populations.

Objective(s) To identify LAI-A wastage patterns and quantify associated costs.

Action (Method) A Pharmacy Technician (PT) prospectively collected data (January–December 2025) on unused LAI-A s, including reason for wastage, cost, and client Medicare, concessional, and CTG status.

Evaluation Of 310 clients, 84% (n=260) were prescribed SGA LAI-As and 19% (n=60) FGA LAI-As; 3% (n=10) were prescribed both. 277 doses (approx. 6%) were returned for disposal: 11% (n=31) FGA and 89% (n=246) SGA. SGA wastage included paliperidone palmitate (Sustenna) 37% (n=103), aripiprazole (Maintena) 24% (n=68), paliperidone palmitate (Trinza) 14% (n=39), and olanzapine pamoate (Zyprexa Relprevv) 14% (n=36). Returns were highest among clients with concession and CTG entitlement 46% (n=126), followed by Concession-only 30% (n=84). Key drivers were dose/therapy change 40% (n=111), internal transfer of care 24% (n=67), disengagement 15% (n=42), discharge to general practitioners 5% (n=15) and planned cessation 7% (n=19). The total value of wasted LAI-Is was $92690.59.

Discussion PT-led transfer of LAI-As at transitions of care was not present at time of audit; however, this has since been implemented to reduce wastage, contain costs, and support quality use of medicines. Strengthening transitional care, cross-service coordination and culturally responsive approaches aligned to Closing the Gap priorities may reduce LAI-A wastage in this regional context.

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Metreleptin in lipodystrophy: Collaborative support for specialised medication access in a rare disease

Jane Ludington[1], Index Patient[1], Professor Jerry Greenfield[1,2]

[1]St Vincent's Hospital, Sydney, Darlinghurst, NSW, [2]Translational Diabetes Laboratory, Victor Chang Cardiac Research Institute, Darlinghurst, NSW

EMAIL jane.ludington@svha.org.au

Objective To describe initiation of metreleptin in a person with lipodystrophy, highlighting the significance of collaboration between patient, pharmacists, physicians, governance bodies, pharmaceutical companies, international clinicians and patient advocacy groups to facilitate access to specialised medication in rare diseases.

Clinical features The index patient (35yrs) has familial generalised lipodystrophy (LMNA mutation), resulting in atypical progeroid syndrome. He has heart failure (LVEF 25%), a pacemaker, type 2 diabetes (HbA1c 6.4%), marked proteinuria (UAlb/Cr 288 mg/mmol), grade 2 hepatic steatosis and dyslipidaemia. He has 6% total body fat. His mother (who also had an LMNA mutation) died from an aerodigestive malignancy aged 44 years.

Literature review Descriptions of characteristics of individuals and families with LMNA mutations have been published; no curative therapy is available. Loss of adipose tissue results in reduced leptin levels, resulting in fat and glucose metabolism abnormalities. Metreleptin is a recombinant human leptin analogue administered by daily subcutaneous injection. It is approved overseas for leptin deficiency in specialised programs but is not available in Australia.

Pharmacist Interventions, Case Progress and Outcomes Pharmacist interventions included collaboration with the patient and endocrinologist to navigate international access programs and local governance processes to facilitate administration of metreleptin in the context of limited clinical data, known potential adverse effects and high cost. Treatment commenced in the US in March 2026 and local supply began in April 2026. Initial quality of life improvement with energy and hunger regulation are reported, biochemical and imaging monitoring are ongoing.

A database, which includes a pharmacist and the index patient as co-investigators, is in development to characterise Australians with rare genetic forms of lipodystrophy to improve understanding and guide personalised treatment.

Discussion This case highlights the increasing opportunities for pharmacist involvement with patients and clinicians to collaboratively advocate for patients and improve access to innovative, personalised therapies in rare conditions.

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Pharmacist Assessors in Prescribing EPAs: A Qualitative Study Exploring Feasibility and Acceptability

Viki Lui[1,2,4], Kirsten Galbraith[3], A/Prof Louisa Ng[2,4]

[1]Pharmacy Department, Alfred Care Group – Bayside Health, Melbourne, Vic, [2]The Royal Melbourne Hospital, Melbourne, Vic, [3]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Parkville, Vic, [4]Faculty of Medicine, Dentistry and Health Sciences, Melbourne University, Parkville, Vic

EMAIL v.lui@alfred.org.au

Background The Australian Medical Council introduced Entrustable Professional Activities (EPAs) for junior doctors, including prescribing EPAs aimed at improving prescribing competence. While pharmacists are endorsed assessors, there is limited empirical evidence describing their role in assessing prescribing performance.

Aim This study explored the feasibility, acceptability and impact of pharmacist assessors in prescribing EPAs from both medical intern and pharmacist perspectives.

Method A qualitative study was conducted during a pilot implementation of prescribing EPAs at a metropolitan quaternary teaching hospital in Melbourne, Australia (June–October 2024). Medical interns (n=18) and pharmacist assessors (n=8) who engaged in at least one pharmacist-assessed EPA were eligible for inclusion in the study. Semi-structured interviews were conducted and analysed using reflexive thematic analysis.

Results Four themes were identified from interviews with the six medical interns and eight pharmacist assessors recruited to the study. First, interprofessional assessment was shaped by the multidisciplinary clinical context, with pharmacists contributing a distinct focus on medication safety and evidence-based prescribing. Second, effective feedback was dependent on established professional relationships, influencing the perceived credibility and relevance of pharmacist input. Third, participants conceptualised EPAs differently, with some viewing them as assessment tasks rather than learning opportunities. Finally, competing priorities and cumbersome workflows limited perceived feasibility and sustainability.

Discussion Medical interns valued pharmacists' input and evidence-based recommendations that complemented senior medical feedback. Pharmacists valued formalising their role in identifying prescribing risks, reinforcing safe prescribing practices and generally found the time commitment acceptable. However, the interprofessional model was challenged by resource demands in the clinical environment. As a result, ongoing implementation is proceeding cautiously, with monitoring and iterations to ensure an appropriate balance between educational value, workforce capacity and patient care. Demonstrating broader service and patient benefits may further support the case for ongoing resourcing of this interprofessional initiative.

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An interprofessional practice-based education workshop for pharmacy and physiotherapy clinical placement students

Stephanie Alexander[1], Nikki Cresswell[1], Karyn Richardson[2], Caitlin Le Maitre[2], Vicky Ma[1], Diana Sandulache[1], Viki Lui[1]

[1]Pharmacy Department – Alfred Care Group – Bayside Health, Melbourne, Vic, [2]Physiotherapy Department – Alfred Care Group – Bayside Health, Melbourne, Vic

EMAIL st.alexander@alfred.org.au

Background Interprofessional education (IPE) refers to an educational experience with two or more health disciplines, with the objective to improve collaborative and quality care. Furthermore, interprofessional practice-based education (IPBE) specifically defines IPE in the clinical setting. Traditionally, student placements occur over several weeks within individual disciplines, with passive exposure to multidisciplinary clinical practice. To address this, an IPBE workshop was developed and piloted with 4th year undergraduate pharmacy and 3rd/final-year physiotherapy students undertaking clinical placement at a large metropolitan teaching hospital.

Objectives To describe the pilot IPBE workshop and report evaluation outcomes based on student and facilitator feedback.

Action The 90-minute workshop was embedded into clinical placements to facilitate interprofessional problem-solving, teamwork and communication skills. Workshops addressed targeted learning outcomes, commencing with an ice-breaker activity that highlighted shared professional experiences, before participants engaged with a fictional orthopaedic case. Throughout the workshop, students worked within and across disciplines to identify priorities, clarify professional roles and collaboratively refine a patient management plan through simulated multidisciplinary discussions. The workshop concluded with a facilitator-led reflection to reinforce collaborative care principles, with anonymous student feedback informing program refinement.

Evaluation Forty-two of 52 students (29 pharmacy, 23 physiotherapy) completed the post-workshop survey. Of respondents, 91% reported increased confidence in describing the role of the other profession, 98% in identifying professional overlap and gaps within the multidisciplinary team, and 98% in demonstrating safe and respectful interprofessional communication. Qualitative feedback indicated strong engagement and highlighted opportunities to include additional disciplines, increase facilitator-guided or explicit teaching, and improved time management. In response, case materials were distributed prior to workshops, and facilitator guidance increased.

Discussion The pilot demonstrated feasibility, acceptability and positive learner-reported outcomes aligned to objectives. Ongoing refinement, informed by feedback, supports scalability across additional disciplines, with future evaluation planned using validated tools and evaluating behavioural and organisational impact.

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Cefazolin Induced Hypovitaminosis K Coagulopathy

Charleigh Lunt[1]

[1]*Queensland Health Metro North, Redcliffe, Qld*

Objective To describe a case of cefazolin-induced hypovitaminosis K coagulopathy in a patient with Staphylococcus aureus bacteraemia and identify factors contributing to severe coagulopathy.

Clinical Features A 72-year-old male with atrial fibrillation, hypertension, and type 2 diabetes mellitus presented with Staphylococcus aureus bacteraemia secondary to a septic shoulder and multifactorial acute kidney injury. Cefazolin therapy was commenced and escalated to an 8 g continuous infusion over 24 hours. During treatment, the patient developed worsening renal function, dysphagia, with significantly reduced oral intake. Two weeks after cefazolin initiation, he developed gross haematuria and cutaneous bleeding. Investigations demonstrated severe coagulopathy with an international normalised ratio (INR) of 10, prothrombin time of 120 seconds, and activated partial thromboplastin time of 64 seconds.

Literature Review Cefazolin-associated coagulopathy is an uncommon but recognised adverse effect. Proposed mechanisms include disruption of vitamin K-producing gut microbiota and inhibition of vitamin K epoxide reductase, resulting in reduced synthesis of vitamin K-dependent clotting factors. Published case reports identify malnutrition and renal impairment as important risk factors.

Pharmacist Interventions, Case Progress and Outcomes Pharmacist review of therapeutic drug monitoring, coagulation parameters, and patient-specific risk factors identified an association between cefazolin exposure, deteriorating renal function, reduced nutritional intake, and INR elevation. Following Infectious Diseases review, cefazolin-induced hypovitaminosis K coagulopathy was diagnosed. Cefazolin was discontinued and 10 mg intravenous vitamin K administered, resulting in correction of the INR to 2 and resolution of bleeding manifestations.

Discussion This case adds to emerging evidence linking cefazolin, malnutrition, and renal dysfunction to clinically significant coagulopathy. It highlights the pharmacist's role in recognising medication-related adverse effects, interpreting results, and recommending timely intervention. Regular monitoring of coagulation parameters should be considered during prolonged cefazolin therapy, particularly in patients with renal impairment or poor nutritional intake, to reduce the risk of serious bleeding complications.

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Breaking Barriers: Pharmacist Leadership in Surgical Antimicrobial Stewardship

Alan Tuxford[2], Geoff Mackay[1]

[1]*Albury Wodonga Health, Albury, NSW,* [2]*Albury Wodonga Health, Albury, NSW*

EMAIL Alan.Tuxford@awh.org.au

Background Surgery is often seen as resistant to antimicrobial stewardship (AMS). Prescribing is fast paced, team cultures tight, and external review rarely prioritised. Yet this resistance is rarely challenged by pharmacist led, infectious diseases (ID) guided AMS education models built on relationships and trust, not restriction. Restriction based AMS services face limitations in surgical settings where relationships and credibility matter. Pharmacists, the constant presence building rapport, coordinating, and carrying clinical context between rounds, are uniquely positioned to build relationships that restriction-based services cannot.

Objectives To evaluate the impact of integrating a general surgical unit into a mature, pharmacist led AMS program at a regional acute care hospital.

Action A prospective pharmacy practice evaluation was conducted between 2018 and 2025. An education focused, post prescription review model without dispensing blocks was used. General medicine and ICU participated from 2018. The general surgical unit joined in mid-2022, supported by a registrar who championed the program. Rounds occurred three times weekly, reviewing general surgical patients prescribed restricted antimicrobials, with ID consultant led recommendations providing authority and trust in stewardship. AMS pharmacists coordinated and maintained continuity across rounds.

Evaluation Across 5,981 AMS reviewed encounters, including 2,211 surgical patients, surgical guideline appropriate prescribing rose from 59% to a sustained 79%, surpassing general medicine which averaged 72% during this time. Surgical acceptance of AMS recommendations reached 84%. Overall antimicrobial utilisation fell below national benchmarks following surgical integration.

Discussion Surgery did not resist stewardship. It just needed the right approach. ID led education, pharmacist led round coordination, and relationships replaced restriction. Surgical registrars reported carrying lessons to other health services, suggesting broader impact. These findings show an education model anchored in trust and supported by internal surgical champions can shift culture where restriction-based approaches never could.

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Breaking Through Refractory Disease: A Clinical Audit of Upadacitinib Use in Paediatric Inflammatory Bowel Disease.

Georgina Makris[1]

[1]*Women's And Children's Hospital, Adelaide, SA*

EMAIL georgina.makris@sa.gov.au

Breaking Through Refractory Disease A Clinical Audit of Upadacitinib Use in Paediatric Inflammatory Bowel Disease

Category Pharmacy Practice

Background Upadacitinib (Upa), a selective Janus kinase-1 (JAK-1) inhibitor, is increasingly prescribed off-label in paediatric and adolescent inflammatory bowel disease (IBD) refractory to conventional biologic therapy. It's use in paediatric Ulcerative Colitis (UC) and Crohn's Disease (CD) is limited and is largely extrapolated from a robust evidence base validated in the adult population. This audit evaluated the use of Upa against emerging international evidence and reputable guidance.

Objectives To assess the safety, efficacy, prescribing practices and monitoring of Upa in paediatric and adolescent IBD patients

Method A retrospective audit was conducted using clinical documentation in electronic medical records and pharmacy dispensing data. All patients < 18 years prescribed Upa for refractory IBD between January 2023 and December 2025 were included. Data collected included demographics, disease phenotype, prior therapies, infection screening, dosing regimens, clinical response, corticosteroid-free remission, adverse effects and laboratory monitoring. Audit findings and recommendations were made to the Gastroenterology team for ongoing patient monitoring and safety considerations.

Evaluation Eight patients met inclusion criteria (4 UC, 4 CD: median age 15 years). All patients had failed at least one biologic therapy prior to Upa initiation. Standard induction dosing of 45 mg daily for 8–12 weeks was used, following maintenance dose of 15–30 mg daily. Clinical response post-induction was observed in 87% of patients, with corticosteroid-free remission achieved in most patients continuing therapy. Two patients needed surgical intervention. No serious adverse effects were observed. Mild acne was reported in one subject.

Discussion Upa showed encouraging short-term efficacy and tolerability in refractory paediatric IBD, aligning with available international evidence.

Variability in monitoring and documentation underscored the need for standardised institutional guidelines for safety surveillance, laboratory monitoring, and long-term governance of JAK-1 inhibitors.

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Comparison of non-cancer potentially inappropriate medication criteria in older adults with cancer: a retrospective study

Sam Maleki[1,2], Josephine Foo[1], Vincent Chen[2], Henry Fang[2], Charmen Kasakara[2], Hiva Vakilian[2], Dr Wee Kheng Soo[3,4,5], Dr Justin Turner[2], Professor Carl Kirkpatrick[2]

[1]*Eastern Health Pharmacy Program, Melbourne, Vic,* [2]*Centre for Medicine Use and Safety, Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Melbourne, Vic,* [3]*Eastern Health Clinical School, Monash University, Melbourne, Vic,* [4]*Eastern Health Cancer Services, Melbourne, Vic,* [5]*Eastern Health Aged Medicine Program, Melbourne, Vic*

EMAIL sam.maleki@easternhealth.org.au

Background Potentially inappropriate medication (PIM) use is associated with adverse outcomes, particularly in older adults with cancer. Several PIM criteria have been developed for general older populations, but their relative performance in older adults with cancer remains unclear.

Aim To compare PIM identification, classification, and deprescribing in older adults with cancer using PIM criteria developed for non-cancer populations.

Methods This retrospective study included oncology and haematology inpatients aged ≥65 years admitted to a cancer service ward between January–December 2024. Four PIM criteria (Beers, STOPP, EU(7)-PIM, and LESS-CHRON) were applied. The primary outcome was number of PIMs identified on admission. Secondary outcomes included medication types, reasons for classification, and deprescribing rates.

Results A total of 276 patients were included (median age 76 years; range 65–98; 43.8% female). Median medication count was 8 (IQR 7). The number and prevalence of PIMs identified varied between criteria, with Beers and EU(7)-PIM identifying substantially more PIMs (543 [75.0%] and 516 [76.8%]) than STOPP and LESS-CHRON (146 [33.0%] and 152 [37.3%]).

Deprescribing rates also varied 10.9% (59/543) for Beers, 32.9% (48/146) for STOPP, 7.9% (41/516) for EU(7)-PIM, and 12.5% (19/152) for LESS-CHRON. Only 6% of PIMs were identified consistently across all criteria, primarily involving proton pump inhibitors and benzodiazepines.

Discussion There was substantial variation in PIM identification across criteria. Beers and EU(7)-PIM identified more PIMs; however, this did not translate into higher deprescribing rates, which were modest overall, with many PIMs remaining at discharge.

STOPP showed higher deprescribing rates than other criteria, indicating greater alignment with clinical action. Inconsistencies across criteria likely reflect differences between criterion-based classifications and clinical judgement in the cancer setting. Cancer-specific PIM criteria may improve identification and deprescribing in this cohort. Until such tools are available, outputs of non-cancer PIM criteria should be interpreted with caution and confirmed within the clinical context.

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Co-Design of Medication Duplication Alerts in the Electronic Health Record System

Jasvin Malhotra[1], Martha Turek[1], Leng Cam[1], Gillian Oates[1]

[1]*Bayside Health Peninsula Care Group, Frankston, Vic*

EMAIL jasvin.malhotra01@gmail.com

Background Therapeutic duplication alerts within the Electronic Health Record (EHR) can prevent unintended medication harm by identifying inadvertent concurrent prescribing of medications from the same class or same medicine. Local incidents have highlighted the need for a system-level intervention to reduce duplication-related prescribing errors. To avoid alert fatigue, ensure prescriber responsiveness and support safe prescribing, it is imperative to engage stakeholders in the development of clinically relevant alerts.

Objective Co-design clinically relevant duplicate therapy alerts within EHR in collaboration with prescribers.

Action (Method) A survey was developed with a list of 19 proposed therapeutic classes and medications tailored to the clinical context for exclusion from the duplication alert. The survey was distributed to prescribers via email and opportunistic in-person engagement across the hospital to capture insights on the proposed exemptions using Likert ratings (agree/disagree/unsure). Quantitative survey response analyses identified medication classes where duplication may be clinically appropriate. Primary outcome was the percentage of prescribers who agreed with the exclusion list of classes and medications.

Evaluation A response rate of 11% was achieved (n=50/455), contributing a total of 950 responses to the 19 proposed exemptions. The overall 69% (n=654) agreement represents the combined responses across all 19 proposed exemptions. 14% of responses (n=134) were unsure due to limited clinical experience with the therapeutic classes. Disagreement was present in 17% (n=162); however, the responses in this group indicated participants misinterpreted the survey as asking about inclusion, rather than exclusion. The results supported implementation of EHR duplicate alert with medication management governance endorsement.

Discussion Involving clinicians in co-design of duplication alerts supports clinical meaningfulness and relevance to practice. The results confirmed the proposed list aligns with current clinical practice and prescriber expectations, validating its potential for implementation in practice. Post-implementation monitoring and feedback will reassess prescriber satisfaction and guide further refinements.

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When limitless consumption is no longer an option – an audit of hospital dispensary consumables

Jalen Ruth Manalo[1], Lynda Blogg[1]

[1]*Fiona Stanley Hospital, Murdoch, WA*

EMAIL jalen.manalo@health.wa.gov.au

Background The healthcare system is increasingly recognised as a major contributor to climate change, with hospital operations at the forefront. There are significant greenhouse gas emissions associated with procurement activities, resource consumption, and waste production. Hospital pharmacy dispensary operations rely heavily on single-use consumables such as labels, bags, and packaging materials, thus contributing substantially to the environmental burden.

Objective(s) This project aimed to review consumables used within a tertiary public hospital pharmacy dispensary, classifying them as essential, non-essential, or replaceable. A secondary aim was to explore and evaluate more sustainable alternatives.

Method An audit of dispensary consumables was conducted using supplier invoices, ordering histories, and a physical assessment of consumable stock. Consumables were then classified as essential, replaceable, or non-essential through an algorithm considering legislation, policies, guidelines, standards, logistical rationale for use, and feasibility of sustainable alternatives.

Evaluation Collected data was analysed using Microsoft Excel®, and 132 lines of consumables representing 155,843 individual units were identified. Of the 132 lines, 112 were classified as essential (119,718 units, 76.8%), 18 lines as replaceable (36,125 units, 23.2%), and 0 lines as non-essential. Of the replaceable items, 15,225 units (42.1%) would no longer require regular procurement due to potential for substitution with longer-lasting and reusable means, or operational changes. The remaining replaceable items were mostly single-use plastics, and these were reviewed for substitution with more sustainable alternatives.

Discussion This project demonstrates that sustainability practices in hospital dispensaries can be achieved through substitution with more environmentally friendly consumables and redesigning workflows. Proposed interventions include reusable or biodegradable alternatives, redesigning processes, reviewing policies, and digitisation of recording systems. Whilst implementing these changes may involve upfront costs and workflow adjustments, they have great potential for long-term financial savings and environmental sustainability in hospital pharmacy practice.

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Limitless potential: The pharmacist's role in antibiotic optimisation during Emergency Department resuscitation

Ella Mar Fan[1], Dr Nazanin Ghahreman-Falconer[1,2], Hillarie Ho[1], Elizabeth Currey[2]

[1]*The University of Queensland, Brisbane, Qld,* [2]*The Princess Alexandra Hospital, Brisbane, Qld*

EMAIL e.marfan@student.uq.edu.au

Background Antibiotics are commonly administered in resuscitation settings where time pressure and overcrowding increase risk of errors and administration delays. Timely administration of the correct antibiotic at the right dose is critical. In Australia, the role of pharmacists in resuscitation settings is variable. There is scope to embed pharmacists within resuscitation teams to optimise antibiotic management.

Aim/Objective(s) To determine if the presence of an emergency medicine pharmacist (EMP) reduces time to administration and improves appropriateness of antibiotics in Emergency Department (ED) resuscitation settings.

Methods A combined retrospective-prospective controlled interventional cohort study of patients aged ≥18 years treated in an ED resuscitation area was conducted from November 2022 to May 2026. Primary outcomes were time to administration of antibiotics in sepsis, septic shock, trauma, and traumatic wounds when an EMP was involved (intervention) or absent (control). Secondary outcomes were number of antibiotics administered within guideline-recommended times and antibiotic appropriateness. Descriptive data analysis was undertaken.

Results Of 180 patients recruited, 32 patients were eligible for analysis. Median time from triage to administration of first antibiotic dose in trauma/traumatic wounds was 104 minutes (interquartile range [IQR] 73–152) in control patients versus 57 minutes (IQR 48–67) with EMP involvement. In sepsis/septic shock median time was 49 minutes (IQR 27–61) in controls versus 48 minutes (IQR 36–71) with EMP involvement. Across all indications and doses given with EMP involvement, 95% were considered appropriate and 93% of first doses were given within guideline recommended time.

Discussion This data supports the potential benefit of EMPs in ED resuscitation settings on the timeliness and appropriateness of antibiotic administration. There was a trend of shorter median time to antibiotic administration in trauma/traumatic wounds and greater appropriateness of antibiotics with EMP involvement. Further prospective research to expand the sample is currently under way.

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Drug interaction causing intensive care admission highlights critical role of pharmacists during transitions of care

Georgia Martinac[1], Alana Meaklim[1], Dr Rahul Costa-Pinto[1,2]

[1]*Austin Health, Heidelberg, Melbourne, Vic,* [2]*Department of Critical Care, The University of Melbourne, Parkville, Melbourne, Vic*

EMAIL georgiam13@hotmail.com

Objective To describe a clinically significant interaction between abiraterone (anti-androgen medicine used for prostate cancer) and propranolol and highlight the pharmacist's role in identifying medicine-related adverse effects during transitions of care.

Clinical Features A 61-year-old male with hormone-sensitive prostate cancer was transferred from rehabilitation to the intensive care unit (ICU) with undifferentiated cardiovascular collapse requiring vasopressor and inotropic support. He was hypotensive (blood pressure 84/59 mHg) and bradycardic (heart rate 39 beats per minute). Thirty-five days earlier, he had been admitted to hospital with acute septic arthritis and abiraterone was withheld on admission. Early into that admission, he had a seizure requiring ICU management; severe agitation in ICU was managed with propranolol 20 mg three times daily after standard therapies failed. Following transfer back to rehabilitation, abiraterone was recommenced (twenty-nine days after the acute presentation). Propranolol continued throughout rehabilitation; the initial dose was reduced to 20 mg twice daily two days after abiraterone was recommenced.

Literature Review Abiraterone is a strong inhibitor of cytochrome P450 2D6, the enzyme responsible for propranolol metabolism. Inhibition can increase propranolol exposure.

Pharmacist Interventions, Case Progress and Outcomes The ICU and medicines information pharmacists performed a targeted medicines review upon transfer to ICU and identified the interaction as the probable cause of the acute deterioration. Peak inhibition of propranolol metabolism likely occurred after six days of co-administration. Propranolol was ceased immediately after the cardiovascular collapse and abiraterone was withheld. Persistent bradycardia was consistent with propranolol accumulation; as it cleared, the patient recovered and was discharged to the acute ward. Pharmacist involvement enabled prompt diagnosis and avoided unnecessary investigations and treatments.

Discussion This case highlights the risk of interactions between targeted anticancer therapies and commonly used medications, particularly during transitions of care. Proactive pharmacist-led medication review is essential to detect high-risk interactions, optimise therapy and improve patient safety.

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Smart Spaces for Safer Medicines: Designing Medication Rooms in an Automated Digital Hospital

Sven Marxen[1], Sally Dixon[1], Aaron Van Garderen[2], Sarah McNutt[3], Cathy Molina[3], Tracey Cooney[1], Marnina Hales[1], Chen Foo[1]

[1]Logan And Beaudesert Hospitals, Metro South Health, Queensland Health, Meadowbrook, Qld, [2]eHealth Queensland, Queensland Health, Brisbane, Qld, [3]Metro South Health, Queensland Health, Meadowbrook, Qld

Background As pharmacy practice has evolved in the Australian hospital context, so too have the considerations for designing medication rooms for modern digital and automation enabled medication imprests. Many current hospitals were built before the wide adoption of Automated Dispensing Cabinets (ADCs) and well before implementation of and system integration with electronic medication management.

Objective(s) To describe learnings and considerations from greenfield and brownfield medication room designs in a digital hospital using integrated ADCs.

Action Planning took inspiration from existing site designs, along with standards, guidelines, literature, vendors and subject matter experts. Discussions with key professional group representatives outlining:

1. Key room requirements
2. Impacts of introduction of ADCs
3. Designing proposed future workflow options
4. Considering regulatory requirements.

Consultation with builders and architects occurred on medication room design with rationale and supporting evidence. Initial design was based on national guidelines. An iterative design process was then undertaken to modify the design to support the proposed future workflow. Designs included multiple considerations such as temperature monitoring, including ambient, closed circuit television and proximity locked safes and cupboards. Operational commissioning included considerations for implementation of proposed workflows, staff training, orientation and transition.

Evaluation Evaluation was conducted through post go live support monitoring for incidents, complaints and lessons learnt workshops. Lessons were then incorporated into future build designs across multiple years of redevelopment.

Discussion This process successfully designed and implemented a variety of contemporary medication rooms. They enabled improved workflows to take advantage of digital hospital and ADC integration. Medication storage and administration workflows were successfully designed, supported and implemented to maximally use profiled ADC and unit of use medication removal. This improved compliance with legislative and safety and quality standards. Through the journey key learnings were developed into design and go live checklists to assist in future redevelopment considerations and steps.

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Perioperative Management of C1-Esterase Inhibitor Deficiency: The Pharmacist's Role in Coordinating Specialised Medicines

Charlotte McBrayer[1]

[1]Prince Of Wales Hospital, Randwick, NSW

EMAIL charlotte.mcbrayer@health.nsw.gov.au

Objective To describe perioperative management of C1-esterase inhibitor (C1-INH) deficiency in emergency major surgery, and highlight the pharmacist's role in ensuring multidisciplinary collaboration and evidence-based use of specialised medicines such as C1-INH and icatibant.

Clinical Features An 83-year-old female with C1-INH deficiency presented for emergency orthopaedic surgery. Previous episodes of angioedema were gastrointestinal with no airway involvement. Perioperative stress and intubation increase the risk of angioedema. The pharmacist was consulted by anaesthetics to review appropriateness and access to icatibant.

Literature Review A review of Micromedex, DynaMed, UpToDate, AIDH and local guidelines confirmed that icatibant is only indicated for acute angioedema, while C1-INH is used for both treatment and prophylaxis. Although intravenous administration of icatibant was initially proposed by anaesthetics, guidelines recommended subcutaneous administration.

Pharmacist Interventions, Case Progress and Outcomes The pharmacist coordinated care across anaesthetics, haematology, immunology, and orthopaedics to ensure safe prescribing of C1-INH and icatibant by recommending an appropriate dose, administration route, and 'prn' use for icatibant. Recommendations for C1-INH were 20 IU/kg intravenous reconstituted and given at a rate of 4 mL/minute and icatibant 30 mg subcutaneous injection over 30 seconds into the abdomen. Guidance was provided to junior doctors on prescribing, obtaining immunologist approval, and clear handover was given to each specialty team. C1-INH was administered prophylactically, nurses were educated on the local protocol and icatibant was made readily accessible prior to surgery. No angioedema occurred perioperatively.

Discussion Perioperative angioedema is a life-threatening complication that requires careful coordination of C1-INH and icatibant to ensure safe and effective use. This case highlights the pharmacist's role in bridging specialist recommendations with frontline care through early multidisciplinary collaboration, supporting junior doctors with prescribing specialised medicines, and providing prompt education to nursing staff in rare but complex situations.

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What are the limitations? Consumer perspectives on ieMR implementation and pharmacist interactions

Dr Libby McCourt[1], Ethan Moya[2], Paul Firman[1,2], Sahra Ashley[1], Dale Trevor[1], Jessica Toleman[1,2]

[1]Royal Brisbane and Women's Hospital, Herston, Qld, [2]University of Queensland – School of Pharmacy, Dutton Park, Qld

EMAIL elizabeth.mccourt@health.qld.gov.au

Background Digital systems, including integrated electronic Medical Records (ieMR), can influence how pharmacists interact with patients. As our Quaternary Hospital prepares to implement ieMR in late-2026, the need to understand consumer perspectives on ieMR was identified.

Objective To explore consumer perspectives on ieMR implementation including perceived impacts on interactions with pharmacists.

Methods A short survey was co-designed with pharmacists and a consumer. It was piloted with four inpatients.

Consumers being discharged between 26/2/2026–10/3/2026 were invited to participate. Surveys were administered verbally by a project team member, with responses recorded in Microsoft Forms. The survey included three closed- and four open-response questions exploring awareness, perceptions, and expectations of ieMR, including its impact on pharmacist–patient interactions. Quantitative data were analysed descriptively, and qualitative responses underwent thematic analysis.

Evaluation Twenty-three consumers participated. Most had never been admitted to a hospital using ieMR (65%,15/23) and were unaware of its planned implementation at our hospital (57%,13/23).

Key concerns included 'data security and confidentiality', 'system reliability', 'impact on patient interactions', and 'staff capability and system effectiveness'. Perceived benefits included 'improved access to information', 'increased efficiency', 'improved communication and coordination', and 'improved care and safety'.

To best engage consumers during pharmacist interactions involving computers, consumers emphasised the importance of communication behaviours including explaining actions (n=6), sharing the screen (n=6), maintaining eye contact (n=3), and engaging the patient before using the computer (n=2). One participant noted that 'it would be helpful if staff explain what they are doing on the computer … so we still feel involved in our care.'

Discussion While awareness of ieMR among consumers was low, attitudes were positive. Findings highlight the importance of maintaining patient-centred communication within digital hospitals. Supporting pharmacists to integrate ieMR into workflows while preserving engagement, transparency, and trust will be critical to ensuring consumer confidence and optimising care during implementation.

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Limitless potential: Evaluating change in Research Capacity and Culture across a state-wide hospital pharmacy workforce

Dr Libby McCourt[3], Jacinta Johnson[1,2], Sally Marotti[1,2]

[1]South Australia Pharmacy, Adelaide, SA, [2]Adelaide University, Adelaide, SA, [3]Royal Brisbane and Women's Hospital, Herston, Qld

EMAIL elizabeth.mccourt@health.qld.gov.au

Background A robust research culture within healthcare is linked to improved patient outcomes, reduced mortality, and enhanced delivery of evidence-based care. In 2019, a state-wide hospital pharmacy service utilised the 'Research Capacity in Context' (RCC) tool to better understand performance at individual, team and organisational levels. Results informed development of a strategic plan implemented over four years to improve research capacity and culture.

Aim To determine the impact of a research strategic plan in a statewide public hospital pharmacy service on research capacity and culture at organisation, team, and individual levels.

Method An online, anonymous, cross-sectional questionnaire using the RCC tool was distributed to all pharmacy staff in public hospitals across the state in 2019 (baseline, August-September 2019) and again in 2025 (post-strategy implementation, October-November 2025). For organisational, team, and personal perceptions respondents rated statements from 1 (lowest) to 10 (highest). Descriptive statistics and comparative analyses assessed changes in research capacity and culture scores, research participation, and perceived barriers and motivators.

Results Overall 410 staff participated (278 in 2019; 132 in 2025). Organisational-level research capacity and culture improved significantly, particularly in 'mechanisms to monitor research quality' (mean 4.6 (2.6) vs 5.9 (2.6), $p<0.01$) and 'opportunities for dissemination' (mean 5.4 (2.7) vs 6.7 (2.7), $p<0.01$). No significant changes were observed at team or individual levels. The proportion of respondents reporting research included in their role increased (27% (76/278) vs 50% (66/132)). Research outputs, including publication authorship, increased (15% (26/177) vs 27% (35/132), $p=0.01$). Barriers such as lack of time and competing priorities remained prevalent.

Discussion Implementation of a statewide strategic plan to develop research capacity, culture, capability and collaboration was associated with improved organisational outcomes but did not translate to team or individual levels. Future strategies should focus on strengthening team-level support and developing individual research skills to enhance engagement.

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Driving Innovation, Standardisation and Partnership: A Team-Based Approach to Development of Dispensary Entrustable Professional Activities

Stephanie McKellar[2], Christopher Macintyre[1], Bronwen Colhoun[2], Tara Clayson-Fisher[1], Alison Walker[3], Dr Fiona Warner[4], Shannon Copping[4], Kaitlyn Palfrey[1,2], Dr Lisa Stanton[1], Catherine Drake[1], Morgan Honner[3], Holly Bailey[2], Emily Cooper[1,2]

[1]Statewide Hospital Pharmacy, Tas, [2]Royal Hobart Hospital, Hobart, Tas, [3]North West Regional Hospital Pharmacy, Burnie, Tas, [4]Launceston General Hospital, Launceston, Tas

EMAIL steph.mckellar@outlook.com

Background In 2025, a collaborative review of Dispensary Entrustable Professional Activities (EPAs) by dispensary and pharmacy education teams within a hospital network found variation in structure and application of EPAs across sites and between clinical and dispensary services. Opportunities were identified to standardise the Dispensary EPA framework, expand application to all pharmacists and technicians, and incorporate paediatric-specific dispensing principles, which were not formally included in orientation processes.

Objective(s) To develop a statewide Dispensary EPA program for pharmacists and pharmacy technicians to ensure consistent supervision, feedback and workforce development.

Action A multidisciplinary statewide working group was established including statewide dispensary and technician managers, pharmacy educator, dispensary technicians and pharmacists, and specialist paediatric and project pharmacists. Between August 2025 and January 2026, the group co-designed EPAs for dispensing inpatient, outpatient, discharge, and controlled and restricted medications. Dispensing principles specific to paediatric and neonatal patients were incorporated alongside adult elements and the scope of practice of technicians and credentialled accuracy checking technicians were reflected in the EPA record. Accompanying learning tools and processes were developed to support consistent application of the framework. The program launched in January 2026, with dispensary leadership operationalising the change, supported by educators and change champions.

Evaluation By 31st May 2026, 19 intern pharmacists, three pharmacists and one technician had commenced or completed the EPA program. Feedback from learners and dispensary leadership indicate a cultural shift towards interprofessional learning, increased orientation and feedback, and improved confidence of learners across different operational areas. Opportunities to improve include increased clarity on program requirements and increased time for learners in each role.

Discussion Collaborative design and effective change management strengthened relationships between education, specialist and dispensary teams and empowered pharmacist and technician champions. This enabled shared ownership, alignment across sites and successful implementation of a standardised dispensary EPA process for workforce development.

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Crossing the Prescribing Threshold: Limitless Possibilities – Experiences of a Collaborative Pharmacist Prescriber.

Kath McLean[1]

[1]Princess Alexandra Hospital, Woolloongabba, Qld

EMAIL Kath.mclean@health.qld.gov.au

Background Collaborative Pharmacist Medication Prescribing (CPMP) is a form of pharmacist prescribing in collaboration with doctors that's legislated in Queensland and implemented in March 2026 on a busy surgical ward within a large Queensland metropolitan hospital. Pharmacist involvement in prescribing is known to reduce medication errors and alleviate physician workload. This integrated approach streamlines transitions of care, reduces errors, and optimises timely medicines management.

Objective(s) To describe the experiences of the first CPMP pharmacist at a metropolitan hospital and evaluate the process and impacts.

Action (method) Extensive international evidence demonstrates numerous documented benefits of this approach. This study evaluated what aspects of the new CPMP model worked, barriers, and future directions to improve the process.

Evaluation When initiating a new model of care within resources, key target areas were identified. The process was discussed and supported by senior staff (Directors of Surgical areas involved) which helped the transition process. Within the first 4 months of implementation 120 occasions of service and collaborative prescribing have occurred. Due to experience within the areas, rapport, and relationship with staff, my expertise was welcomed, and my clinical opinion around optimal patient care was welcomed. The greatest barrier thus far has been who local policy allows me to collaborate with. This new service has become quickly relied upon and change in prescribing habits is occurring even when I am not on the rounds.

Discussion For healthcare systems, this model yields operational and economic efficiencies. Having a senior pharmacist working with surgeons benefited the patient, ensuring optimal patient care and pharmacotherapy. Improved patient flow has been acknowledged early on with anecdotal reports highlighting improved discharge times and communication between staff allowing more timely delivery of medication. Increasing scope is currently being discussed to expand the role within the teams due to its success so far.

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To Cease or Not to Cease? The Management of Antidepressants in the ICU

Charlotte Meads[1,2,3], Dr Nazanin Ghahreman-Falconer[2,3], Belinda Badman[2]

[1]Queen Elizabeth II Jubilee Hospital, Coopers Plains, Brisbane, Qld, [2]Princess Alexandra Hospital, Dutton Park, Brisbane, Qld, [3]University of Queensland, St Lucia, Brisbane, Qld

EMAIL charlotte.meads@health.qld.gov.au

Background Antidepressant prescribing in Australia is rising, and we must consider usage in vulnerable populations including the critically ill. The potential impact of abrupt cessation is hypothesized to contribute to neurological harms like delirium. Alternatively, continued therapy increases risk of toxicity from altered drug pharmacokinetics, and adverse drug effects (ADEs). Understanding the impact of continuation versus cessation is key to ensuring patient safety.

Aim/Objective(s) To determine the rates of antidepressant cessation upon admission to Intensive Care Unit (ICU), and the occurrence of withdrawal-related delirium between patient groups, as well as quantify the rates of antidepressant ADEs in continued patient group.

Methods This was a retrospective study at a metropolitan hospital. Primary outcome was the number of patients with interruption of antidepressant therapy for ≥24 hours upon admission to ICU. Secondary outcomes included delirium assessment using validated tools (Confusion Assessment Method [CAM-ICU]), antidepressant ADEs, length of stay, and duration of ventilation. Data was obtained through MetaVision and Integrated electronic medical records. Descriptive statistics, univariable and multivariable analysis was conducted to determine rates and correlation between CAM-ICU scores and antidepressant status.

Results Of 172 ICU admissions, 33 (19.2%) had antidepressant therapy continued, and 96 (55.8%) ceased. The odds of positive CAM-ICU in the ceased group was OR 2.73 (95% CI 0.91, 9.43, p= 0.086). A single antidepressant-attributed ADE was identified. Duration of mechanical ventilation was found to be shorter in the continued group (p= 0.003).

Discussion Antidepressant therapies were more commonly ceased on ICU admission. The abrupt cessation of antidepressants may be contributing to higher odds of delirium in ICU patients, whilst continuation did not show high incidence of antidepressant ADEs. Powered prospective studies are required to further examine findings.

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Limitless or not? That's the question! Designing paediatric dose-range rules in a tertiary health service

Amber Milne[1], Tara Hay[2], Thomas Ewin[3], Maddison White[3], Teana Brewster-O'Brien[4]

[1]Department of Corporate and Digital Development, Darwin, NT, [2]Alice Springs Hospital, NT Health, Alice Springs, NT, [3]Royal Darwin and Palmerston Hospital, NT Health, Darwin, NT, [4]Clinical Innovation and Research, NT Health, Darwin, NT

EMAIL amber.milne@nt.gov.au

Background Paediatric patients remain vulnerable to dosing errors when electronic medication management (eMM) systems are in use. Dose-range rules and age-based dose caps detect unsafe orders but often require local configuration. At a tertiary hospital, a six-week-old infant was prescribed paracetamol 605 mg (150 mg/kg/dose, reference dose 15 mg/kg/dose) due to incorrect recorded weight. Similar incidents emphasised a need for paediatric dose-range rules.

Objectives Reduce paediatric high-dose prescribing errors through targeted dose-range rules and age-based dose caps.

Action A retrospective review of paediatric incidents identified three recurring contributors to eMM system related dosing errors: incorrect patient weight, selection of adult presets, and inappropriate weight-based calculations in children with extreme weights. Five high-use medicines were prioritised for rule development: paracetamol, ibuprofen, cefazolin, benzylpenicillin and oxycodone. Parameters were set for maximum single dose, cumulative daily dose, minimum dosing interval and age-based dose caps to 12 years. Clinicians validated parameters and completed user testing before implementation.

Evaluation Vendor-generated queries identified 9,733 trigger events over 9-months. Data analysis is ongoing; however, early qualitative review shows that rules prevented clinically significant errors including inappropriate adult preset selection, duplicate orders and prompted dose adjustments for ideal body weight. A high proportion of trigger events (over 90%) were insignificant relating to dose rounding, highlighting the need to refine rule parameters to minimise alert fatigue.

Discussion Dose-range rules and age-based dose caps help prevent high dose prescribing errors, though design must balance safety benefits with alert burden. This project demonstrates a practical local approach to developing paediatric dose range rules and their potential to prevent significant errors. Tailoring rules to system behaviour and local practice is complex, requiring ongoing review and clinician engagement to optimise rules and minimise low-value alerts.

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AI-Enabled Mentoring in Hospital Pharmacy: A Scalable Model for Leadership Development

Neil Mistry[1]

[1]*HPS, Sydney, NSW*

EMAIL neil_mistry18@hotmail.com

Background Leadership development in hospital pharmacy is often challenging due to time constraints, inconsistent documentation, and competing priorities. This can impact leader engagement, progression, and early performance.

Objective(s) To enhance a structured mentoring program supported by digital tools and artificial intelligence (AI), aiming to improve engagement, documentation, administrative efficiency, consistency, and mentee development outcomes.

Action (Method) A digital structured mentoring program was implemented for three mentees, supported by Microsoft SharePoint and AI-enabled tools to standardise and enhance mentoring delivery.

SharePoint was utilised to:

- Centralise mentoring documentation and session tracking
- Provide structured templates and predefined discussion points from short survey prior to the session
- Enable visibility of progress and accountability

AI tools were incorporated to:

- Generate session summaries and action plans
- Plan session agenda and discussion points
- Reduce administrative burden for mentors

The mentoring sessions were conducted using guided templates focusing on current challenges, leadership capability, and wellbeing.

Evaluation All three mentees completed the revised method over a 6-month period (100% participation and retention).

- 3/3 mentees reported increased quality of the session
- 3/3 demonstrated improved clarity on session outcomes and goals
- Mentor-reported documentation time reduced by approximately 75% with AI-assisted summaries
- 1/3 mentees progressed to expanded responsibilities and leadership opportunities during the 6 months

Qualitative feedback highlighted improved structure, stronger mentor-mentee relationships, and increased accountability for development goals.

Discussion The integration of AI and digital platforms into the mentoring program improved consistency, reduced administrative burden, and supported development in a small cohort of leaders in pharmacy.

This scalable model establishes a structured, repeatable system for broader use. It enables multiple mentors to deliver consistent, high-quality mentoring through shared templates and centralised, AI-supported documentation. This enhancement supports standardisation and may extend to other professional development processes, such as performance reviews and goal setting.

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A Simple Shift in Induction: Improving Engagement Through Accountability-Based Onboarding and Understanding the Why

Neil Mistry[1], Bashir Al Hassany[1]

[1]*HPS, Joondalup, WA*

EMAIL neil_mistry18@hotmail.com

Background Hospital pharmacy induction programs commonly focus on systems, workflows, and procedures. While essential, this can leave new staff overwhelmed and unclear about how their role contributes to patient care and service outcomes. This project explored whether introducing accountability and purpose early in induction could improve engagement, role clarity, and service improvement.

Objective(s) To redesign the induction using an accountability-based onboarding framework that clarifies the why. A secondary objective was to determine whether this approach could reduce overwhelm and improve competency in the role.

Action (Method) A revised induction model was implemented for new pharmacy staff. Initial onboarding discussions focused on three questions: why the staff member was hired, what they are accountable for, and what they want to achieve. Subsequent training was aligned to these responses, linking daily responsibilities to patient care and service priorities.

The approach was applied to a workflow challenge within the day procedure unit where high patient turnover contributed to delays in pharmacy services. A newly inducted pharmacy technician was given accountability to help address this service gap. Within the first week, the technician engaged with nursing and medical staff, identified workflow barriers, and proposed a practical solution to improve medication supply processes.

Evaluation Following implementation, 96% of new starters reported clarity in their accountabilities within the first week, compared with 39% prior to implementation. Staff also reported reduced feelings of overwhelm and greater motivation. In the day procedure unit example, the initiative was a successful turnaround in pharmacy services defined by nursing and patient feedback.

Discussion An accountability-based induction model improved early engagement and role clarity for new pharmacy staff. Future work will explore broader implementation, including use during employee review discussions, and assess impacts on workforce retention and patient outcomes. This low-cost, scalable approach may support faster competency, team collaboration, and workforce engagement.

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Fix With Premix? Reducing Intravenous Potassium Phosphate Treatment Delays

Ellen Moes[1], Alice Staciwa[1], Cindy Kim[1], Peter Samios[1]

[1]*St Vincent's Hospital Sydney, Darlinghurst, NSW*

EMAIL ellen.moes@svha.org.au

Background Intravenous (IV) potassium phosphate is a high-risk medication requiring timely administration to treat hypophosphataemia and hypokalaemia. Availability of concentrated potassium phosphate vials on general wards is restricted to minimise risks associated with preparation and administration. This contributes to treatment delays. Premixed potassium dihydrogen phosphate 10 mmol/250 mL bags were introduced to improve timeliness of administration and enhance safety by eliminating ward-based dilution of concentrated vials.

Objective(s) To evaluate whether the introduction of premixed potassium phosphate bags improved timeliness of administration, with a target interval of ≤60 minutes from ordering to infusion commencement.

Action (Method) A retrospective observational study at a NSW metropolitan hospital compared potassium phosphate doses administered between 1 September-1 December 2025 (pre-implementation) and 1 February-1 May 2026 (post-implementation).

Ordering and administration data were extracted from the electronic medication management system and restricted to 'stat' orders for IV potassium phosphate 10 mmol in 250 mL diluent. The ordering-to-administration interval was calculated. Where multiple doses were charted at the same time for a single patient, only the first dose was included.

Summary measures included: central tendency, variability, and proportions meeting predefined time targets.

Evaluation A total of 229 pre-implementation and 255 post-implementation administrations were analysed. Descriptive analysis showed that median time from ordering to administration decreased by 96 minutes (226 to 130 minutes), with reduced variability (IQR 299 to 218.5 minutes).

The proportion of doses administered on time (within 60 minutes) approximately doubled (from 17.5% to 34.5%). Additionally, orders administered within 120 minutes increased from 30.6% to 48.6%, and within 180 minutes from 42.8% to 60.8%. Prolonged delays (≥240 minutes) decreased from 49.3% to 29%.

Discussion Introduction of premixed potassium phosphate bags reduced treatment delays, improving timeliness of electrolyte replacement. It highlights the impact of optimising medication access and workflow efficiency for high-risk medication administration. Cost effectiveness and safety evaluation are ongoing.

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Transforming Dispensary Culture Through Short (<10-minute) Structured Daily Pharmacy Huddles

Mahmoud Mohamed[1]

[1]*WSLHD, Cumberland, NSW*

EMAIL ma7moud_rushdy@yahoo.com

Background Hospital pharmacy dispensaries are high-pressure environments commonly associated with workforce stress, disengagement, interpersonal conflict, and operational inefficiencies. Traditional operational meetings frequently prioritise workflow demands without adequately addressing workforce engagement or team culture.

Objective To evaluate a short (<10-minute) structured daily huddle model designed to improve staff engagement, workplace culture, and operational performance within a hospital pharmacy dispensary.

Action (Method) For an 18-month period to March 2026, all twelve pharmacy dispensary team members, including pharmacists, technicians, and pharmacy assistants, attended daily morning huddles. Components included gratitude reflection, intention statements, peer recognition, solution-focused problem solving, and escalation of broader operational concerns. Team members identifying operational challenges were encouraged to propose an initial solution to promote accountability and collaborative problem solving. Fortnightly huddles focused on professional goals, quality improvement activities, and recognition of positive professional behaviours and skills.

Evaluation Staff feedback identified huddles as safe and supportive spaces that improved workforce engagement, team cohesion, and operational performance. Significant reductions in overtime, workflow gaps, workplace conflict, and sick leave rates were observed, while average discharge medication turnaround time reduced by 50% to 33 minutes. Staff retention remained high, with the dispensary evolving from a historically nonpreferred rotation into an area attracting pharmacists seeking permanent positions and professional development opportunities. A strong peer-recognition culture emerged, with team members actively nominating colleagues for organisational awards. The team achieved multiple educator, early career, professionalism, and kindness awards and nominations, representing an unprecedented level of allied health recognition for the pharmacy department.

Discussion Integrating workforce engagement strategies into structured operational huddles improved psychological safety, shared accountability, workplace culture, and pharmacy operational performance. This leadership model demonstrated that intentional investment in workforce engagement and professional recognition can contribute to sustainable operational improvement, workforce retention, and development of high-performing pharmacy teams within demanding hospital environments.

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A pre-post nonrandomised follow-up study of pharmacist-led prescription writing educational interventions to final-year medical students

Sophie Mokrzecki[1,2], Dr Stephen Perks[1,2], Dr Michael Crowe[2], Dr Tilley Pain[1,2], Professor Tarun Sen Gupta[2], Professor Andrew Mallett[1,2,3]

[1]*The Townsville University Hospital, Townsville, Qld,* [2]*James Cook University, Townsville, Qld,* [3]*Institute for Molecular Bioscience, The University of Queensland, Brisbane, Qld*

EMAIL sophie.mokrzecki@health.qld.gov.au

Background Intern medical officers write the highest proportion of hospital prescriptions and are more likely to make prescribing errors. Lack of standardised education and assessment during university can contribute to inconsistent technical prescribing skills. Further investigation is required to determine if medical education has prepared them to write safe and legal medication prescriptions.

Aim/Objective(s) This three-phase-follow-up study aimed to; assess if pharmacist-led multimodal education interventions quantitatively changed participant's technical prescribing skills and dispensability of prescriptions, determine appropriate confidence when comparing self-perceived confidence in a prescription being safe and legal with the dispensability, and evaluate knowledge retention at follow-up as interns.

Methods This nonrandomised pre-post-interventional follow-up study has been ethically approved (H9114). Final-year medical students in 2024 received pharmacist-led education using a didactic and hands-on case-based workshop, and an innovative online learning module. Participants were assessed via a novel online test delivered by Qualtrics before the intervention, after five-weeks clinical placement, and at one-year follow-up as interns in 2025 and outcomes analysed.

Results Paired analysis in R-4.5.3 and Microsoft Excel included 22 final-year medical students and 10 interns. All participants felt the intervention had prepared them to write medication prescriptions. There was significant improvements in prescription dispensability pre- to post-intervention 0.28 (95%CI 0.16, 0.41;P<0.001) and pre-intervention to follow-up 0.15 (95%CI 0.04, 0.27;P=0.011). Mean dispensability probability increased in confident participants pre- to post-intervention (0.10 and 0.44 respectively) before declining slightly at follow-up (0.25) but remaining above baseline.

Discussion Whilst technical prescribing skills declined slightly at follow-up, the intervention showed consistent prescribing competence and confidence improvements. Our educational interventions and assessments are pivotal in breaking boundaries for curriculum development, improving future prescribing practice, and contributing to medication safety initiatives. Prioritising future medical education and assessment may contribute to the World Health Organisation goal of Medication Without Harm.

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Pharmacy-led development of a referral pathway to improve access to acute care at home

Terri Morgan[1], June Chan[1], Dr Elizabeth Marsden[1]

[1]*Metro North Older Persons Emergency Network, Brisbane, Qld*

EMAIL terri.morgan@health.qld.gov.au

Background Health systems are seeking alternatives to Emergency Department (ED) presentations for appropriate patients to improve hospital capacity. We are a community-based emergency substitution service providing in-home care for older patients as an alternative to ED transfer. A pharmacist identified a newly established home-based acute care model that could overcome a clinical governance barrier and enable a direct referral from our service to ambulatory care, providing hospital-level treatment in the home.

Objective(s) To design, implement and evaluate a pharmacist-led service improvement project establishing a referral pathway between a community-based emergency substitution service and a home-based acute care service.

Action (Method) A retrospective review of transfers from our community service-to-ED over four months was conducted to assess suitability for referral to home-based acute care. Pharmacist-led stakeholder engagement defined referral criteria, governance, and handover processes. A co-designed pathway incorporating transfer of clinical governance was implemented, supported by clinician education, antimicrobial stewardship, and post-implementation evaluation.

Evaluation Pre-implementation review of 52 transfers to ED identified 18 with potentially suitable indications, however, documentation gaps limited confirmation of eligible patients. Despite low anticipated yield, establishing a referral pathway remained worthwhile given its potential to support system capacity and improve patient experience. Since implementation, six patients have been accepted: four completed treatment via the home-based acute care service and two required admission. Forty-nine treatment days were delivered in the community, avoiding inpatient bed use and associated costs. Outcomes demonstrated effective delivery of hospital-level care at home, including end-of-life support.

Discussion This project demonstrates pharmacist leadership in linking services by addressing governance barriers and facilitating an alternative to ED transfer. It supports system capacity while delivering patient-centred care aligned with individual treatment goals. Despite low volumes, the pathway shows impact and scalability, with planned expansion to nurse practitioner-initiated referrals and broader eligibility criteria to enhance care access.

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Lost in the Circuit? Exploring Voriconazole Exposure in Patients Receiving Extracorporeal Membrane Oxygenation (ECMO)

Ashlei Mornement[1,2], Susan Poole[2], Dr Mohd Hafiz Abdul-Aziz[3], Professor Andrew Udy[2], Professor Michael Dooley[2], Dr Gene Chai[2]

[1]Western Health, Melbourne, Vic, [2]Bayside Health Alfred Care Group, Melbourne, Vic, [3]University of Queensland Centre for Clinical Research, Brisbane, Qld

EMAIL ashleimornement@gmail.com

Background Critically ill patients receiving ECMO may have reduced exposure to lipophilic antimicrobials due to circuit sequestration. Voriconazole is an example of such agent, where therapeutic drug monitoring (TDM) is recommended. Target plasma trough concentrations of 1–5.5 mg/L are recommended, although the optimal dosing regimen on ECMO remains uncertain.

Aim To describe voriconazole dosing, plasma drug concentrations, and target attainment in a tertiary centre ICU in patients receiving ECMO, as compared to non-ECMO patients.

Method Retrospective cohort study was conducted from April 2013 – September 2023. Adult ICU patients aged ≥18 years receiving voriconazole treatment, initiated in ICU with a loading dose, with at least one trough concentration available, were eligible for inclusion. Patients were then categorised into ECMO or non-ECMO groups. Dosing regimens and initial trough concentrations were then evaluated, with a target attainment defined as a plasma trough concentration of 1–5.5 mg/L.

Results Twenty-four patients (9 ECMO, 15 non-ECMO) were included in the study. The mean±SD loading and maintenance doses were higher in the ECMO group than the non-ECMO group (loading: 6.5±1.0 mg/kg vs 5.7±0.5 mg/kg non-ECMO, p=0.02; maintenance: 4.4±0.9 mg/kg vs 3.7±0.7 mg/kg non-ECMO, p=0.03). The mean first trough concentration was higher in the ECMO group, although this was not statistically significant (5.2±3.4 mg/L vs 4.0±2.7 mg/L non-ECMO, p=0.36). Voriconazole treatment was longer among patients on ECMO (mean±SD ECMO 21±14 days vs non-ECMO 16±17 days, p=0.50), with a greater proportion obtaining supratherapeutic concentrations (ECMO 56% vs non-ECMO 27%, p=0.26) and a lower proportion achieving target attainment (ECMO 33% vs non-ECMO 60%, p=0.37).

Discussion ECMO patients received higher voriconazole doses and had an increased proportion of supratherapeutic concentrations. However, the sample size and dosing variability limit the ability to determine whether standard voriconazole dosing achieves therapeutic concentrations in this cohort. Further research is required to define the optimal dosing regimen in this population.

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Appropriateness of psychotropic use in the management of delirium in the older patient population.

Jasmine Moustafa[1], Hashini Kumara, Jake Bromley, Duy Le

[1]Alfred Health, Melbourne, Vic

EMAIL j.moustafa@alfred.org.au

Background The Australian Commission on Safety and Quality in Healthcare National Delirium Clinical Care Standard and hospital protocol advise antipsychotic use for the pharmacological management of delirium should be reserved for patients who are an imminent threat to themselves or others, with a plan for ongoing review and cessation.

Aim/Objective(s) To evaluate the pharmacological management of delirium and adherence to hospital guidelines in older adults admitted under a Geriatric Evaluation and Management (GEM) service.

Methods This retrospective audit included inpatients aged ≥65 years under the GEM service identified by ICD-10AM codes for delirium (Jan-Dec 2024). A random sample of 99 patients were screened for inclusion. Cases of terminal delirium, delirium onset in the intensive care unit and patients admitted under a home-based bed substitution program were excluded. Data relating to the management of delirium was collected, including psychotropic medications prescribed and ceased during the inpatient stay and/or on discharge from the GEM service.

Results All patients (n=61; mean±SD age: 85±7.3; 45.9% male) received non-pharmacological management, and 67.2% (n=41) received psychotropic medications. Overall, delirium management was in line with hospital protocol in 75.4% of patients (psychotropic use n=25; non-pharmacological n=20). Olanzapine and quetiapine were most frequently prescribed initially (n=22 orders). Prior to admission to hospital, six (9.8%) patients were prescribed ≥2 psychotropic medications, compared to 12 (19.7%) on discharge. Psychotropics were deprescribed in 48.8% (n=20/41) on/before discharge. Of patients who continued psychotropics on discharge (n=21), delirium was unresolved in 16 (76.2%) patients and 11 (52.4%) had no plan for review on discharge.

Discussion Management was largely guideline-adherent; however, gaps in psychotropic selection, deprescribing, and discharge planning remain. These findings have informed strategies to strengthen adherence to the Clinical Care Standard to improve psychotropic deprescribing including prescriber education and improving documentation of deprescribing plans on discharge.

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Improving Timeliness of Sepsis Care Through Pharmacist Integration, Clinical Decision Support and Staff-Endorsed Pathways

Shannon Mullen[1]

[1]*Sir Charles Gairdner Hospital, Nedlands, WA*

EMAIL shannon.h.mullen@gmail.com

Background Timely delivery of sepsis bundle interventions, particularly antimicrobial therapy, is critical to improving outcomes. A previous institutional audit demonstrated a median time to antibiotics of 137 minutes, highlighting substantial delays. A multifaceted approach incorporating pharmacist expertise, decision-support tools, and structured workflows was trialled.

Objectives To evaluate the activity profile, preliminary clinical impact, and staff acceptability of a pharmacist-integrated multidisciplinary ED sepsis alert pathway.

Action A prospective observational evaluation was conducted during a weekday (07:30–15:30) 3-month sepsis alert pilot. The intervention included an embedded ED pharmacist, a sepsis clinical nurse consultant, a hospital-specific sepsis antibiotic guideline developed with the local infectious diseases team, incorporating novel to the state IV bolus first-dose antibiotic administration for sepsis presentations, and a structured sepsis alert flowchart. A concurrent snapshot audit compared in-hours (intervention) and out-of-hours care. Staff experience was assessed via multidisciplinary survey (n=109).

Evaluation A total of 121 sepsis alerts involved pharmacist support, primarily in antibiotic selection, preparation, administration advice, and prompting escalation of treatment where indicated.

Preliminary findings from a snapshot audit (n=56) demonstrated improved in-hours performance: time to antibiotics (26 vs 68 minutes), fluids within 1 hour (78.5% vs 55.6%), and repeat lactate compliance (76.9% vs 40%). Notably implementing the guidelines improved out-of-hours performance for all metrics compared to the baseline audit.

Staff feedback demonstrated strong uptake and acceptability 96% awareness, 92% flowchart use, 96% ease of use, 83% reported earlier treatment initiation, and 92% support continuing the program.

Across all alerts (n=367), only 43.6% occurred during service hours.

Discussion A pharmacist-integrated sepsis pathway incorporating site-specific guidance and rapid IV antibiotic administration improved delivery of time-critical care and was strongly endorsed by staff. While outcomes remain preliminary, system-wide improvements including a trend toward reduced length of stay, combined with strong staff uptake, support extending ED pharmacy service hours and broader implementation.

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From firefighting to flow: Operational excellence as a scalable enabler of safer, sustainable pharmacy practice

Kirsty Mullin[1]

[1]*Slade Pharmacy, Green Point, NSW*

EMAIL kirsty.mullin@sladepharmacy.com.au

Background [NJ1.1] Hospital pharmacy services face workforce pressure, operational variation and fragmented workflows, driving workarounds that reduce safety visibility and limit pharmacists' capacity for patient-centred care. The Pharmacy Operational Excellence program standardises operations and uses technology to improve workflow efficiency and partner hospital satisfaction.

Objective(s) To describe how a scalable operational excellence model across a national pharmacy network improves workflow reliability and visibility, safety and compliance visibility, partner hospital satisfaction, and workforce sustainability, enabling pharmacists to practise at top of scope.

Action (Method) Practice-based case study describing implementation of a standardised operating model across over 70 partner hospitals. Key actions included workflow mapping to identify variation and constraints; standard process design with clear roles/decision ownership; site onboarding and training; deployment of digital solutions and automation; and dashboard reporting to support governance, safety/compliance visibility and continuous improvement.

Evaluation Evaluation used routine operational/service indicators (e.g., workload visibility, turnaround and exceptions) and stakeholder feedback captured via the annual Hospital Satisfaction Survey (5-point scale; 1 = least favourable, 5 = most favourable), supported by dashboards.

The implementation of a digital medication order solution enabled real-time order transmission, prioritised queues and live monitoring; adoption by over 950 nurses improved visibility of workload, turnaround and exceptions. Hospital satisfaction improved, supported by the annual survey: 1,560 responses (+26.4%), a 10% increase in overall satisfaction, and sites scoring <4 reduced from 32 (2024) to 12 (2025).

Automation feasibility analysis identified substantial, bankable efficiency benefits from redesigned dispensing workflows, allowing pharmacists to focus on clinical activities rather than manual administrative tasks.

Discussion Operational excellence is a transferable, system-level approach that improves reliability and safety and compliance visibility through standardisation, prioritisation and real-time monitoring. Combined with digital and automation investment, it supports a sustainable workforce model and enables pharmacists to practise at top of scope across diverse hospital sites

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Limitless reach: characterising a statewide after-hours pharmaceutical supply on-call service

Patrick Murphy[1]

[1]*Central Pharmacy – Supply Chain Branch , Richlands, Qld*

EMAIL patrick.murphy2@health.qld.gov.au

Background Hepatorenal syndrome doesn't wait for Monday. Neither does an outback community running low on a critical antibiotic, or an island township that can only be reached by air. Across a geographically dispersed state health systems, after-hours access to medicines can be the difference between life and death.

A centralised pharmaceutical warehouse operates a unique on-call model: a single point of contact for urgent medicines access across the health system, reaching communities more than 2,000 kilometres away. Despite its scale and reach, this service has never been formally described.

Objective(s) To describe the volume, nature, reach, and operational burden of after-hours on-call activity over a nine-month period.

Action (Method) A retrospective audit of on-call records was conducted from August 2025 to April 2026. Each record was classified by site, geographic category (metropolitan or regional/remote), and call type: urgent medicine dispatch, stock availability confirmation, advise, or internal facility related issue.

Evaluation 207 on-call interactions were recorded: 175 spanning 36 sites, and 32 related to internal warehouse incidents (security and warehouse management issues), reflecting the breadth of operational responsibility.

137 (78%) resulted in urgent supply dispatch 99 by taxi, 18 via next-flight courier, and 17 by self-delivery. 11 interactions involved stock availability confirmations and 27 sought product information. Regional and remote facilities accounted for 24 interactions. 66% of all interactions occurred on weekends.

Discussion A single point of contact. An entire state health system. This audit demonstrates that a centralised warehouse model can deliver limitless after-hours medicines access. From metropolitan emergency departments to the state's most remote communities, geography and time of day are no barrier to medicines access. Operational responsibility extended beyond supply, encompassing facilities management and after-hours logistics coordination across a geographically dispersed network. These findings provide the first formal characterisation of this service's volume, reach and operational burden.

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Evaluating Prescribing Compliance in Empiric Microbial Keratitis: Adherence to Hospital Guide and Therapeutic Guidelines®

Dr Shrie Muthumagesan[1], Wan Lin Michelle Tan[1], Dr Grace Tang[1]

[1]*Fremantle Hospital – Department Of Health WA, Perth, WA*

EMAIL he211031@health.wa.gov.au

Background Microbial keratitis (MK) is a sight-threatening corneal infection requiring urgent ophthalmology assessment and empiric antimicrobial therapy. Therapeutic Guidelines® (TG®) recommend only ocular antimicrobials (ofloxacin, ciprofloxacin, or cefazolin and gentamicin) unless scleral spread occurs. Our hospital ophthalmology orientation guide (OOG) recommends cefazolin and gentamicin eyedrops plus oral doxycycline, atropine eyedrops and oral ascorbic acid. In the absence of a validated local guideline, evaluation of prescribing compliance is warranted as part of antimicrobial stewardship.

Objective(s) This study evaluates empiric prescribing compliance with hospital OOG and TG® for MK, the pattern of oral anti-inflammatories and atropine use as well as the incidence of antimicrobial-related adverse events.

Action (Method) MK admissions (2023–2025) were identified via clinical codes and verified against ophthalmology records. Prescribing data from electronic records was collected using REDCap®. Treatment initiated within 2 days of admission was defined as empiric. Readmitted patients for same episode, patients younger than 16 years and untreated patients were excluded.

Evaluation Seventy-four patient records were identified and 12 were excluded. Six patients (10%) were treated ≥2 days at another hospital. Compliance with TG® was observed in 34 patients (61%). Only 9 patients (16%) adhered to the hospital OOG empiric recommendations. Compliance to OOG for doxycycline, ascorbic acid and atropine was 14%, 69% and 53% respectively. Nil antimicrobial adverse effects were recorded.

Discussion Adherence to recommended empiric antimicrobial therapy in MK is essential for optimising clinical outcomes and minimising resistance. Almost two-thirds of MK episodes were adherent to TG® antimicrobial guidelines. This highlights need for education and a validated local guideline to improve compliance. It supports the development of a robust, locally governed guideline with ongoing review to strengthen future prescribing practices. To enhance compliance, regular prescriber education and eLearning modules should be implemented, supported by an infographic decision tree to provide real-time guidance.

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Laying the foundations for monitoring an Antipsychotic Stewardship Program

Mx Rey Nairn[1], Deka Barre[1], Geoffrey Ham[1], Kerry Fitzsimons[2], Jacinta Berlingeri[2]

[1]Rockingham General Hospital, Cooloongup, WA, [2]Medicines and Technology Unit – Department of Health, Perth, WA

EMAIL nairnrey@gmail.com

Background High-dose antipsychotic therapy (including antipsychotic polypharmacy) is associated with increased adverse effects and requires clear clinical justification, appropriate monitoring, and documentation of patient consent. Antipsychotic stewardship initiatives aim to optimise prescribing practices and improve patient safety by addressing these risks.

Aim/Objective(s) To identify high-dose antipsychotic prescribing patterns and assess documentation of associated risks and monitoring in clinical records.

Methods A retrospective audit was conducted using separation data from three adult mental health wards in a public hospital over a three-month period. Patients without antipsychotics, transferred to acute medical wards, or not represented on the state mental health separation dashboard were excluded. Thirty-two eligible patients were randomly selected; where multiple separations occurred, only the most recent was included. Antipsychotic load was calculated based on the patient's discharge medicines using a ready reckoner and patients with antipsychotic load greater than 100% were identified. Clinical records were reviewed for documentation of prescribing rationale, risk assessment, monitoring, and consent. Data were recorded using a structured REDcap audit tool.

Results Fourteen of 32 patients met inclusion criteria, with 12 patients (85.7%) prescribed multiple antipsychotics. Prescriber rationale for polypharmacy was documented clearly for 7 patients (50%), and rationale for high-dose prescribing in 9 patients (64.2%). Explicit consultant approval was documented in 2 cases (14.3%). Documentation of patient or carer discussion and consent was present for 12 patients (85.7%), though information documented was not always specific to high-dose therapy. Documentation of antipsychotic risk was identified for all patients but was frequently incomplete, particularly in relation to metabolic monitoring.

Discussion High-dose and polypharmacy antipsychotic prescribing were common, with inconsistent documentation of clinical justification, monitoring, and risks. These findings demonstrate key gaps in documentation and monitoring practices, supporting the need for targeted antipsychotic stewardship interventions to improve prescribing transparency, strengthen risk monitoring, and enhance patient safety outcomes.

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Thromboembolic Outcomes Post discharge following Replacement Of Hip or Knee (TOP ROHK): A guideline-based audit

Claudia Nano[1], Ruby Ridgway[2], Hannah Parenti[2], Kath McLean[2], Duncan Long[2]

[1]The University of Queensland, Brisbane, Qld, [2]Princess Alexandra Hospital, Brisbane, Qld

EMAIL c.nano@student.uq.edu.au

Background Venous thromboembolism (VTE) remains a significant postoperative risk for patients undergoing total hip replacement (THR) and total knee replacement (TKR). Appropriate prophylaxis reduces the incidence of deep vein thrombosis (DVT) or pulmonary embolism (PE), in accordance with Queensland Health Statewide Guidelines for VTE prophylaxis (VTEp) post-discharge. These Guidelines recommend VTEp based on individual patient risk assessment and advise alternative therapy to aspirin where thrombotic risk is high.

Objectives Determine the number of TKR and THR patients who were treated in accordance with Statewide Guidelines for VTEp post-discharge. Assess documentation of discharge VTEp medication plans in post-surgical notes, quantifying variation in prescribing and the number of post-discharge thrombotic events.

Method A retrospective observational cohort study at a tertiary hospital audited 221 patients who underwent THR or TKR for any indication between January 2023 and September 2025, excluding patients who were not discharged under an orthopaedic surgeon or prescribed therapeutic anticoagulation for pre-existing conditions.

Therapy was considered guideline-adherent if the prescribed regimen was appropriate for patient risk in terms of drug, dose, and duration.

Evaluation Total guideline adherence was 48.8% in THR and 42.0% in TKR. Very high risk patients experienced lower rates of guideline adherence than standard risk patients in both procedures. Five post-discharge thromboembolic events were recorded, comprising 2.3% of the cohort. These patients were prescribed appropriate VTEp; however, two cases were considered guideline non-adherent due to the dose of aspirin, 150 mg. Over 50% of very high risk patients with a history of VTE or active/metastatic malignancy received guideline adherent anticoagulation.

Discussion The guideline adherence for VTEp was sub-optimal. The 2.3% thrombotic rate is considered clinically significant but lacks correlation to guideline adherence. The results require further discussion regarding the inherent limitations of prophylaxis and impacts of patient compliance to reduce sequelae events.

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One Scan Away: Improving Patient Access and Workflow Through QR Code–Enabled Repeat Prescription Requests

Tien (Angel) Nguyen[1], Maxine Nathan[1]

[1]*Department of Pharmacy, St George Public Hospital, Kogarah, NSW*

EMAIL angel-nguyen@outlook.com

Background Repeat prescription requests in an outpatient pharmacy were primarily managed via telephone. This process was time-consuming, disruptive to workflow, and difficult to sustain within a small team. Frequent interruptions reduced time available for direct patient care and medication checking. A Quick Response (QR) code system was introduced to enable electronic request submission.

Objectives To implement a QR code–enabled medication request system to reduce workflow interruptions, improve efficiency and triage safety, and enhance patient access through 24-hour submission.

Method A prospective baseline audit of incoming calls was conducted over two weeks, recording caller type and reason. Following stakeholder consultation, a QR code request form was developed using existing Microsoft Forms, Power Automate, and SharePoint platforms. Privacy and information technology reviews ensured compliance with governance requirements. Patient information and staff education preceded implementation in a pilot cohort with active repeat prescriptions. A repeat two-week audit was conducted seven months later using the same methodology, alongside patient feedback.

Evaluation Total incoming calls decreased from 190 to 114, representing a 40% reduction and an estimated saving of 228 minutes of staff time over two weeks. Patient calls related to repeat prescriptions showed the greatest reduction. Staff reported fewer interruptions, and electronic requests were more complete, reducing follow-up. Patient access improved through out-of-hours submission, with 91% reporting a favourable experience. The system was subsequently expanded to enable additional outpatient services to submit medication requests for their patients.

Discussion A QR code–enabled request system reduced reliance on telephone-based processes and supported a shift to planned workflow. As a low-cost solution using widely available platforms, it is accessible to most organisations. The intervention demonstrated how simple digital tools can streamline medication request workflows, reduce interruptions to clinical work, and improve patient access. The model is readily transferable to other outpatient pharmacy services.

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Evaluating the Implementation of an Outpatient Heart Failure Clinic Training Module for Pharmacists

Grace Nguyen[1], Anna Truong, Mahek Shah, Judy Duong

[1]*Monash Health, Melbourne, Vic*

EMAIL graceatwork44@gmail.com

Background Despite growing evidence supporting pharmacists' integration into ambulatory care, structured training and orientation for pharmacists transitioning into these roles remain limited. Outpatient practice differs from inpatient care, necessitating targeted training and standardisation of workflows to ensure pharmacists are well supported and able to deliver safe, consistent, and high-quality patient care.

Objective(s) To implement and evaluate a training module to support skill development and enhance confidence of pharmacists working in outpatient heart failure clinics.

Action (Method) The training module was implemented at a tertiary hospital over a six-month period for pharmacists newly practicing in heart failure clinics. The module comprised three key components: (1) a 24-item knowledge-based quiz on heart failure management, (2) a video demonstrating a simulated patient–pharmacist consultation, highlighting medication counselling for heart failure therapies, and (3) an assemblage of clinical resources and standardised templates to support documentation. Pharmacists were encouraged to complete a pre- and post-survey to assess self-reported confidence in delivering clinic-based care.

Evaluation A total of eight pharmacists completed the knowledge quiz. Of these, four completed both the pre- and post-surveys, two completed the pre-survey only, and two did not complete either survey. Among those with matched responses (n=4), confidence in understanding clinic workflow and independently reviewing patients improved, with mean confidence scores increasing from 2.7 to 4.75 on a 5-point scale. Similarly, all participants reported increased confidence in recommending guideline-directed therapies and providing counselling on heart failure medications. Confidence in delivering self-management strategies (e.g. daily weights, fluid restriction, and monitoring symptom exacerbation) also improved, with mean scores increasing from 4 to 4.75.

Discussion The findings support the use of a structured training module to enhance pharmacist confidence in providing clinic-based practice. Standardised orientation processes may help reduce variability in clinical care and documentation, thereby improving the consistency and quality of service delivery.

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Are we ready for non-viral vector and gene-editing therapies?

Tammy Nguyen[1], Ali Laith Safi[1]

[1]*Westmead Hospital, Westmead, NSW*

EMAIL tammy.nguyen@health.nsw.gov.au

Background Advanced therapies are rapidly entering hospital practice, yet preparedness has predominantly focused on viral-vector products and their genetically modified organisms (GMOs) containment requirements. Non-viral therapies, including plasmids, messenger ribonucleic acid (mRNA) and gene-editing pharmaceuticals, have been comparatively overlooked. Although they fall outside viral-vector GMO containment requirements, they still create distinct hospital challenges, including storage, aseptic handling, clinical governance, biosafety, and workforce capability. Hospital pharmacists are well positioned to provide essential leadership in education and operations for emerging therapies.

Objective To develop a pharmacist-led conceptual framework and practical tools to assess institutional readiness for non-viral advanced therapies, with a focus on pharmacy practice, governance and multidisciplinary integration.

Method A narrative review of regulatory, manufacturing, biosafety, and clinical integration literature was undertaken to identify characteristics, delivery requirements and safety considerations relevant to non-viral advanced therapies. Findings were compared against existing hospital pharmacy frameworks for hazardous medicines, biologicals, and viral-vector therapies. Readiness domains were derived and grouped into: infrastructure; handling and quality systems; chain of custody and documentation; governance and regulatory alignment; clinical and safety processes; workforce capability; and workflow integration. A self-assessment checklist, multidisciplinary survey and process-mapping template were drafted for future evaluation; no data collection or implementation occurred.

Evaluation The framework structures a preliminary appraisal supporting early identification of system gaps prior to the introduction of non-viral advanced therapies. Planned evaluation includes stakeholder review and iterative refinement for local adoption.

Discussion Non-viral vectors and gene-editing therapies are expected to expand across multiple specialties. A proactive, pharmacist-led readiness framework supports safe, timely integration by aligning governance, strengthening pharmacy systems, and building workforce capability. The approach is transferable to other emerging advanced therapeutics and provides a practical pathway for pharmacy-led service preparedness.

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Creating space to lead: a limitless approach to leadership

Kerryn Griffett, Melissa Nguyen

[1]*Pharmacy Department, Royal Melbourne Hospital, Parkville, Vic*

Background Increasing operational complexity within a quaternary hospital pharmacy service places substantial demands on senior leadership, often limiting capacity for strategic oversight and advanced clinical priorities. Previously, responsibilities including workforce coordination, rostering, and service development were managed solely by the Deputy Director of Clinical Pharmacy. A novel clinical leadership pharmacist role was introduced to support efficient service delivery.

Objective To implement a clinical leadership pharmacist role to improve workforce management, enhance digital innovation, and reduce operational burden on senior pharmacy leadership.

Action (Method) A pharmacy practice service improvement initiative was undertaken focusing on workforce optimisation and communication processes. Rostering systems were redesigned, digital solutions were implemented, including electronic on-call submission forms, shift swap platforms, and digital noticeboards to streamline communication and reduce administrative duplication. Communication pathways were improved transition from pager based to secure chat EMR based systems.

Evaluation Implementation of the clinical leadership pharmacist role improved roster efficiency, transparency, and responsiveness across the clinical pharmacy service as reported by the clinical pharmacy department. Digital automation reduced administrative burden and enabled timely, consistent communication to staff. Enhanced communication systems improved operational coordination and supported more efficient day-to-day service delivery as reported by senior pharmacy leadership. These changes enabled the Deputy Director of Clinical Pharmacy to prioritise strategic and clinical leadership activities.

Discussion The introduction of a clinical leadership pharmacist role strengthened workforce sustainability and operational governance in a high demand quaternary hospital environment. This model supports sustained practice change, enhances leadership capacity, and promotes safe pharmacy practice, and is readily transferable to other tertiary and quaternary healthcare organisations.

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Building Hope for a Stalled Bowel: Pyridostigmine in Chronic Intestinal Pseudo-Obstruction

William Nguyen[1], Dr Henry Cheung[2]

[1]*Pharmacy Department, Concord Repatriation General Hospital, Concord, NSW,* [2]*Department of Colorectal Surgery, Concord Repatriation General Hospital, Concord, NSW*

EMAIL william.nguyen1@health.nsw.gov.au

Objective To describe the use of pyridostigmine as a pharmacological bridging strategy in refractory chronic intestinal pseudo-obstruction (CIPO).

Clinical features A 65-year-old male presented with abdominal pain, vomiting, and distension; CT demonstrated markedly dilated large bowel without a transition point, consistent with intestinal pseudo-obstruction. Initial management included flexible sigmoidoscopic decompression and rectal tube insertion. Following rectal tube removal, laxatives and twice-daily enemas were commenced. Recurrent symptoms despite endoscopic decompression and a 2-day oral neostigmine trial prompted initiation of pyridostigmine.

Literature Review CIPO is a rare, high-morbidity condition with limited pharmacological options. Neostigmine is effective for acute decompression but unsuitable for ongoing use. Oral pyridostigmine, a reversible acetylcholinesterase inhibitor, offers a longer-acting cholinergic alternative; however, evidence is limited and its role in sustained or relapsing disease remains unclear. Emerging reports suggest benefit in reducing symptom burden and procedural dependence.

Pharmacist Interventions, Case Progress and Outcomes In collaboration with the colorectal surgery team, the pharmacist conducted a literature review to evaluate the off-label use of oral pyridostigmine in CIPO. Pyridostigmine was initiated and titrated with pharmacist-led guidance on dosing, monitoring, and adverse effects. The pharmacist also advised on a structured weaning plan for pyridostigmine which was associated with partial clinical stabilisation. Significant gastrointestinal losses contributed to severe hypokalaemia, necessitating aggressive electrolyte replacement and rationalisation of laxative therapy with multidisciplinary input. Refractory recurrence ultimately required botulinum toxin injection, after which pseudo-obstruction resolved and pyridostigmine was ceased.

Discussion Pharmacists play a key role in addressing a key gap in CIPO between repeated decompression and invasive intervention. Pyridostigmine provides a mechanism-based approach by restoring cholinergic-mediated motility, rather than offering transient decompression. Its use in this refractory, procedure-dependent case was associated with improved bowel function and reduced reliance on repeated interventions. Consideration of pyridostigmine earlier in similar presentations may reduce procedural burden.

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Virtual Hospital Care: A Stronger Rhythm for Heart Health

Rachel Goodman[1], Sarah Noori[1], Ray Dowling[1], Angela Sullivan[1], Danielle Panaccio[1], Steph Montalto[1], Jack Bradbury[1]

[1]*Austin Health, Heidelberg , Vic*

EMAIL sarah.noori@austin.org.au

Background Heart failure with reduced ejection fraction (HFrEF) carries significant morbidity and mortality, yet uptake of guideline-directed medical therapy (GDMT) remains suboptimal. Virtual hospital models offer a novel opportunity for multidisciplinary review and medication optimisation beyond traditional inpatient care.

Aim/Objective To evaluate the impact of a virtual hospital program on the uptake of GDMT in patients admitted with HFrEF.

Methods A prospective cohort study was conducted within a virtual hospital program, where patients with HFrEF received daily review via video telehealth by a multidisciplinary team comprising a nurse, physician, and pharmacist. GDMT was defined as the concurrent use of an ACE inhibitor or angiotensin receptor blocker (ACE/ARB), a cardioselective beta-blocker, a sodium-glucose cotransporter-2 inhibitor (SGLT2i), and a mineralocorticoid receptor antagonist (MRA). The primary outcome was the proportion of patients prescribed complete GDMT at discharge from the virtual hospital program.

Results Of 84 patients with HFrEF enrolled in the virtual hospital program, 47.6% (n=40) were prescribed complete GDMT at admission, increasing to 73.8% (n=62) at the time of discharge, representing an absolute increase of 26.2% ($p<0.001$).

Discussion Enrolment in a multidisciplinary virtual hospital program was associated with a clinically meaningful increase in complete GDMT prescribing rates among patients with HFrEF. These findings suggest that virtual hospital models may support medication optimisation, particularly for patients whose renal function, blood pressure and oral intake may not be stable enough to reintroduce all components of GDMT at the time of hospital discharge. This approach may reduce readmissions and improve long-term outcomes.

Pharmacists played a vital role in the success of the virtual hospital program. Through daily telehealth reviews, medication reconciliation, patient education, and ongoing review of medications and pathology results, pharmacists helped optimise GDMT and identify medication-related issues. Their collaboration across healthcare settings ensured continuity of care and contributed to improved patient outcomes.

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Breaking Boundaries in Anticoagulant Management: The Expanding Role of Therapeutic Drug Monitoring in Complex Patients

Vera Nordh[1], Karl Winckel

[1]*Princess Alexandra Hospital, Brisbane, Qld*

EMAIL Vera.Nordh@health.qld.gov.au

Objectives To highlight the role of therapeutic drug monitoring (TDM) in managing individuals with risk factors associated with reduced direct-acting oral anticoagulants (DOAC) clearance. To explore uncertainty surrounding the interpretation of elevated DOAC levels.

Clinical Features A 77-year-old male (80 kg) with atrial fibrillation, stable on apixaban 5 mg twice daily and amiodarone, was commenced on posaconazole for severe neutropenia six days prior to admission. He presented with acute kidney injury (eGFR 15 mL/min/1.73 m^2, baseline ~48 mL/min/1.73 m^2) secondary to sepsis and reduced oral intake.

Literature Review Apixaban concentrations increase with CYP3A4 and P-gp inhibition, including posaconazole (strong inhibitor) and amiodarone (moderate inhibitor). DOAC levels may further accumulate in acute kidney injury. Studies suggest that DOAC levels increase significantly when eGFR falls below 30 mL/min/1.73 m^2 and that clinically significant DOAC levels may persist despite recommended withholding periods of 3–4 days. However, evidence remains limited. This highlights that guideline-based withholding may not reliably predict DOAC clearance in patients with AKI or concurrent interacting medications.

Pharmacist Interventions, Case Progress and Outcomes The ward pharmacist identified acute kidney injury and significant drug interactions (Posaconazole and amiodarone) as key contributors to delayed apixaban clearance. Apixaban and amiodarone were withheld, and posaconazole was ceased. Despite withholding apixaban for three days, an elevated apixaban level of 370.4 ng/mL was detected (undetectable: <20 ng/mL). Following improvement in renal function (eGFR 26 mL/min/1.73 m^2) after six days, apixaban was recommenced at a reduced dose of 2.5 mg twice daily, accounting for renal impairment and concomitant amiodarone use.

Discussion This case highlights the critical role of pharmacists in preventing DOAC-related harm through early identification of drug interactions and renal dose adjustments. Standard DOAC withholding guidelines may be insufficient in complex patients. TDM may provide objective data to guide extended withholding and support safer, individualised anticoagulation decisions when pharmacokinetics are unpredictable.

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Turning Medication Incidents into Action: A Multidisciplinary Approach to Medication Safety Communication

Adriana Nyunt[1], Rayan Nahas[1], Wassi Hossain[1], Dr Michael Dadson[1], Dr James Yang[1], Dr Bill Zhangchen[1], Dr Christopher Katsinas[1], Nicole Daoud[1]

[1]*St George Hospital, Kogarah, NSW*

Background The Medication Incident Review Group (MIRG) is a multidisciplinary committee established in 2024, involving nursing, medical and pharmacy representatives. Key learnings from these bimonthly incident reviews are communicated through Medication Safety Bulletins, which are one-page educational summaries that provide clinical staff with focused education on a medication safety issue identified.

Objective(s) To analyse medication incident trends and evaluate whether medication safety bulletins adequately reflect identified medication safety themes.

Action (Method) A retrospective evaluation of Medication Safety Bulletins and incident data was undertaken. Bulletins produced over a two-year period were reviewed and categorised by theme, then compared with medication incident data from 2024 and 2025 to assess alignment between incident types, frequency and communication topics.

Evaluation A total of 1,452 incidents were analysed across 10 meetings, with a mean of 145 incidents reviewed per meeting. Administration-related incidents were most frequent (~56%), followed by accountable medicines (~25%) and prescribing-related incidents (~12%). Eight safety bulletins were produced, covering themes including communication, medication workflows, medical staff administration, COVID-19 medication management, transdermal patches, heparin infusions, and documentation of height and weight.

Discussion Medication Safety Bulletins provide valuable targeted education; however, they primarily focus on single themes and may not fully reflect incident frequency or recurring risks. Administration-related incidents accounted for over half of all incidents but were underrepresented in the bulletin coverage. Additionally, no bulletins specifically addressed accountable medicines, despite their substantial contribution to overall incident volume. This demonstrates a gap in translating incident trends into clinician-facing medication safety communication. To address this, a multidisciplinary poster strategy is being developed to complement Medication Safety Bulletins by presenting multiple themes alongside incident data in a concise format, with planned dissemination in high visibility clinical areas.

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Evaluating a pharmacist-led digital platform to address women's health misinformation in Australia.

Courtney Oar[1], Miranda Chan[1]

[1]*Pretty Proven, Gold Coast, Qld*

EMAIL courtney.oar@gmail.com

Background Social media platforms are now primary sources of health information for many Australians, offering opportunities to improve health literacy but also increasing exposure to inaccurate and misleading content. Women are disproportionately targeted by health misinformation online. Pharmacists are accessible and uniquely positioned to address this gap with expertise spanning a broad range of women's health concerns.

Objectives To evaluate the acceptability and impact of a pharmacist-led digital health platform on women's health literacy and confidence navigating online health information.

Action A digital women's health platform was developed incorporating an evidence-based content strategy and multi-channel distribution via social media and a dedicated website. Content was designed to educate, demystify health misinformation and empower informed health decision-making utilising short video's, carousels, long-form articles and written guides. The platform launched in March 2026. A survey measuring the initial acceptability and impact of the platform was developed. It was hosted on the platform website and distributed to female subscribers via social media channels and electronic direct mail (EDM) campaigns.

Evaluation 35 women aged between 25 and 65 years responded. 71% reported seeking health information online weekly or more frequently and 94% admitted concern about health misinformation online. 89% of respondents reported increased confidence since engaging with the platform. 86% stated the content had empowered more informed health decisions. 91% stated they 'mostly' or 'completely' trust pharmacists for health information and 97% said they would 'probably' or 'definitely' recommend the platform to others.

Discussion Findings from the survey contribute to the evidence base for pharmacist-led digital health education as a scalable, accessible intervention for improving women's health outcomes. It also provides a unique example of pharmacist role expansion. Additional survey findings related to preferred formats for content delivery (short videos and podcasts) and women's health topics will inform the ongoing development of the platform.

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Unlocking limitless access: Pharmacy-led Digital Education for New Medication Access Pathways Following Hospital Redevelopment

Gillian Oates[1], Leng Cam[1], Anh Ong[1]

[1]*Bayside Health Peninsula Care Group, Frankston, Vic*

EMAIL goates@phcn.vic.gov.au

Background The redevelopment of an acute hospital created both opportunities and challenges. In early 2026, inpatients transitioned to a new clinical building, with new medication access processes, equipment, storage locations and workflows. Rapidly evolving systems, infrastructure testing, and real-time process changes created a complex and unpredictable environment, increasing the risk of medication-related errors. Targeted, responsive and scalable education was requested by Director of Education to safely manage medication access during this high-risk period. Pharmacy leadership responded and focused on governance of medication management, application of systems thinking and risk mitigation during education design.

Objectives To design, implement, and deliver responsive training to prepare healthcare staff safely manage medication access following major hospital redevelopment.

Action Pharmacy educators developed an E learning package, Medication Access, to support staff during transition. Content was co-designed with pharmacy, nursing, redevelopment, and learning design teams. A case-based scenario incorporating interactive elements, quizzes, with narrative learning and utilised an Articulate™ Rise integrated AI assistant. Education reflected new medication workflows, automation, equipment, storage and supply models, after-hours access, and relevant resources. Promotion occurred through 'change champion' staff and targeted communication. The package was available via voluntary self-enrolment on the Learning Management System (LMS).

Evaluation Education was available early 2026 to align with latest changes and demands. Post-implementation evaluation via staff surveys in the LMS indicated improved staff knowledge, confidence, and preparedness to manage medications in the unfamiliar environment. Participants reported improved understanding of medication processes, correct storage requirements, navigation of pharmacy infrastructure, enhanced workflow efficiency, safer practice, streamlined discharges, and improved patient care.

Discussion Timely, responsive, scalable, asynchronous education is critical during hospital redevelopment, a period of risk and competing pressures. This pharmacy-led E learning initiative supported staff adaptation to new medication systems and workflows and remains a sustainable resource for ongoing orientation and safe medication management.

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Reducing the Limitless: A Checklist Tool for Clinical Issue Identification and Discharge Reconciliation

Caitlan O'Keefe[1]

[1]*Royal Hobart Hospital, Statewide Hospital Pharmacy, Tas*

EMAIL caitlan.okeefe@ths.tas.gov.au

Background Identifying clinical medication-related issues in hospitalised patients is complex and multifactorial. A comprehensive medication review incorporates multiple elements including appropriate drug selection and considering contributing factors. For learners, such as intern pharmacists, integrating these elements while simultaneously developing competency in medication reconciliation processes can be challenging. This may contribute to variability in practice and an increased risk of omissions during both inpatient review and transitions of care.

Objective(s) To develop a structured checklist tool to support pharmacy staff in conducting systematic and comprehensive medication reviews, including discharge reconciliation.

Methods A checklist tool was developed by an intern pharmacist to streamline the medication review process during a patient's inpatient stay and at discharge. Core elements were identified based on key components of clinical review (summarised to 'POBIND'). The tool was iteratively refined through ongoing clinical use, peer feedback, and application across tertiary hospital settings. Additional elements incorporated included anticoagulation considerations and reconciliation processes to ensure continuity of care at discharge (summarised to 'PROABIND'). What initially began as an acronym was subsequently expanded into a structured tool ('PINBOARDS') for wider dissemination, incorporating explanatory detail for each element to support understanding and application.

Evaluation Formal evaluation to assess the impact of the tool is being considered. This could include comparison of activity completeness, quality and efficiency with and without use of the tool, as well as assessment of usability, acceptability, and perceived usefulness among pharmacy staff.

Discussion This checklist tool addresses a gap in structured supports for pharmacists in identifying clinical issues and performing discharge reconciliation. While electronic medication reconciliation systems and clinical decision support tools exist, structured, pharmacist–focused cognitive checklists remain limited. The PINBOARDS checklist tool has the potential to reduce cognitive load, minimise omissions, and improve consistency in medication review processes, particularly within busy and high-demand clinical environments.

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Limitless opportunity: Pharmacist-led Deprescribing Medication Stewardship pilot study

Leakhena Hang[1], Deanna O'Kelly[1], Yuh-Lin Gan[1], Olivia Carswell[1]

[1]*North Canberra Hospital, Canberra, ACT*

EMAIL Leakhena.Hang@act.gov.au

Background Medication-related harm contributes to preventable hospitalisations and readmissions, highlighting the need for innovative, pharmacist-led medication optimisation strategies. Despite evidence supporting structured deprescribing interventions, their use in acute care remains limited.

Aim/Objective(s) To assess the feasibility and impact of a pharmacist-led Deprescribing Medication Stewardship (DMS) service in an acute public hospital, to inform development of a Model of Care (MoC).

Methods A pilot study was undertaken over six weeks, using criteria based on previous studies, targeting patients over 65 years, hospitalised for over five days and prescribed over five medications. Stakeholder engagement took place with general medicine teams, and education for clinical pharmacists was delivered to support implementation. Medical wards were screened weekly for eligible patients, supplemented by direct referrals, and patients were engaged in a pharmacist-led clinical review, followed by collaborative bedside consultation with a geriatrician.

Results Twenty-one patients (mean age 80 years) were reviewed leading to 17 consultations, and the most common presenting complaint was falls risk.

Ninety-one deprescribing or optimisation recommendations were made (mean 5.4 per patient), with an acceptance rate of 59.4%. Frequently targeted medications included antidepressants, anticholinergics, opioids, antihypertensives, antihyperglycemics, statins, anti-reflux medications and supplements.

Mean time for pharmacist-led triage and recommendation development was 41 minutes, with an additional 37 minutes required for pharmacist-geriatrician collaboration and patient engagement in decision making. Anecdotal feedback from patients was positive.

Discussion The pilot demonstrated benefits of a pharmacist-led, multidisciplinary deprescribing approach and strengthened the pharmacists' role as leaders in stewardship. The volume and acceptance of recommendations highlight the positive impact, while recorded time requirements informed resourcing for a sustainable MoC. Strong endorsement from general practitioners and medical teams, as well as patient gratitude, supports integration of DMS services. Further promotion, education and a focus on anticholinergic medications may improve patient outcomes and acceptance of deprescribing recommendations.

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Discontinued but Not Disrupted: Coordinated Insulin Transition in AcuteCare

Amy Ong[1], Martha Turek[1], Gillian Oates[1], Leng Cam[1]

[1]*Bayside Health Peninsula Care Group, Frankston, Vic*

EMAIL oamy9729@gmail.com

Background Several insulin products manufactured by Novo Nordisk™ are being discontinued between 2024 and 2026, creating a medication safety risk during inpatient care and discharge transitions. Insulin is a high-risk medicine where inappropriate substitution or continuation of discontinued formulations may cause harm. This project evaluated the impact of proactive hospital-based pharmacy-led interventions, endocrinology referral pathways, and targeted staff and consumer education to support safe insulin transition.

Method A prospective pilot study was conducted over eight weeks at a major tertiary hospital. Daily electronic reports identifying inpatients prescribed discontinuing insulin products were screened by a clinical pharmacist. Eligible patients were referred to endocrinology or diabetes nurse educators for transition planning or documentation. A multidisciplinary education program was delivered to nursing, medical, and pharmacy staff through medication safety forums, ward meetings, and targeted communications. Consumer education brochures supported patient understanding and continuity of care.

Evaluation Outcomes were assessed via retrospective follow-up including inpatient insulin transition rates, discharge documentation, referral activity, and consumer resource uptake. Thirty-three patients were screened; ten were eligible for endocrinology referral. Six received referrals, two transitioned successfully, and three had documented post-discharge plans. Four were not referred due to short stays, discharge against medical advice, or death. Twenty-three patients (70%) were incorrectly charted as receiving discontinuing insulin products, with four errors persisting to discharge.

Discussion The pilot demonstrated that pharmacist-led identification, education, and referral pathways supported safer insulin transition planning in identified patients. However, high prescribing error rates limited reliable patient capture and highlight the need for system-level prescribing interventions. A prescribing system prompt was implemented to flag discontinued insulin products and support timely endocrinology referral. Strengthening automated alerts and embedding pharmacist review into prescribing workflows may further reduce errors and improve continuity of care for patients affected by insulin discontinuations across inpatient and discharge settings.

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Utilising a Mandatory Electronic Antibiotic Indication Field in Antimicrobial Prescribing Report Development: Accuracies and Biases

Roy Kadira[1], Arshdeep Kohli[1], Owen O'Reilly[1]

[1]*Pharmacy Department, Western Health, Footscray, Vic*

EMAIL roy.kadira@wh.org.au

Background Electronic prescriptions with a drop-down mandatory antibiotic indication field can be used to create indication-specific automated reports on antibiotic prescribing patterns. Such reports can be used to monitor the efficacy of antimicrobial stewardship interventions and provide feedback to medical units. Accurate selection of antibiotic indication options is essential for report accuracy.

Aim/Objective(s) To assess the accuracy of the mandatory indication field of inpatient antibiotic electronic prescriptions at a tertiary hospital and identify common errors in selection from a list of 21 indications.

Methods One hundred patients were randomly sampled from a list of patients prescribed antibiotics on the audit day. The mandatory indication of each antibiotic administered as part of the treatment course was compared to the indication documented in the medical note closest to the time of antibiotic prescription, which was considered the true indication.

Results The mandatory indication was inaccurate in 13% (41/308) of prescriptions. Fifty-two percent (14/27) of the 'lower urinary tract infection (UTI) – uncomplicated' indications were inaccurate, frequently chosen instead of 'pyelonephritis/complicated UTI'. Forty-four percent (7/16) of 'other lower respiratory tract infection' indications were inaccurate, frequently chosen instead of 'nosocomial pneumonia'. Low inaccuracy was seen in the selection of the indications 'intra-abdominal infection' (2%, 1/56), 'diabetic foot infection' (0%, 0/39) and 'prophylaxis' (0%, 0/9).

Discussion The mandatory indication field showed high accuracy and suitability for the development of automated antimicrobial prescribing reports. Inaccuracy generally occurred in the selection of indications in which multiple options for the same infective source existed. Choosing unambiguous indication names that reflect standard nomenclature may reduce inaccuracies, e.g. 'infective exacerbation of chronic obstructive pulmonary disease' instead of 'other lower respiratory tract infection' and 'hospital-acquired pneumonia' instead of 'nosocomial pneumonia'. Placing severity classifiers before the infection name may promote accurate selection, e.g. 'uncomplicated lower UTI' instead of 'lower UTI – uncomplicated'.

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Connecting the Dots: Do We Fully Capture Insulin-Related Harm?

Angela Tu[1], Caitlin O'Rourke[2], Belinda Chappell[2], Lily Hatt[2], Maddison White[2]

[1]Queensland University of Technology, Brisbane, Qld, [2]Caboolture Hospital, Caboolture, Qld

EMAIL thanh.tu@connect.qut.edu.au

Background Insulin is a high-risk medicine associated with significant patient harm when medication errors occur. Hospitals have access to coded data and reporting systems to monitor insulin-related adverse events; however, the utility of these systems in capturing all insulin-related harm remains unclear. Hospital Acquired Complications (HAC) are coded adverse outcomes arising during an admission, Y-codes provide supplementary information regarding factors contributing to the complication, and RiskMan is an incident reporting system used within hospitals which relies on staff-reported documentation of incidents.

Objective(s) To evaluate the utility of HAC, Y-codes and clinical incident reporting data in capturing incidents involving insulin-related adverse events, and to identify differences in the information captured by each system.

Action (Method) A retrospective quality assurance audit was conducted using HAC, Y-codes and RiskMan clinical incident reporting data collected over a six-month period (July-December 2025). Medical records were reviewed to determine whether insulin-related adverse events occurred, verify accurate clinical coding, and assess completeness of information within each system.

Evaluation Sixty-two insulin-related events were identified. Hypoglycaemia was the most common clinical outcome (n=30), followed by hyperglycaemia (n=9). HAC and Y-code datasets predominantly identified adverse effects, documented in 86.4% (19/22) and 100% (6/6) of cases respectively. In contrast, only 14.7% (5/34) of RiskMan reports were associated with a documented adverse effect. Medication omissions, dosing errors and process-related incidents were frequently identified through clinical incident reporting. Approximately 53.2% of events required supplementary chart review to accurately characterise events.

Discussion HAC and Y-code datasets explicitly captured adverse outcomes, whereas clinical incident reporting identified a broader range of insulin-related medication incidents and near-misses. No single database independently quantified the full burden of insulin-related harm. These findings support the use of multiple data sources and clinical document review when evaluating insulin-related adverse events and may inform future medication safety surveillance and quality assurance initiatives.

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Digital Misinformation, Real Toxicity: A Case of Ivermectin Overdose

Caitlin O'Rourke[1]

[1]Caboolture Hospital, Caboolture, Qld

EMAIL caitlin.orourke@health.qld.gov.au

Objective To describe a case of suspected ivermectin toxicity following use of an unverified 'cancer eradication regimen' and highlight pharmacist's role in medication safety and clinical management.

Clinical Features A 68-year-old male was brought to the emergency department following acute loss of consciousness, confusion, and syncope. He reported recent self-limiting gastroenteritis. His wife found him disoriented and weak; initial Glasgow Coma Scale (GCS) was 13. His history included prostate cancer, hypertension, and obstructive sleep apnoea.

The patient was taking an online-sourced regimen for preceding 6-months for prostate cancer before escalating doses to an 'eradication regimen' following a rise in Prostate-Specific Antigen. The eradication regime consisted of ivermectin 800 mg and mebendazole 500 mg daily. GCS initially fluctuated between 14–15 before deteriorating to 6, requiring intubation and ICU admission. CT imaging showed no intracranial pathology, and ivermectin toxicity was suspected.

Literature Review Ivermectin is generally safe at therapeutic doses; however, supratherapeutic exposure may cause neurotoxicity, including altered consciousness and respiratory depression. Evidence guiding management is limited and favours supportive cares. Increasing reports link toxicity to self-medication using unregulated online sources.

Pharmacist Interventions, Case Progress and Outcomes The ICU pharmacist obtained a comprehensive history, identifying excessive dosing and unregulated sourcing, which was critical to diagnosis. Toxicology-informed advice was provided on expected clinical course, sedation sensitivity, and supportive care, informing ventilation and monitoring strategies.

The patient developed bradypnoea, delaying extubation, and was treated for suspected aspiration pneumonia. He was extubated on day 3 and discharged from ICU on day 4 with full neurological recovery.

The pharmacist provided targeted counselling on medication safety, risks of non-evidence-based therapies and communicated recommendations to prevent recurrence.

Discussion This case highlights harms associated with unregulated therapies and misinformation. Pharmacists play a key role in medication reconciliation, toxicity recognition, clinical decision support, and patient education to mitigate emerging medication safety risks.

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Limitless potential, limited action: Are we maximising kidney-protective prescribing in stage 3 chronic kidney disease?

Sophia Ouellette[1], Karl Winckel[1,2], Jess Lloyd[2], Xanthe Cross[2], Dr Wubshet Tesfaye[1]

[1]School of Pharmacy and Pharmaceutical Sciences, University of Queensland, Brisbane, Qld, [2]Princess Alexandra Hospital, Brisbane, Qld

EMAIL sophiaouellette05@gmail.com

Background Angiotensin-converting enzyme inhibitors (ACEi), angiotensin receptor blockers (ARBs), angiotensin receptor-neprilysin inhibitors (ARNI), sodium glucose co-transporter 2 inhibitors (SGLT2i), incretins such as glucagon-like peptide-1 agonists (GLP-1s) and mineralocorticoid receptor antagonists (MRAs) have growing evidence of cardio-kidney-metabolic benefits. However, their use in chronic kidney disease (CKD) in real-life settings remains largely unknown.

Aim/Objective This study aimed to describe the prescribing patterns of these medications in patients with CKD at a large metropolitan hospital in Queensland.

Methods This retrospective observational study analysed a sample of patients with stage 3 CKD (estimated glomerular filtration rate [eGFR] 30–60 mL/min/1.73 m^2) admitted to the hospital between January and December 2025. Patient characteristics and prescription of kidney-protective medicines were audited and summarised using descriptive statistics.

Results A total of 400 patients were audited. The mean age was 68±12.6 years, mean eGFR was 47±9.2 mL/min/1.73 m^2, and 59% were male. Prescribing frequency for ACEi/ARB/ARNI was 268/400 (67%), 147/400 (37%) for SGLT2i, 55/400 (14%) for GLP-1s and 101/400 (25%) for MRAs. Overall, 88/400 (23%) were not prescribed any of the 4 kidney-protective medications, 133/400 (33%) were prescribed one, 110/400 (28%) were prescribed two, 58/400 (15%) were prescribed three, and 11/400 (3%) were prescribed all four medication classes. Patients were more likely to be prescribed ≥2 kidney-protective medications when comorbid with heart failure 85/108 (79%), ischaemic heart disease 73/110 (66%) and type 2 diabetes mellitus 115/180 (64%).

Discussion Despite the growing evidence of cardio-kidney-metabolic benefits of ACEi/ARB/ARNI, SGLT2i, GLP-1s and MRAs, prescribing rates in patients with stage 3 CKD are relatively low. Potential barriers to their uptake in real-life settings include slow evidence translation, current Pharmaceutical Benefits Scheme restrictions, costs to patients and adverse drug effects. Larger-scale studies are warranted to better understand the relative importance of these barriers.

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Pharmacists' knowledge and confidence in acute kidney injury: A statewide public hospital pharmacy service survey

Lucas Panagopoulos[1], Hanh Tran[1], Professor Shilpanjali Jesudason[2], Yu Ting Sim[1], Stefan Kowalski[3]

[1]SA Pharmacy, Central Adelaide Local Health Network, SA Health, Adelaide, SA, [2]Central and Northern Adelaide Renal and Transplantation Services, SA Health, Adelaide, SA, [3]School of Pharmacy and Biomedical Sciences, Adelaide University, Adelaide, SA

EMAIL lucas.panagopoulos@sa.gov.au

Background Acute kidney injury (AKI) accounts for 7% of Australian hospital bed days and is associated with significant morbidity and mortality. AKI may be prevented or minimised with early recognition and intervention. Pharmacists can play a key role in AKI prevention and management, but whether Australian hospital pharmacists have the knowledge and confidence to do this effectively has not been adequately researched.

Aim To characterise pharmacists' knowledge and confidence in preventing and managing AKI within a statewide Australian public hospital pharmacy service, to better inform pharmacy workforce development.

Methods An anonymous, cross-sectional, web-based survey was distributed to pharmacists and intern pharmacists across a statewide Australian public hospital pharmacy service over a 4-week period (September–October 2023). The survey assessed knowledge of AKI definitions, risk factors, causes, clinical markers, and management, self-reported confidence and preferred interventions for practice improvement. Descriptive statistics were used to summarise findings. Ethics exemption was granted by the institutional ethics committee.

Results 49 responses were analysed (9.3% response rate). Correct AKI definitions emerged as a key gap, with the urine output criteria least recognised (38.8%, n=19), and high uncertainty across all three criteria. 73.5% (n=36) incorrectly identified Aboriginal or Torres Strait Islander background as an AKI risk factor. Ibuprofen (95.9%, n=47), perindopril (95.9%, n=47), and gentamicin (93.9%, n=46) were the most common medications perceived as likely to contribute to AKI. Participants felt most confident identifying medication-related causes of AKI (53.1%, n=26) and least confident defining AKI (18.4%, n=9). Preferred improvement interventions included workshops (89.8%, n=44), mentorship and training (83.7%, n=41), and screening tools (81.6%, n=40).

Discussion This study identifies priority areas for improving pharmacist AKI knowledge and confidence. Health services should provide targeted training and decision-support tools to strengthen AKI prevention and management. Further research is required to guide training development and implementation.

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Reversing Trend of Opioid Overdose Deaths by Improving Accessibility to the Take Home Naloxone Program

Julius Pangjaya[1], Kirsty Morgan[1], Jessica Reece[1], James Wei[1], Nicholas Jones[1]

[1]*Bayside Health – Peninsula Care Group, Frankston, Vic*

EMAIL jpangjaya@phcn.vic.gov.au

Background Opioid has been identified as the most common drug type involved in overdose deaths across Australia, including Victoria, for the past two decades. Trial of Take Home Naloxone (THN) program has been proven successful in New South Wales, Southern and Western Australia. Opioid related deaths have dropped by 16% since Victoria launched the THN program in 2022. A local audit in 2023 revealed only 5 in 39 patients admitted for opioid overdose were prescribed naloxone, and just 1 received a THN pack on discharge, highlighting a major gap in care and a need to optimize accessibility.

Objective This initiative aims to enhance the provision of government funded naloxone at discharge for all eligible patients identified as being at risk of opioid overdose.

Action A multidisciplinary team comprising pharmacists and clinical service educators was formed and launched the local THN initiatives in February 2025. A clinical practice guideline, benchmarked across health services, was developed for supply of Take-Home Naloxone Packs without a prescription. Key implementations include identification of local champions, conducting educational sessions for clinical staff to promote awareness, workflow understanding and gather feedback.

Evaluation Measurable elements include the absolute and average number of packs distributed monthly. A series of interventions, systematically guided by the Behaviour Change Wheel framework, were implemented. Plan-do-study-act cycles were adopted to measure ongoing impact of change and the need to modify interventions to optimize outcome. Peak distribution of 10 packs in a single month was observed at the 10th month post launch. Average distribution has consistently quadrupled within the first year.

Discussion Statewide participation of THN program contributes to synergistic reduction of opioid overdose deaths within Victoria. Effective implementation of the initiatives achieved via multidisciplinary collaboration. Findings from this evaluation will guide future strategies in optimizing THN distribution both locally and across public health services.

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Impact of Revised SPU Forms on Approval Efficiency of Restricted Medicines at a Metropolitan Hospital

Swara Patel[1], Claire McAvaney[1], Emily O'Halloran[1]

[1]*Monash Health, Melbourne, Vic*

EMAIL swarapatel03@gmail.com

Background A formulary is a list of medications that are approved for use within a health organisation, designed to limit the use of high-cost medications and support evidence-based practice. Timely access to restricted medicines relies on the accuracy and completion of the correct Single Patient Use (SPU) forms by clinicians, limiting the approval process. In January 2025, SPU forms were updated with aims to reduce administrative burden and improve approval times. Questions relating to common clarifications were amended, and formatting was improved.

Objective To evaluate SPU form updates on accuracy and completeness of submissions and timeliness of approval.

Methods A retrospective observational study of SPU applications received by the formulary team over two four-week periods in August 2024 and February 2025 was conducted. All forms were included, excluding those where approvals were made after hours, applications where the outcome was pending, and requests which did not follow standard procedure. Forms were compiled, de-identified, and compared to measure differences in pre- and post-intervention groups.

Evaluation 245 applications were reviewed, of which 6 were excluded, leaving 133 applications from August 2024 (pre-intervention) and 106 from February 2025. Form completeness remained largely unchanged (88% vs. 86.2%). The proportion of forms requiring follow-up showed a reduction, from 48.1% to 44.3%. However, the time taken for approvals granted by the formulary team improved from a median of 3.42 hours in August 2024 (IQR 1.3–20.3) compared to 2.73 hours in February 2025 (IQR 1.0–18.0). Fewer forms required clarification on expected discharge dates, time of medication administration, and barriers to discharge. Conversely, requests for supporting evidence increased, which is an area to improve upon in future form revisions.

Discussion Despite overall completion rates remaining largely unchanged, greater detail provided in practitioner responses on SPU forms post-update, reduced the need for clarification and shortened turnover time for approval.

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Improving VTE Risk Assessment Practices in a Cardiothoracic and Vascular Surgery Unit through Pharmacist-Led Interventions

Avani Patel[1]

[1]*The Canberra Hospital, Garran, ACT*

EMAIL avanipatel8421@gmail.com

Background Venous thromboembolism (VTE) is a significant cause of preventable morbidity and mortality in hospitalised patients. Timely assessment and documentation of VTE risk is essential to ensure appropriate prophylaxis is initiated. The Venous Thromboembolism Prevention Clinical Care Standard emphasises that all patients should have their VTE risk assessed and documented within 24 hours of admission using a locally endorsed, evidence-based tool. Despite clear guidance, compliance remains inconsistent, particularly in high-risk surgical populations, leading to missed or delayed prophylaxis.

Objective(s) To improve the timeliness and overall completion of VTE risk assessments within 24 hours of admission and reduce missed prophylaxis through pharmacist-led interventions.

Action (Method) A retrospective audit of cardiothoracic and vascular surgery patients (length of stay >24 hours) was conducted for August 2025. Interventions included clinician education, reinforcement of the electronic VTE risk assessment tool within the digital health record, and pharmacist-led prompting and completion of assessments. A re-audit in March 2026 evaluated the impact using identical methodology. Limitations included retrospective design, ICU-to-ward transfers, and short-stay patients.

Evaluation Baseline (n=146) and post-intervention (n=154) results showed improvement.

Cardiothoracic patients 24-hour completion increased from 27.5% to 42.5%, overall completion from 80% to 98%, and missed assessments decreased from 20% to 3%.

Vascular patients 24-hour completion improved from 50% to 78.5%, overall completion from 71.4% to 94.9%, and missed assessments reduced from 27.3% to 9.1%.

High-risk omissions (>72 hours) decreased, though gaps persisted in short-stay patients.

Discussion Pharmacist-led interventions significantly improved VTE assessment practices, demonstrating the value of pharmacists in enhancing guideline adherence and patient safety. Embedding pharmacists into routine workflows supports sustained improvement. Ongoing challenges in short-stay and perioperative patients require targeted strategies, including improved perioperative planning and system-level integration.

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Targeted improvement initiatives for preventable medication-related hospital acquired complications in mental healthcare

Shivani Patel[1], Carolyn Woods[2], Seniha Kasif[1], Libby Waugh[1]

[1]*Mental Health Service, Sydney Local Health District, NSW,*
[2]*Sydney Local Health District, , NSW*

Background The Australian Commission on Safety and Quality in Health Care defines four medication-related Hospital Acquired Complications (HACs), including movement disorders (10.4) and serious alteration in conscious state (10.5) associated with psychotropic use. As psychotropic prescribing is central to mental healthcare, inpatient settings may experience higher HAC rates. Preliminary data identified that 0.002% of medication administrations resulted in a HAC, indicating these events are rare but clinically significant. Between October 2024 and April 2026, 59 HACs were identified, of which 10 (17%) were classified as preventable.

Objectives To determine causation and develop targeted improvement initiatives for preventable medication-related HACs within a mental health inpatient service.

Action (Method) HACs coded between October 2024 and April 2026 were analysed using the Schumock and Thornton Preventability Assessment Tool. This validated tool applies ten structured questions to determine the preventability of adverse drug events. A multidisciplinary working group, including pharmacists, medical officers and nurses, reviewed preventable HACs to identify contributing factors and inform improvement strategies.

Evaluation Of the 10 preventable medication-related HACs, four were attributed to allergy or adverse drug reactions, three to suboptimal prescribing, two to toxic drug concentrations, and one to a combination of factors. The working group identified key gaps in documentation, prescribing, and monitoring, and concluded there is a need for targeted education, improved reporting, and structured feedback. This includes direct feedback to medical teams, multidisciplinary education on HACs, optimisation of adverse drug reaction documentation, regular reporting, and education for nursing and medical staff on psychotropic pharmacokinetics and pharmacodynamics.

Discussion This approach provides a structured and scalable framework to reduce preventable harm and improve psychotropic medication safety in inpatient settings. Limitations related to implementation and sustainability include challenges in collecting education feedback, the need for repeated education, and ensuring timely feedback for admissions coded as HACs.

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Building Cancer Care Pharmacy Technician Capability Through an Online Anticancer Medication Calculations Program

Michelle Rantucci, Margaret Patterson[1]

[1]*Slade Pharmacy, Brisbane, Qld*

EMAIL Michelle.Rantucci@sladepharmacy.com.au

Background Pharmacy technicians working in cancer care play a vital role in supporting pharmacists with complex medication calculations and patient-specific dosing. Responsibilities may include ordering, compounding, and dispensing anticancer medicines. Despite this, no nationally recognised training program exists to support technicians seeking to specialise in this area.

Objective(s) To develop an online learning module that enhances pharmacy technician competency and confidence in anticancer medication calculations, including core dosing methods and the rationale for individualised dosing in cancer care.

Action (Method) Content was developed by the organisation's national Quality Pharmacist Cancer Care team and reviewed by the Quality Learning and Development team. Key topics included methods for calculating anticancer medication doses, application of calculation principles to oral therapies, and interpretation of drug concentrations in cancer care pharmacy practice.

Learning content was uploaded into Articulate 360, a comprehensive e-learning platform, to create an interactive module, with embedded knowledge checks and summative quizzes to support learning and assess understanding.

Evaluation Since its launch in March 2026, 21 pharmacy technicians have enrolled in the module, with steady uptake observed. Preliminary qualitative feedback indicates strong acceptability and perceived value, with participants reporting increased confidence in undertaking calculation-based tasks. Pharmacy managers have also observed improved collaboration between pharmacists and technicians in the delivery of cancer care services.

Discussion This training addresses a recognised gap in structured education for cancer care pharmacy technicians and demonstrates a practical, practice-based approach to workforce capability development. Early findings suggest the module supports role optimisation and may contribute to safer, more efficient medication management processes. Further evaluation will assess impact on competency, workflow efficiency, and patient safety outcomes, informing ongoing refinement and enhancement of the module to align with evolving workforce learning needs.

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Developing a clinical dashboard to support Venous Thromboembolism prevention and anticoagulation management

Travis Phelan[1], Elise Murphy[1], Joanne Young[1], Michelle Nalder[1]

[1]*The Royal Melbourne Hospital, Parkville, Vic*

EMAIL travis.phelan@mh.org.au

Background Venous thromboembolism (VTE) is a potentially preventable cause of significant morbidity and mortality in hospitalised patients. Appropriate VTE prophylaxis significantly reduces the risk of hospital-acquired VTE. However, inconsistent documentation of VTE risk assessments, and inappropriate prescribing and monitoring of anticoagulants remains common. These gaps highlight the need for proactive, system wide anticoagulation stewardship. Funding was secured for a 12 month quality improvement project for an anticoagulation stewardship pharmacist to design and implement a clinical dashboard to support real time identification of patients at risk of VTE or anticoagulant related harm.

Objective(s) To develop a prototype anticoagulation stewardship dashboard integrated within the electronic medical record (EMR) to identify hospitalised patients at increased risk of VTE or anticoagulant related harm.

Action (Method) Hospital acquired complication data, anticoagulation prescribing data, VTE risk assessment completion rates, and medication incident reports were reviewed to identify key problems and preventable factors. Based on these findings, predefined clinical rules were developed to proactively identify at risk patients using real-time EMR data. Once built, the prototype was user-tested to guide further improvements.

Evaluation Evaluation focused on the initial dashboard build and iterative refinement of its design, layout, and underlying clinical logic. User testing with an anticoagulation stewardship pharmacist assessed usability, clarity of information display and appropriateness of rule thresholds. Feedback informed refinement of rule logic, prioritisation of risk indicators, and optimisation of dashboard navigation to support efficient oversight of unit level signals and individual patient review.

Discussion This project demonstrates the potential of EMR-embedded, real time identification of anticoagulation-related problems to strengthen anticoagulation stewardship. Unlike retrospective audits or externally hosted dashboards, this EMR integrated tool enables timely, targeted intervention within the same system. Future work will focus on implementing a formal model of care to support sustained and scalable use of the dashboard in clinical practice.

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The Data Wears Hi-Vis: data-driven patient lists to guide prioritisation of clinical pharmacist review

Travis Phelan[1], Joanne Young[1], Kerryn Griffett[1], Martine Vromen[2], Michelle Nalder[1]

[1]*The Royal Melbourne Hospital, Parkville, Vic,* [2]*Parkville EMR, Parkville, Vic*

EMAIL travis.phelan@mh.org.au

Background Clinical pharmacists traditionally prioritise patients for review and identify clinical issues using manual chart review and individual clinical judgement. This process is time-consuming and heavily influenced by clinical experience. The increasing availability of structured data within Electronic Medical Records (EMRs) presents an opportunity to enhance identification of high-risk patients, enabling pharmacists to focus effort where it is most needed.

Objective To design and implement an EMR clinical pharmacy patient list that supports pharmacists to rapidly identify high-risk patients and common medication-related problems.

Action (Method) An iterative Plan–Do–Study–Act (PDSA) cycle approach was utilised. An initial EMR patient list was developed incorporating medication and patient-related risk indicators. Usability testing was conducted through System Usability Scale surveys and focus groups. Feedback informed successive refinements to which medication-related problems were displayed, list layout and functionality. The final version was implemented into routine clinical workflows, followed by a post-implementation usability evaluation.

Evaluation Usability scores indicated the EMR patient list was well designed and fit for purpose at implementation. The majority of pharmacists reported that the final version of the list was intuitive (70%), supported clinical decision-making (70%), and assisted with identifying patients requiring urgent review (92%). Most respondents (77%) indicated they would recommend the tool to colleagues. Pharmacists reported improved visibility of clinically significant risks, reduced cognitive load during prioritisation, and usefulness during busy clinical periods. Opportunities for further improvement were identified, including specialty-specific medication indicators, and presentation of trended rather than static data such as the patient's kidney function.

Discussion This quality improvement initiative demonstrated leveraging existing EMR data into patient lists can improve the identification and timely review of high-risk patients. A co design approach supported alignment with real world workflows and adoption of the new list. Ongoing optimisation will further embed the tool into practice and strengthen patient safety outcomes.

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Limitless Connectivity: Australia's First Implementation of Wi Fi–Enabled BD Alaris Nexus Infusion Pumps

Alice Plath[1], Timothy Dunn[1], Patrick Murphy[1]

[1]*Caboolture, Kilcoy and Woodford Directorate, Caboolture, Qld*

EMAIL alice.plath@health.qld.gov.au

Background A new fleet of BD Alaris Nexus infusion pumps was procured to replace an ageing fleet. Although the Nexus platform includes Wi-Fi capability to support Guardrails™ governance, asset tracking, and infusion analytics, the required digital infrastructure and cybersecurity configuration had not yet been established. As a result, the pumps were initially deployed without connectivity, limiting access to their full digital functionality.

Objectives To implement secure Wi-Fi connectivity for the BD Alaris Nexus fleet – the first known Australian deployment of network-enabled Nexus pumps – and to evaluate early outcomes in dataset distribution and digital capability, demonstrating how connected infusion technology can unlock limitless improvements.

Action A multidisciplinary collaboration between Pharmacy, Digital Services, Biomedical Technology Services, the vendor, and the Hospital Equipment Service enabled development of the server environment, cybersecurity approval, Wi-Fi certificate installation, and manual activation of wireless capability on each device. Pharmacy conducted comprehensive user acceptance testing to confirm safe and reliable Wi-Fi performance. Legacy pumps were decommissioned. A new Guardrails™ dataset was uploaded to the server and wirelessly deployed across the fleet.

Evaluation The fleet comprised 353 pumps (115 syringe and 238 large volume). Within two weeks, 174 pumps (49%) had completed the Guardrails™ update, 76 (22%) had the update staged but awaiting acceptance, and 103 (29%) had not begun the process. By week five, uptake had increased substantially, with 317 pumps (90%) fully updated, 32 (9%) pending acceptance, and only 4 pumps (1%) yet to receive the update. Wi-Fi activation also enabled wireless event logs, infusion reporting, and real-time pump location data for the first time.

Discussion This first-in-Australia implementation demonstrates that secure Wi-Fi enablement of BD Alaris Nexus pumps is feasible at scale and delivers immediate benefits for medication safety, dataset governance, and device management. Realising these digital capabilities highlights how modern infusion technology can create limitless clinical potential.

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Enabling Take-Home Naloxone in Emergency Departments: A Theory-Informed Implementation Study

Holly Powell[1], Kate Bennett

[1]*Sunshine Coast University Hospital, Birtinya, Qld*

EMAIL holly.powell@health.qld.gov.au

Background Opioid-related harm remains a significant public health concern, with emergency departments (EDs) representing critical points of contact for individuals at risk of overdose. There are several research papers and posters evaluating uptake of THN in Australian Hospitals, but there is limited data on the implementation strategies used, and furthermore, analysis of the effectiveness of implementation strategies. Implementation within regional and rural EDs is often limited by behavioural, knowledge, and system-level barriers. This project aimed to address the need for a targeted and scalable THN implementation across EDs.

Objectives To implement a sustainable ED-based THN program by systematically identifying and addressing clinician-level barriers to naloxone provision, with a defined role for pharmacy services in facilitating practice change.

Methods A mixed-methods, pre-implementation survey of ED clinicians was undertaken to identify barriers and enablers to THN provision. Quantitative data was collected using Likert-scale measures, while qualitative free-text responses were analysed using thematic analysis. Survey items were mapped to the COM-B model (Capability, Opportunity, Motivation – Behaviour) to inform targeted interventions. A pharmacy-led implementation strategy was developed, including creation and dissemination of patient information handouts in response to identified clinician need, alongside development of concise educational sessions and short instructional videos. Additional strategies focused on improving access to naloxone and embedding processes within existing clinical workflows.

Evaluation Evaluation incorporated pre and post-implementation staff feedback, and a post-implementation audit of naloxone supply. Findings demonstrated the uptake of THN provision, enhanced clinician confidence, and reduced perceived barriers, particularly within capability and opportunity domains.

Discussion Application of a theory-informed, pharmacy-led approach facilitated targeted and sustainable implementation. Integration of THN into ED workflows strengthens harm reduction practices, with pharmacy playing a central role in education, resource development, and system integration. This model offers a transferable framework for similar regional and rural healthcare settings.

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Impact of a Credentialled Pharmacist in Pre-Admission Clinic on PreoperativeMedication Adherence: A Post-Intervention Study

Olivia Pritchard[1], Alison Tse[1], Lisa Li[1]

[1]*Pharmacy Department, Western Health, Melbourne, Vic*

EMAIL olivia.pritchard1@wh.org.au

Background Pre-admission clinic (PAC) supports patient assessment and preparation before elective surgery, including the provision of medication advice to reduce perioperative risk. A baseline in-hospital study conducted in 2022 showed variable patient adherence to advice provided by nursing and medical staff, contributing to day-of-surgery cancellations. These concerns prompted the introduction of a credentialled pharmacy service in PAC, where pharmacists provide guideline-based advice and facilitate medication adjustments.

Objective(s) The primary aim was to compare patient adherence to preoperative medication advice provided by pharmacists and non-pharmacists in PAC. Secondary aims included evaluating the impact on surgery cancellation due to medication mismanagement and assessing compliance with hospital medication guidelines.

Action (Method) A post-intervention cross-sectional survey study was conducted from April to July 2025, adapted from the 2022 baseline study. Adults undergoing elective surgery who received preoperative medication advice from PAC pharmacists were surveyed on admission. Data collected included demographics, clinical characteristics, adherence, reasons for non-adherence, and communication methods. Results were analysed and compared with the baseline study.

Evaluation A total of 156 participants were surveyed in both pre- and post-intervention studies. Patient adherence to preoperative medication advice increased from 58.3% at baseline to 80.8% following the intervention. Among all participants (n=156), forgetting advice (14.7%) and misunderstanding advice (14.1%) were common contributors to non-adherence at baseline. Post-intervention, the prevalence of these factors decreased to 5.1% and 3.8%, respectively. Two surgical cases were cancelled on admission due to anticoagulant mismanagement in the baseline study, compared with none in the post-intervention study. Compliance of advice provided by staff with hospital guidelines increased from 71.2% to 96.8%.

Discussion Credentialled pharmacist-led interventions in PAC improved patient adherence and reduced day-of-surgery cancellations related to preoperative medication mismanagement. Pharmacist involvement also enhanced the consistency and guideline compliance of preoperative medication advice, potentially reducing perioperative risk and improving surgical workflow efficiency.

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Advancing safe and consistent off-label use of medicines: Guiding Principles for Australian healthcare

Lisa Pulver[1], Lisa Crisp[1,2], Prof Ric Day[3], Julie Briggs[1]

[1]CATAG, Sydney, NSW, [2]Department of Health Tasmania, Hobart, Tas, [3]St Vincent's Clinical Campus, School of Clinical Medicine, Medicine & Health, University of New South Wales, Sydney, NSW

EMAIL catagcoordinator@catag.org.au

Background Off-label use of medicines is well-recognised in clinical practice. 'Off-label' refers to the use of a medicine included in the Australian Register of Therapeutic Goods for a purpose or in a manner different from that described in its Therapeutic Goods Administration approved Product Information. Supporting evidence for off-label use can vary and is often subject to less formal scrutiny, leading to increased uncertainty regarding benefits, harms, and cost-effectiveness. The clinical, safety, ethical, legal and financial issues of off-label prescribing require a careful and responsible approach to deliver quality use of medicines.

Objective To update a national framework for the safe, ethical, and effective off-label use of medicines, expanding to include all Australian healthcare settings (public and private hospitals and primary care), with an emphasis on structured, evidence-based, and patient-centred practice.

Action Alongside a review of literature, eleven qualitative interviews were conducted with representatives from primary care and Medicines and Therapeutics Committees. A multidisciplinary group, including experts in clinical practice (medical, pharmacy, nursing), evidence-based medicine, clinical ethics, consumer representation, medicines information, regulation, and medicines governance, was convened to inform this update. External stakeholder consultation was conducted in April 2026, including public and private hospitals, health departments, primary care and national professional bodies. All feedback was collated, reviewed and discussed to refine the final content of the Guiding Principles.

Evaluation Eight Guiding Principles were released in mid-2026 to support appropriate off-label use of medicines, addressing evidence-based decision making, expert consultation, consumer involvement and informed consent, communication across transitions of care, monitoring and evaluation, and relevant legal and professional responsibilities.

Discussion The updated Guiding Principles provide a national framework to support safe, ethical, and patient-centred off-label use of medicines across Australian healthcare settings, promoting improved governance, transparency, and decision-making while minimising harm and enhancing the quality use of medicines.

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Collaborative Pharmacist Medication Prescribing: a new care model to Address Medication Safety in Remote Healthcare

Louise Quabba[1]

[1]North West Hospital and Health Service, Mount Isa, Qld

EMAIL louise.quabba2@health.qld.gov.au

Background Remote healthcare settings face challenges, including workforce shortages and increased risks during transitions of care. The implementation of MetaVision in ICU at our remote hospital introduced a new electronic workflow in a paper-based hospital. This raised concerns regarding increased prescribing workload when patients 'stepped-down' to wards. This, along with legislative changes, created a timely opportunity to redesign medication management processes. The Collaborative Pharmacist Medication Prescribing (CPMP) model was introduced to mitigate risks and alleviate medical officer (MO) burden.

Objective(s) To leverage the implementation of MetaVision to introduce a CPMP model for ICU step-down in a remote hospital, and to describe barriers, enablers, and lessons learnt for sustainable practice.

Action CPMP was implemented in an 80-bed remote hospital which comprised of eight pharmacists. Pharmacists were authorised to transcribe medication orders from MetaVision to paper charts, prescribe selected low-risk therapies (analgesia, nicotine replacement therapy, aperients), and clarify orders to ensure safe medication administration. The CPMP model included developing and documenting collaborative medication management plans with MOs, reconciling medications, conducting handovers, and performing independent reviews.

Evaluation The MetaVision rollout acted as a key enabler, creating both urgency and clinical engagement for change. MO support was driven by recognition of reduced prescribing burden and improved workflow efficiency. Additional enablers included proactive leadership, allocated funding, and executive support. Barriers included high staff turnover, limited resources, and a complex external consultation process. Despite these challenges, the CPMP model was successfully integrated into routine practice.

Discussion Aligning CPMP implementation with major digital transition enabled a pragmatic approach to improving medication safety. This model demonstrates how rural services can leverage system change to implement sustainable, pharmacist-led innovations that reduce workload, enhance continuity of care, and improve patient outcomes.

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When Less Is More – Optimising After-Hours Medication Stockholding

Michael Quach[1], Teagan Fursey[1], Lilly Comacchio[1], Jordan Hegarty[1], Minh Nguyen[2], Monika Krcoska[2], Justine Mitchell[3]

[1]Shellharbour Hospital, Mount Warrigal, [2]The University of Sydney School of Pharmacy, Camperdown, NSW [3]The Wollongong Hospital, Wollongong NSW

EMAIL Michael.Quach@health.nsw.gov.au

Background In regional hospitals, timely access to medicines outside pharmacy operating hours is essential to support patient care. The After-Hours Medication Cupboard (AHMC) provides access to urgent medications when pharmacy services are unavailable. Over time, duplication between AHMC stock and ward imprest holdings resulted in inefficient use of limited storage space, increased stock management requirements and unnecessary inventory complexity. Given the resource constraints often experienced in regional health services, a review was undertaken to optimise medication storage and improve stock governance.

Objective To rationalise AHMC inventory by reducing duplication with ward imprest stock while maintaining timely access to essential after-hours medications.

Method The AHMC medication list was compared against hospital imprest holdings. Medications available on ward imprest were identified for removal from the AHMC. Green-labelled antibiotics available on imprest were also removed. Where appropriate, imprest quantities were increased to mitigate the risk of stock shortages following removal from the AHMC. The remaining inventory was reviewed to ensure continued availability of essential after-hours medications across the regional health service.

Evaluation Prior to review, 164 medications were stored in the AHMC. Hospital imprest holdings comprised 633 medication line items. Application of the predefined rationalisation criteria resulted in the removal of 73 medications from the AHMC. Following optimisation, 91 medications remained, representing a 44.5% reduction in AHMC inventory. The remaining inventory accounted for 55.5% of the original stockholding. Removal of duplicate medications increased available storage capacity and simplified inventory management while maintaining access through ward imprest locations.

Discussion This project demonstrates how a targeted pharmacy-led review can streamline after-hours medication storage in a regional hospital. Reducing duplication improved inventory efficiency while preserving medication accessibility for clinical staff. The approach provides a practical and sustainable model for regional health services seeking to optimise limited storage capacity and strengthen medication governance without compromising patient care.

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Comfort Can't Wait – Palliative Care Crisis Kits Improving After-Hours Access

Michael Quach[1], Rhiannon Dyer[1], Minh Nguyen[2], Monika Krcoska[2], Justine Mitchell[3]

[1]Shellharbour Hospital, Mount Warrigal, [2]The University of Sydney School of Pharmacy, Camperdown, NSW [3]The Wollongong Hospital, Wollongong NSW

EMAIL Michael.Quach@health.nsw.gov.au

Background Timely access to palliative care medicines is essential for effective symptom management and patient-centred care. In regional settings, limited after-hours pharmacy services can delay access to urgent medications. To address this gap, pharmacy introduced palliative care crisis kits for community nurses. The kits were stored on the hospital ward and were available 24 hours a day, providing an after-hours pathway to essential palliative care medicines. Three kit types were developed: a non-accountable medicines kit, a high-use accountable medicines kit and a low-use accountable medicines kit. The high-use kit contained clonazepam, hydromorphone, midazolam and morphine, while the low-use kit contained methadone and phenobarbital.

Objective To evaluate the utilisation of palliative care crisis kits, identify trends in demand and determine the most frequently used medicines.

Method A retrospective review of palliative care crisis kit distributions was conducted over a three-year period (2023–2025). Sixty-two kit transactions were reviewed and stratified by year and kit type. Medicines replaced following kit use were analysed to identify utilisation patterns and inform future stock requirements.

Evaluation Overall kit utilisation increased from 14 (2023) distributions to 21 (2024) and 27 (2025), representing a 93% increase over the study period. The high-use accountable medicines kit usage increased from 7 distributions in 2023 to 11 in 2024 and 18 in 2025. Utilisation of the non-accountable and low-use accountable kits remained relatively stable. Hydromorphone and midazolam were the most frequently replaced medicines.

Discussion Increasing utilisation of palliative care crisis kits demonstrates their value in supporting timely after-hours access to essential medicines in regional communities. Demand was greatest for high-use injectable medications, highlighting the importance of maintaining readily available stock. By providing community nurses with 24-hour access to medicines stored on a regional hospital ward, this service model may reduce treatment delays and support timely symptom management for palliative care patients.

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Pharmacist-Led National Protocols to Standardise Medication Administration and Enable Digital Readiness

Ella Raguz[1], Priscilla Han[2], Amanda Berry[3]

[1]Ramsay Health Care, Melbourne, Vic, [2]Ramsay Health Care, Sydney, NSW, [3]Ramsay Health Care, Brisbane, Qld

EMAIL raguze@ramsayhealth.com.au

Background Variation in medication administration across large, multi-site healthcare organisations increases complexity, introduces risk and limits the effectiveness of digital systems. As organisations transition to a single electronic health record (EHR), inconsistent local practices create barriers to safe standardisation. Pharmacists are well positioned to lead system-level initiatives that translate governance into consistent, administration-ready practice.

Objective(s) To develop and implement pharmacist-led national medication administration protocols to standardise practice, reduce variation and support EHR readiness across a 72-hospital network.

Action (Method) Pharmacist-led working groups developed national medication administration protocols for selected high-risk and specialised medicines where local variation existed across sites with differing clinical capability. Initial engagement with local sites ensured alignment with clinical workflows. Protocols standardised administration practices, aligned to approved concentrations, promoted ready-to-use injectable products, and defined clinician scope, monitoring requirements and care setting limitations. Significant focus was placed on protocol template design to ensure clarity, logical flow and inclusion of critical information, supporting rapid, safe use at the point of care. Drafts underwent subject matter expert consultation and governance endorsement. Protocols were released monthly, with infusion pump drug libraries updated the following month to support implementation prior to activation as a system-enforced standard.

Evaluation Implementation is ongoing, with 12 protocols developed. Early evaluation indicates acceptance across sites, driven by reduced need for local protocol governance and improved consistency in practice. Centralisation reduced duplication of effort and streamlined infusion pump library updates. Protocols are aligned for future EHR integration and clinical decision support.

Discussion Pharmacist-led standardisation at scale provides a foundation for safe digital transformation. Embedding scope, monitoring requirements and user-centred design reduces variation while maintaining safety and usability. This scalable model highlights the role of pharmacists in system readiness and is transferable to other organisations undertaking EHR implementation.

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Taking Control of Propofol: Balancing Access, Risk and Accountability

Ella Raguz[1]

[1]Ramsay Health Care, Melbourne, Vic

EMAIL raguze@ramsayhealth.com.au

Background Propofol is a widely used anaesthetic agent for induction and procedural sedation, requiring immediate clinical access across multiple care settings. However, its potential for diversion, misuse and medication error necessitates strong governance. While an Australian and New Zealand College of Anaesthetists (ANZCA) advisory statement on propofol storage has existed since 2019 (1), no equivalent legislated standard applies in Australia. In the absence of a regulatory framework, variation in storage, access and documentation practices across hospital services can increase risk and reduce accountability.

Objective(s) To strengthen governance of propofol management through pharmacist-led organisational policy, balancing timely clinical access with clear accountability across a multi-site hospital network.

Method Propofol was designated as a high-risk medicine within the organisation's Medication Management Policy. Care area–specific requirements were developed by pharmacists to reflect differing clinical workflows across settings including intensive care and perioperative environments, mandating secure storage and access by authorised staff. A dedicated propofol register was implemented in each care area to document stock movements, reconciliation and discrepancies. A targeted audit tool was developed to assess compliance.

Evaluation Compliance was assessed through audit review, governance reporting and clinical feedback. Post-implementation, audit results demonstrated improved documentation compliance and reduced practice variation. Register use enabled identification and timely resolution of stock discrepancies. No adverse impact on clinical access was identified.

Discussion In the absence of legislated standards, this initiative demonstrates the capacity of pharmacists to lead a proactive organisational response to an unregulated risk. Embedding advisory guidance into internal policy improved accountability and reduced variation while preserving clinical workflows. This model is transferable to other high-risk medicines requiring a balance between accessibility and control.

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Evaluation of an Intern Pharmacist-Led Maternity Discharge Medication Service in a Private Hospital

Sally Rajendran[1], Maxime Watts[1]

[1]*St John of God Subiaco Hospital, Perth, WA*

EMAIL Sally.Rajendran@sjog.org.au

Background During the COVID-19 workforce shortages, a clinical pharmacist-led discharge medication service was established within maternity to support medication ordering, delivery coordination, and patient counselling. As hospital activity normalised, the service transitioned to intern pharmacists, enabling clinical pharmacists to refocus on higher acuity clinical care.

Objective(s) To describe and evaluate the effectiveness of an intern pharmacist–led maternity discharge medication service, focusing on service coverage and patient satisfaction.

Action (Method) Patients planned for discharge are identified by the midwife coordinator (Monday to Friday). The intern reviews discharge medication orders, confirms patient requirements, and provides counselling, primarily for analgesia. Medication requests are then submitted electronically and dispensed for next-day delivery via a pharmacy porter service. Before commencement, interns receive structured training and the service is guided by a standard operating procedure.

Over a two-week period, data were collected to compare the number of patients reviewed by the intern pharmacist with the actual number of patients discharged. Patient satisfaction was assessed using an anonymous online survey comprising of four graded-response questions and a free-text comment section, distributed via a handout with a QR code following counselling.

Evaluation 88% of maternity patients (90/102) were reviewed prior to discharge. All respondents (100%) either strongly agreed or agreed that they understood how to use their discharge medications to manage their pain, and 100% reported satisfaction with the pharmacy service. Additionally, 80% of patients either strongly agreed or agreed that counselling helped to reduce breastfeeding concerns. The response rate for the survey was 18% (10/54).

Discussion This service demonstrates high reliability and strong patient satisfaction, while also supporting intern skill development and fostering interprofessional collaboration. Future directions include expansion to a seven-day service model, enhancing the provided medication safety in breastfeeding information, and development of a structured credentialing process.

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Pause & Refresh: Piloting a Peer-Led Wellbeing Model in Hospital Pharmacy

Samiha Rashed[1], Sarah Khoo[1], Sylvia Behary[1], Chloe Bunt[1]

[1]*South Eastern Sydney Local Health District, Caringbah , NSW*

EMAIL samiharashed01@gmail.com

Background Burnout among hospital pharmacy staff is increasingly recognised as a patient safety concern, impairing communication, decision-making, and increasing the risk of medication-related errors. Post-COVID literature suggests burnout affects over 90% of Australian pharmacists, with more than half considering leaving the profession. Despite this, wellbeing initiatives remain largely ad hoc, with few proactive, structured models integrated in the workplace.

Objective(s) To implement a monthly reflective session for hospital pharmacy staff to connect, reflect, and strengthen wellbeing practices.

Action (Method) A pharmacy wellbeing committee was established to design the initiative. A voluntary baseline survey adapted from the Maslach Burnout Inventory assessed burnout risk and staff needs, informing the development of monthly 30-minute hybrid drop-in sessions. The semi-structured sessions involved checking-in, grounding, facilitated discussion, peer sharing, and practical takeaways. Post-session surveys guided ongoing refinement, and participants were invited to complete an overall evaluation survey after the fourth session.

Evaluation Baseline results indicated early signs of burnout. Sessions commenced January 2026 with an average attendance of 10 pharmacy staff per session. From the evaluation survey (n=12), 75% attended more than two sessions, 83% agreed the sessions provided a safe space, and 92% found strategies applicable to daily work and life. 92% would recommend the sessions to colleagues and 75% felt inspired to support team wellbeing. Scheduling was a barrier, with only 42% agreeing that it was manageable within the workday.

Discussion This initiative demonstrates that a monthly reflective session can facilitate opportunities for staff to connect, reflect, and strengthen team wellbeing within hospital pharmacy. The model normalises wellbeing practices and fosters peer connection, both protective against burnout. Protected time and leadership support were identified as important enablers for sustainable participation. Early cultural shift is evident, with staff-led wellbeing initiatives emerging beyond the sessions, highlighting potential for broader adoption across district pharmacy sites.

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Limitless Care: Hybrid Pharmacy Model Improving Medication Safety in Rural Hospitals

Anna Reynolds[1]

[1]*Southern NSW Local Health District, Bega, NSW*

EMAIL anna.reynolds@health.nsw.gov.au

Background Rural hospitals face ongoing challenges recruiting and retaining pharmacists due to geographic isolation, limited workforce availability, and migration to metropolitan areas. This results in critically low staffing, risk of service disruption, and burnout among remaining staff.

Objective To implement a sustainable hybrid onsite-remote pharmacy service model that maintains safe medication management while reducing strain on onsite staff.

Methods A hybrid workforce model paired remote pharmacists with onsite staff. Remote pharmacists with local health district experience were recruited to maintain contextual knowledge and team cohesion, with quarterly onsite visits where possible. Workshops with the Director of Medical Services and pharmacy team identified priorities and guided workflow redesign.

Pharmacy technicians were upskilled to obtain Best Possible Medication Histories (BPMH), enabling pharmacists to focus on clinical review and medication safety. Daily huddles, triage frameworks, agile resource allocation, and standardised medication management plan documentation improved efficiency. Digital tools, including communication boards, remote electronic medical record (eMR) access, Microsoft Teams, and task allocation systems, supported real-time coordination.

Evaluation The model restored staffing to full FTE (143% increase) using a blended onsite-remote workforce, maintaining core medication management services without disruption.

Staff surveys showed improved workload prioritisation, reduced strain on onsite pharmacists, and increased confidence in service sustainability. Interdisciplinary communication and team integration also improved.

Process measures demonstrated more consistent BPMH collection and Medication Management Plan (MMP) documentation, supporting safer transitions of care. Early trends indicate improved prioritisation of high-risk patients, with some activity-based KPIs stabilising as focus shifted to clinically prioritised care.

Discussion This model shows rural pharmacy services can be stabilised through workforce redesign and digital integration. Relationship-centred implementation, embedding virtual pharmacists via onsite engagement and team workflows, was critical. The model improves continuity of care, reduces burnout, and offers a scalable approach for rural hospitals.

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Mapping clinical workflows and identifying inefficiencies in paediatric oncology medication delivery

Harriet Robertson[1], Christine Staatz[1], Ashlee Aitken[2], Rachael Lawson[2,3]

[1]*School of Pharmacy and Pharmaceutical Sciences, University of Queensland, St Lucia, Brisbane, Qld,* [2]*Pharmacy Department, QCH, South Brisbane, Qld,* [3]*School of Medicine, Centre Child Health Research, South Brisbane, Qld*

EMAIL Hattie.robertson02@gmail.com

Background Systemic anti-cancer therapy (SACT) delivery in paediatric oncology is a complex, multidisciplinary process requiring coordination across teams, systems and clinical environments. Understanding workflows is essential to optimise efficiency and patient safety.

Objectives This study aimed to characterise workflow patterns and task distribution among medical and nursing staff; and identify inefficiencies affecting the timely and safe delivery of medications within the SACT setting.

Action (Methods) A prospective observational time-and-motion study was conducted in the outpatient oncology department of a large tertiary children's hospital. Real-time minute-by-minute observations were undertaken, with activities systematically recorded in a purpose-designed data collection tool. Workflows of medical and nursing staff across the SACT pathway, including prescribing, preparation, administration, monitoring and supportive care, were mapped and analysed. Task duration, sequencing, interruptions, and communication patterns were captured to provide a detailed assessment of workflow dynamics.

Evaluation (Results) Seventeen nursing staff, five medical staff and two theatre staff participated, contributing approximately 90 hours of observation. Workflows were complex and fragmented, characterised by frequent interruptions, task-switching between patients and interdependent processes across clinical roles. Several bottlenecks delaying SACT delivery were identified, including holdups in clinical approvals, pharmacy dispensing and delivery and patient-readiness (i.e. port access, anti-emetic administration). Nursing staff spent on average 16 minutes preparing and delivering chemotherapy per patient, while residents spent approximately 13 minutes per hour prescribing supportive cares. Nursing staff spent 0.5% of their time communicating with pharmacists, compared to 2.2% for medical staff. During medication preparation and measurement, in-person interruptions occurred on average every 14.5 minutes and during prescribing of supportive cares, in-person interruptions occurred on average every 8.4 minutes.

Discussion This study provides a comprehensive, data-driven analysis of paediatric SACT workflows. Findings will help inform targeted workflow redesign aimed at improving staff efficiency, patient safety, and overall care experience.

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Standardisation of intravenous insulin concentration to improve patient safety

Melinda Rose[1], Lisa Robertson[1], Dr Tara Anderson[1], Anu Daniel[1,3,4], Emily Dix[1,5], Yvonne Hablutzel[1,2], Holly Kealy[5], Larrissa Laviolette-Rawn[1,3,4], Michelle Paine[1,5], Amy Richardson[1,2], Jodie Semmler[5], Aiden Stalker[1], Yingqi Teh[1,5]

[1]Statewide Hospital Pharmacy – Tasmanian Health Service, Hobart, Tas, [2]Launceston General Hospital , Launceston , Tas, [3]Mersey Community Hospital , Latrobe, Tas, [4]North West Regional Hospital , Burnie, Tas, [5]Royal Hobart Hospital , Hobart, Tas

EMAIL melinda.rose@ths.tas.gov.au

Background Insulin is a high-risk medicine. Serious safety events within the health service resulted in significant harm and were attributed to multiple suboptimal elements of intravenous (IV) insulin management, including the availability and use of non-standardised IV insulin concentrations.

Objective Improve safety by standardising the concentration of IV insulin to 1 unit per mL for all endocrine indications.

Action A multidisciplinary medication safety unit led the project to standardise IV insulin concentration across the state's health service, which involved the following elements:

- Commissioning production of premade IV insulin products (syringes and bags)
- Updating smart pump Dose Error Reduction Software protocols
- Creating a suite of statewide IV insulin infusion order and monitoring records
- Developing statewide guidelines for perioperative management and diabetes inpatient management in pregnancy, labour and birth
- Developing clinical resources, including a comprehensive intranet page
- Standardisation of administration processes to reflect best practice
- Providing education and training to front-line clinical staff
- Appointment of change champions in key clinical areas

Evaluation Initial vigilance was maintained for four weeks to identify unexpected issues with new processes, including a point-of-care survey, daily safety event review, and promotion of feedback channels.

Implementation was well accepted with no major safety trends identified.

Patient safety continues to be evaluated through a pre and post implementation audit of IV insulin management, safety events and complications. Preliminary findings suggest improved glycaemic monitoring following implementation, while highlighting ongoing challenges in electrolyte monitoring and clinical glycaemic and ketone management despite standardisation.

Discussion Statewide standardisation to a single IV insulin concentration supports safer use of this high-risk medicine and facilitates smart pump optimisation and future electronic medication management transitions. Further work is required to address monitoring and clinical response processes.

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How Is Deprescribing Education Delivered to Patients? A Systematic Review

Ella Ryan[1], Joanna Benedict[1], Dr Sweekriti Sharma[2], Dr Aili Langford[1]

[1]Sydney Pharmacy School, Faculty of Medicine and Health, The University of Sydney, Camperdown, NSW, [2]The Institute for Musculoskeletal Health, Camperdown, NSW

EMAIL Ellavlilyv123@gmail.com

Background Polypharmacy is associated with significant patient harms including falls, hospital admissions, and increased mortality. Deprescribing, the reduction or cessation of potentially inappropriate medications, is a key strategy to address this burden. Direct-to-patient educational materials are increasingly used to support deprescribing, yet no review has systematically characterised their design and delivery.

Aim/Objective(s) To characterise direct-to-patient educational interventions for deprescribing evaluated in controlled studies, including target medications, content, format, mode of delivery, frequency, and tailoring strategies.

Methods A systematic review was conducted in accordance with PRISMA 2020 guidelines, searching five electronic databases from inception to January 2026. Included studies were controlled studies evaluating direct-to-patient deprescribing education for adults. Intervention characteristics were extracted and synthesised using an adapted Template for Intervention Description and Replication (TIDieR) framework – the first application of this framework to characterise deprescribing education interventions.

Results Twenty-nine studies were included. Written formats predominated (n=26; 89.7%), followed by electronic (n=7; 24.1%) and verbal (n=4; 13.8%) components. Benzodiazepines were the most frequently targeted medication class (n=17; 58.6%), followed by proton pump inhibitors (n=8; 27.6%) and Z-drugs (n=6; 20.7%). The most common content elements were drug education (n=28; 96.6%), tapering and self-management strategies (n=25; 86.2%), and encouragement to initiate deprescribing conversations with a healthcare professional (n=13; 44.8%). Most interventions were delivered by postal mail (n=17; 58.6%) as a single provision (n=22; 75.9%). Tailoring was inconsistently reported across studies.

Discussion This review reveals that deprescribing education is being built on a highly variable, poorly standardised evidence base. Written, postal, single-provision interventions dominate, yet fidelity reporting is inconsistent and readability largely unassessed. As the field grows, integrating intervention characteristics with deprescribing outcome data will be essential to identify optimal design parameters and develop truly evidence-based patient education.

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Defining Expectations: A Ward Round Entrustable Professional Activity for Pharmacists

Shobika Sabashan[1], Eugene Ong[1], Samanta Wood[1]

[1]*Monash Health, Clayton, Vic*

EMAIL Shobika.Sabashan@monashhealth.org

Background Recent studies report low pharmacist participation in multidisciplinary ward rounds (WRs), despite evidence demonstrating improved medication safety and patient outcomes when pharmacists are involved. Local and international literature suggest common barriers to participation include limited role clarity, insufficient education, and lack of structured support. Although pharmacist involvement is widely recognised as beneficial, there is currently no published WR framework aligned with national pharmacy competency standards to guide practice and support consistent skill development.

Objective To develop and implement a standardised Entrustable Professional Activity (EPA) for pharmacist participation in multidisciplinary ward rounds, aligned with National Competency Standards to support consistent assessment and practice across different clinical areas.

Action A working group was established comprising pharmacists with and without prior WR experience practicing in different clinical areas via expression of interest. Guided by published literature and the National Competency Standards, the group used facilitated discussion and consensus-based methods to define critical and non-critical elements for effective WR participation which informed the EPA criteria. A structured feedback component, based on the Pendleton model, was also incorporated to support reflective, learner-centred feedback.

Evaluation The EPA was piloted with pharmacists working across Cardiology, Critical Care, General Medicine, Geriatric Medicine, and Neonatology. Two independent assessors evaluated its clarity, relevance, feasibility, and usability. Their feedback informed minor refinements to the criteria, assessment duration and minimum number of patients to be reviewed before organisation-wide implementation. From pilot to April 2026, 54 EPA assessments were completed among pharmacists of varying experience levels and clinical areas within a large tertiary hospital network.

Discussion Piloting and implementation across sites and specialties demonstrate feasibility and broad applicability of the developed EPA. However, content validation and interrater reliability testing are needed to ensure consistent assessment across assessors, different clinical areas and sites.

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Making the Rounds: How Structured Training Enhances Pharmacist Ward Round Confidence and Practice

Shobika Sabashan[1], Eugene Ong[1], Samanta Wood[1]

[1]*Monash Health, Clayton, Vic*

EMAIL Shobika.Sabashan@monashhealth.org

Background Pharmacist participation in multidisciplinary ward rounds (WRs) reduces adverse medication events and improves medication appropriateness, yet consistent attendance remains challenging. Additionally, structured training to support effective WR participation and preparedness is limited, with little insight into pharmacists' experiences. To address this, a WR training course comprising three components was developed: (1) observation of pharmacist WR participation, (2) simulated WR case activities, and (3) completion of a WR Entrustable Professional Activity.

Aim To examine pharmacists' views and experiences of WR participation before and after the WR training course, and to evaluate how the training influenced their confidence, practice, and participation.

Methods Fourteen pharmacists with varied clinical experience, practice settings, hospital sites, and baseline WR involvement completed the training. Semi-structured focus groups held before and after the course explored their perspectives on WR participation, perceived enablers and barriers, experiences of the training, and changes in WR participation following training. Interviews were recorded, transcribed verbatim, and analysed inductively to identify themes.

Results Pre-training themes influencing WR participation were oganisational culture and expectations as primary drivers; individual factors (confidence, competence, motivation); systemic and workload barriers; and support and training needs. Post-training themes were training-driven professional development and practice enhancement; enhanced confidence and professional growth; persistent systemic and workload barriers; and organisational culture and ongoing support. All pharmacists reported benefit, with the greatest impact among early-career pharmacists (≤3 years' experience) and those who attended WRs ≤50% of the time before training. However, ongoing systemic pressures – such as heavy workloads, multiple-unit coverage, limited support staff, and competing priorities continued to constrain pharmacists' ability to participate consistently.

Discussion The WR training course enhanced pharmacists' confidence, skills, and engagement in WR practice, particularly among early-career pharmacists. However, sustained organisational support to address systemic and workload barriers is required to enable consistent participation in WRs.

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Pain-Tient Care 2.0: Optimising Tapentadol Discharge Prescribing in the Emergency Department

Nicholas Samios[1]

[1]*Bankstown-Lidcombe Hospital, Bankstown, Sydney, NSW*

EMAIL nicholas.samios@health.nsw.gov.au

Background Following successful reduction of oxycodone discharge quantities in the Emergency Department (ED), stewardship efforts were expanded to tapentadol prescribing. Review highlighted discharge supply of immediate-release tapentadol frequently exceeding indicator 9c of the 'Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard'. Analysis also identified a concerning proportion of sustained-release tapentadol prescriptions. This contradicts guideline recommendations for acute pain and is associated with increased risks of persistent opioid use, respiratory depression, and accidental overdose.

Objective To reduce excessive immediate-release tapentadol discharge supply and evaluate sustained-release tapentadol prescribing in the ED.

Method A six-month retrospective cohort study of ED patients discharged with tapentadol was conducted at a tertiary hospital. Days of tapentadol supplied was calculated by dividing the total quantity prescribed by the maximum daily dose. Prescriptions exceeding three-days were classified as non-compliant. Sustained-release tapentadol prescribing was analysed separately. A pharmacist-led quality improvement initiative using Plan–Do–Study–Act (PDSA) methodology was implemented. PDSA-1 engaged medical and nursing champions and disseminated baseline audit findings and educational resources to raise awareness. PDSA-2 introduced targeted educational workshops incorporating case discussion, appropriate opioid selection, risk mitigation, and multimodal analgesia principles. PDSA-3 will introduce ongoing performance feedback.

Evaluation A cohort of 125 patients who received immediate-release tapentadol discharge prescriptions were reviewed. Prior to intervention, 66% exceeded a 3-day supply. Following PDSA-1, prescriptions exceeding three-days decreased by 16%, with further reduction to 37% following the first iteration of PDSA-2. 34 sustained-release tapentadol prescriptions were identified during the audit period.

Discussion Excess immediate-release tapentadol supply demonstrates misalignment with clinical care standard indicators. Pharmacist-led audit and education improved compliance and established a scalable framework for ED opioid stewardship. Identification of sustained-release tapentadol prescribing highlighted a higher-risk practice inconsistent with acute pain guidance. Future PDSA-cycles will focus on sustaining improvements in immediate-release prescribing compliance and evaluating sustained-release prescribing practices to guide interventions.

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Taking the Temper Out of Temperature Deviations – Streamlining the Reporting Process in Clinical Trials

Melanie Sanden[1]

[1]*Concord Repatriation General Hospital, Concord, NSW*

Background Temperature excursions in clinical trials can occur due to a multitude of reasons and once an investigational product has experienced a temperature deviation, it must be reported to the sponsor within 24 hours of the event. Reporting procedures vary by trial sponsor, and this process can be both protracted and inefficient. The reporting process for each individual trial sponsor can, on average, take up to two weeks. By creating a site-specific document for all temperature excursions, this will help eliminate the timely administrative tasks involved in reporting to all trial sponsors.

Aim To improve the process of reporting temperature excursions in a more linear and expedited fashion which does not affect patient care by creating a site-specific temperature excursion document to be used for all trial sponsors.

Method Develop a standardised site-specific temperature excursion document that consolidates all required information for temperature excursion assessment which will enable a timely, consistent, and efficient evaluation for reporting across all clinical trials. This will provide a structured and consistent approach to documentation which will facilitate a timely review from sponsors and reduce the impact on patient treatment. Staff will be trained in the implementation of this document.

Evaluation The use of the site-specific temperature excursion document will be evaluated by measuring and comparing the turnaround times for reporting, the completeness of documentation, and user feedback before and after implementation of the site-specific document. This can only be assessed if a temperature excursion occurs.

Discussion The expected outcomes of implementing a site-specific temperature excursion document include reduced time from temperature deviation to sponsor notification, improved consistency of documentation, reduced administrative tasks, enhanced workflow and minimising delays impacting patient treatment.

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How to Move a Hospital's Worth of Patient Medications in One Day. A Road Trip

Sarah Schembri[1], Andrew Vuong[1], Charis Lau[1], James Polmear[1], Jennifer Tio[1], Namita Warrior[1], Nellie Clear[1]

[1]*Western Health, Footscray, Vic*

EMAIL sj2charles@gmail.com

Background A large metropolitan hospital was scheduled to move all patients to a new state of the art facility over one day. To ensure patient safety and continuity of care, a medication transfer strategy required development and implementation.

Objective(s) To develop, test, and implement a medication transfer checklist for patient move with a multidisciplinary and supportive approach between pharmacists, nurses and National Patient Transport (NPT) staff.

Action (Method) Pharmacists were engaged early to identify scenarios where a medication would require transfer. A checklist was developed and stakeholder consultation conducted with pharmacists, operations leads, senior and junior nursing staff, and the project manager. Specialist pharmacists identified high complexity transfer scenarios to further map requirements and NPT were engaged to understand capabilities for transfer of patients with complex infusions. Two simulations were run with learnings from each used to further optimise the checklist. Training was provided through various platforms and available to all relevant staff in the leadup to move.

Evaluation All patients were transferred three hours ahead of schedule and no Schedule 8 or 4D discrepancies occurred during the move. Thirty-nine items were dispensed on move day compared to an average of 123 items per day in the five weekdays prior. This 68% reduction demonstrated the efficacy of the checklist for advanced planning in medication supply. Organisation-wide and Pharmacy forums highlighted the checklist was an invaluable tool to support the move.

Discussion Movement of patient medications is a unique opportunity, and with ongoing infrastructure redevelopment presents useful lessons to other organisations. Extensive stakeholder consultation and simulations were essential to ensure staff investment in the process, gaps were addressed, and transfer was efficient and safe. Pharmacist leadership of the process provided a strong system for success.

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From Hidden to Seen: Transforming Clinical Incident Reporting with Increased Access and Safety Culture

Brianna Seeto[1], Sallie Drake[1]

[1]*EBOS/HPS, Melbourne, Vic*

EMAIL brianna.seeto@hps.com.au

Background Analysis of clinical incident and near miss data is critical to identifying systemic failures, mitigating risk and enhancing patient care within a national pharmacy organisation. The incident reporting system previously used was not fit for purpose, with reporting functionality limited to pharmacists in leadership roles. There were also limitations to data analysis, creating gaps in visibility of incidents and near misses, and limiting opportunities for quality improvement and medication safety initiatives.

Objectives To implement a new clinical incident reporting system accessible to all staff, improve the depth and quality of data captured, and foster a culture of safety that encourages transparent reporting.

Action An improved incident reporting system was rolled out organisation-wide, enabling pharmacists and technicians to log incidents and near misses. Implementation combined system rollout with culture change strategies, including targeted webinars, quick-reference flowcharts, drop-in training, and a microlearning module on root cause analysis. Engagement was reinforced via monthly competitions, regular feedback on reported data, and organisation-wide forums promoting a no-blame, just culture approach and psychological safety.

Evaluation In the four months post-implementation, clinical incident reports (including near misses) doubled from 62 to 124, reflecting improved engagement and accessibility. Near misses accounted for 20% of reports (vs 0% pre-implementation), providing critical insight to support risk mitigation and prevent harm.

Data quality also improved, with more consistent capture of contributing factors, clearer incident descriptions, and enhanced tracking of medications by individual drug and therapeutic class.

Discussion Expanding access to incident reporting and supporting staff new to the process significantly improved reporting rates and data visibility. Embedding a positive safety culture alongside an accessible, user-friendly system is essential to sustain engagement and drive ongoing quality and medication safety improvements in pharmacy practice.

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Evaluation of cross-platform allergy documentation in oncology practice

Habiba Shah[1,2], Neil Kim Chiu Lam[1,3]

[1]*Slade Pharmacy, Auchenflower, Qld,* [2]*The University of Queensland, Brisbane, Qld,* [3]*Icon Cancer Centre Wesley, Auchenflower, Qld*

EMAIL habibashah12004@gmail.com

Background Accurate documentation of hypersensitivity reactions and medication allergies is essential for medication safety, particularly in oncology where high-risk therapies are frequently used. Inconsistencies across multiple clinical documentation systems may contribute to prescribing errors and compromise continuity of care.

Objective(s) To evaluate the completeness and cross-platform consistency of allergy and hypersensitivity documentation across clinical systems within an oncology outpatient setting and identify areas for medication safety improvement.

Action (Method) A retrospective quality improvement audit was conducted for adult patients commencing or changing cancer treatment over a two-month period. Allergy and hypersensitivity documentation was reviewed across three routinely used clinical systems: electronic prescribing, medication management plan, and the medical chart. Documentation completeness and consistency across systems were assessed using descriptive analysis. Following baseline evaluation, targeted education sessions were delivered to clinical staff to improve awareness of documentation discrepancies and encourage cross-platform verification practices.

Evaluation A total of 161 patient records were included. Completion rates within individual systems were high (100%, 94%, and 89%, respectively); however, overall cross-platform consistency was 51%. Among patients with documented allergies (n=90), only 12.2% demonstrated consistent documentation across all systems. High-risk discrepancies included missing allergy entries and contradictory 'no known drug allergies' documentation.

Discussion Despite high completion rates within individual systems, substantial inconsistencies between platforms were identified, highlighting a significant medication safety vulnerability. These findings demonstrate that documentation completeness alone does not ensure reliable communication of allergy information across care settings. This project supports the need for standardised cross-platform verification processes and integrated documentation systems to improve medication safety and safer prescribing practices.

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Stability of Extemporaneously Prepared Ophthalmic Formulations: A Systematic Review

Dina Shahin[1], Dr. Thilini Thrimawithana[2], Vicky Chen[1], Dr. Malath Al-Juhaishi[2]

[1]*Sydney and Sydney Eye Hospital, Sydney , NSW,* [2]*RMIT University, Bundoora, Vic*

EMAIL dina.shahin@health.nsw.gov.au

Background Pharmacists frequently compound sterile ophthalmic preparations to meet clinical needs when commercially manufactured products are unavailable. Beyond-use date (BUD) is a critical component of the compounding process and should be supported by evidence demonstrating physicochemical integrity and microbiological quality throughout storage. However, stability data are formulation-specific, requiring pharmacists to extrapolate data or apply conservative BUDs in the absence of direct evidence. This increases pharmacists' workload and reduces patient accessibility.

Aim To systematically evaluate published literature on the stability of pharmacist-compounded ophthalmic formulations.

Methods A systematic review was conducted in accordance with Preferred Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A comprehensive search was conducted across PubMed, Embase, Scopus, ProQuest Central and Web of Science from inception to May 2026, using a combination of MeSH and non-MeSH search terms.

Eligible studies included peer-reviewed publications, reporting on physicochemical and/or microbiological stability outcomes. Data extracted detailed formulation characteristics, storage conditions, stability parameters assessed and reported BUD. The risk of bias was assessed using the QUIN tool.

Results A total of 4,382 records were identified, with 3,656 studies screened following duplicate removal. Subsequently, 45 of 137 met inclusion criteria after full-text articles were assessed for eligibility. Included studies evaluated a diverse range of compounded ophthalmic preparations, including antimicrobials, acetylcysteine, and insulin formulations. Considerable heterogeneity was observed in formulation, storage, packaging, and BUDs. Multiple studies evaluated the same active ingredient using different formulations, limiting direct comparison and highlighting challenges in applying stability data across compounding settings.

Discussion The review provides a comprehensive synthesis of the available stability evidence for pharmacist-compounded ophthalmic preparations. The findings will support evidence-based BUD assignment, assist pharmacists in identifying formulation-specific stability data and highlight areas where further stability studies are required. Robust consolidated stability evidence will reduce unnecessary wastage, improve consistency in compounding practice and effective patient care.

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Breaking the Cold Chain: Smarter Medication Storage for Modern Healthcare

Alborz Shahsavand[1], David Harris[1], Jier Nguyen[1]

[1]*Northern Health Hospital*

EMAIL alborz.shahsavand2@nh.org.au

Background Many medications require refrigeration to preserve stability; however, limited fridge capacity and frequent access can delay administration and increase risk of cold chain breaches. Such breaches can reduce medication potency and risk treatment failure. At one Victorian metropolitan public hospital site, over $16,000 of medications were discarded in the 2024–25 financial year due to over 80 fridge breaches highlighting the need for alternative storage strategies.

Objective To evaluate the feasibility of storing selected refrigerated medications at ambient temperatures within a metropolitan public hospital to reduce waste and improve workflow without compromising therapeutic integrity or patient safety.

Method Eighteen medications stored under refrigeration within pharmacy and ward areas were systematically reviewed by the Formulary and Medication Strategy Pharmacist. Products with validated stability under both refrigerated and ambient conditions were identified. These included carbetocin, clindamycin, daptomycin, fludrocortisone, levothyroxine, rocuronium, and selected suppositories. Education and a formal memorandum were provided to pharmacy and nursing staff outlining updated storage requirements to ensure safe, consistent implementation.

Evaluation Twelve medications were transitioned from refrigerated to ambient temperature storage, with six remaining. When complete, rollout will cover 90 imprests and five pharmacies. To date, the number of fridge excursions have remained relatively stable (65 in 2025 vs 77 in 2026); however, the cost of discarded medications decreased by approximately $6,000. Final evaluation will include medication wastage assessment, fridge utilisation, staff feedback and medication incident rates. Risks remain contingent on strict adherence to defined stability limits and accurate, consistent labelling practices to ensure medication safety and efficacy.

Discussion Overall, optimising fridge-to-ambient transitions is feasible within a metropolitan public hospital and can enhance workflow when supported by clear protocols, education to nursing and pharmacy staff and monitoring. Further evaluation is needed to confirm sustainability and broader application.

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Balancing Sustainability and Safety Through Activity-Based Pharmacy Labour Modelling

Jara Shaw[1]

[1]*Slade Pharmacy, Mt Kuring-gai, NSW*

EMAIL jara.shaw@sladepharmacy.com.au

Background Traditional workforce planning frequently relies on historical staffing allocations rather than objective workload data, limiting alignment between labour resources with service demand.

This may contribute to workforce strain, inefficient skill utilisation, and reduced capacity for sustainable service growth.

Objective(s) To design and implement an activity-based labour modelling framework to support evidence-based workforce planning, optimise skill mix, and enable dynamic redistribution of pharmacy labour across multiple hospital sites.

Action An activity-based model quantified labour requirements across key pharmacy services.

Time-in-motion studies across 10 hospital pharmacies generated 16 validated benchmarks, which were combined with service agreements, historical activity and forecast demand to model full-time equivalent workforce requirements and optimise pharmacist and technician role distribution.

Evaluation The model enabled data-driven alignment between service demand and labour capacity. Mean activity durations were 25 minutes per discharge, 30 minutes per Medication Management Plan, 15 minutes per compounded item, and 120 minutes per clinical trial.

Complexity multipliers were applied for higher-acuity workload, including discharges with more than five medicines (1.8), clinically complex Medication Management Plans (2.0), advanced clinical trials (1.5), and complex compounding (3.0).

Implementation improved workforce visibility, supporting labour redistribution, identification of underutilised capacity, and optimisation strategies including remote clinical screening and proactive leave management. A 24% reduction in leave liability was achieved while maintaining service continuity.

Nine sites exceeded budgeted labour estimates, with 0.6 to 4.0 full-time equivalent excess per site. Surplus capacity was redeployed to support remote services, balance workload across sites, provide leave cover, and coordinate reliever staffing.

Discussion Activity-based workforce modelling provides a clear and responsive approach to workforce planning by linking measurable clinical activity, including task duration and complexity, to workforce requirements. It improves workforce visibility, supports redistribution, and enhances operational efficiency and sustainability. Further study is required to evaluate impacts of optimisation strategies on pharmacist patient-facing time.

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Analgesic Stewardship Clinical Care Standard Indicators post Cholecystectomy, Tonsillectomy, or Orthopaedic Procedure: A Baseline Audit

Wendy Ewing[1], Mark Sheppard[1], Jesslyn Ha[1], Kelly Cheung[1], Dinithi Heenkenda[1]

[1]*Monash Health, Melbourne, Vic*

EMAIL Wendy.Ewing@monashhealth.org

Background Analgesic stewardship quality improvement measures are embedded in the Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard 2022. The Clinical Care Standard indicators can help determine the focus of a pharmacist-led analgesic stewardship service across a large multi-site public hospital organisation. Cholecystectomy, tonsillectomy, and orthopaedic procedures were identified as priority areas for the new pharmacist-led analgesic stewardship service.

Objective(s) To identify baseline measures of Clinical Care Standard indicators for patients post cholecystectomy, tonsillectomy, or orthopaedic procedures and identify stewardship-led opportunities to improve pain management.

Action (Method) A retrospective baseline audit was conducted to assess 13 pre-selected Clinical Care Standard indicators prior to implementation of a pharmacist-led analgesic stewardship service. The audit included a random sample of 200 patients who underwent cholecystectomy (n=50), tonsillectomy (n=50), or orthopaedic procedure (n=100) between 1 July 2024 and 30 June 2025. The electronic medical record was reviewed using predefined criteria to assess each indicator, with outcomes recorded as binary or categorical measures in a standardised Microsoft Excel® tool and analysed descriptively.

Evaluation Key findings included 0% (0/200) of patients requiring naloxone administration. Laxatives were administered to 31% (62/200) of patients. Most patients (98%, 196/200) were newly prescribed opioid analgesics, with an analgesic management plan documented in the medication list for 38% (75/200) of patients and 12% (24/200) in the discharge summary. Few patients receiving opioid analgesia on discharge received supply greater than 7 days (1.6%, 2/128).

Discussion This audit identified multiple opportunities the pharmacist-led analgesic stewardship can target within surgical units. This included promoting the use of laxatives to prevent opioid-induced constipation and improving the documentation of specific analgesic medication management plans, particularly for patients not reviewed by pharmacists on discharge. Whilst the low sample size may limit the interpretability, discharge supply quantities and the absence of inpatient naloxone usage were positive findings.

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When Resources Aren't Limitless: Preventable After-Hours Weekend Medication Supply Requests

Wendy Ewing[1], Mark Sheppard[1], Perri Teoh[1], Siyuan Zhang[1], Toni Cooper[1], Rona Thomas[1]

[1]*Monash Health, Melbourne, Vic*

EMAIL Wendy.Ewing@monashhealth.org

Background After-hours medication supply requests on weekends place an operational and safety burden on hospitals with pharmacy staffing often limited. Although extended pharmacy services have been shown to reduce after-hours medication requests, there are limited descriptions of reductions achievable within existing resources.

Objectives To analyse after-hours weekend medication supply requests and determine the proportion that could have been completed during core pharmacy hours.

Action (Methods) A retrospective audit of medication supply requests placed after pharmacist hours (8pm to 7am) over both days of a weekend at a multi-site public hospital organisation was undertaken. Each request and the electronic medical record were reviewed to determine preventability, considering whether the medication was newly prescribed, timing of prescribing, and supply request time. Imprest lists were reviewed to identify on-ward medication availability, and pharmacy dispensing software was reviewed to confirm supply. Data was analysed descriptively.

Evaluation There were 394 medication supply requests placed after pharmacist hours with 197 requests each day included. Most after-hours medication requests were preventable (312, 79%, n=394), with supply possible during core pharmacy hours. There were 210 (53%, n=394) medication requests for newly prescribed medications with the remaining for ongoing supply of existing prescribed medications. About half (115, 55%, n=210) of the new medications were prescribed during core hours, but only 61 (29%, n=210) were requested within this time. Medications were listed on imprest for 20% (79, n=394) of all requests.

Discussion Despite limitations of a point in time audit, this study suggests that weekend after-hours pharmacy workload may be reduced through targeted interventions during core hours. These may include proactive technician-led medication supply, early supply of weekend doses, and improved communication with clinical teams. Findings support redesigning workflows to shift reactive after-hours supply to planned daytime activity, with potential benefits for medication safety, staff workload and service efficiency.

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Opioid Analgesic Stewardship in Acute Pain: A Clinical Care Audit

Angela Siah[1]

[1]*Fiona Stanley Hospital, Perth, WA*

EMAIL asiah0311@gmail.com

Background Opioid analgesics carry significant risks in the acute setting, and their safe use remains a key patient safety priority. The Australian Commission on Safety and Quality in Health Care (ACSQHC) Opioid Analgesic Stewardship in Acute Pain- Clinical Care Standard provides a framework for hospitals to evaluate and improve opioid-related care.

Aim To assess the extent to which current opioid prescribing, documentation, and discharge practices align with the Clinical Care Standard across four medical wards, and to identify key areas for improvement.

Methods A retrospective audit was performed on inpatients newly commenced on opioids across four medical wards who were discharged between January and June 2025. Patients were identified from dispensing software records and reviewed using a validated audit tool guided by the nine quality statements of the Clinical Care Standard.

Evaluation Of 93 patients newly commenced on opioids, 53% had documented pain or functional assessments, and only 5% had evidence of a real-time prescription monitoring review prior to initiation. Discharge documentation gaps included pain location recorded in only 40% of patients, intended opioid duration in 28%, and follow-up referral in 61%. Current practice only partially aligns with the Clinical Care Standard, with documentation and discharge planning representing the greatest areas of non-compliance.

Discussion This audit identified meaningful gaps in opioid stewardship practices across surveyed wards. The absence of pain assessments limits clinicians' ability to guide appropriate treatment, monitor response to therapy and evaluate the functional impact of pain. Failure to review real-time prescription monitoring prevents adequate risk-benefit analysis, increasing the risk of harm, particularly in vulnerable patient populations. Incomplete discharge documentation around opioid duration and follow-up further increases risks, such as unintended long-term use of opioids. Although immediate-release opioids and multimodal analgesia were frequently prescribed, opportunities remain to improve documentation, follow-up planning, and best practice opioid prescribing.

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Antipsychotic choice in young adults: are INTEGRATing with guidelines?

Lesley Smith[1], Alla Nila[2], Tara Kirkpatrick[1], Dr Timothy Tanzer[1,3]

[1]*Princess Alexandra Hospital – Pharmacy Department, Brisbane, Qld,* [2]*Queensland University of Technology – School of Pharmacy, Brisbane, Qld,* [3]*University of Queensland – School of Pharmacy, Brisbane, Qld*

EMAIL lesley.smith@health.qld.gov.au

Background Antipsychotics are essential for the management of psychosis and schizophrenia-spectrum disorders but are associated with significant metabolic adverse effects that contribute to excess physical morbidity and mortality. The 2025 INTEGRATE consensus guidelines emphasise early attention to physical health, side-effect informed prescribing, consideration of D2 partial agonists as first-line treatment, avoidance of prolactin-elevating antipsychotics in young females, metformin co-initiation with high metabolic risk antipsychotics, and earlier clozapine use in treatment resistance.

Aim To describe antipsychotic prescribing among young adults (<25 years) discharged from a tertiary acute psychiatric inpatient unit and compare alignment with INTEGRATE recommendations.

Methods A retrospective audit was conducted of patients aged <25 years discharged on regular antipsychotics (between July 2024 and March 2026). Electronic records were reviewed for demographics, diagnosis, discharge antipsychotics, metabolic monitoring, prior or current D2 partial agonist trial, and metformin co-prescription.

Results Eighty-four patients (54 male, 30 female) were identified. Diagnostic indication included 23 first-episode psychosis, 47 relapse presentations, and 14 non-psychotic indications. Aripiprazole (n=36) and olanzapine (n=29) were most prescribed; however, only 17 patients (20%) received aripiprazole monotherapy. Polypharmacy was present in 32 (38%) patients at discharge. Clozapine was prescribed in four cases. Among patients treated for psychosis, 26 (37%) had no documented current or previous D2 partial agonist trial. Metformin was prescribed in five patients, including three patients receiving olanzapine or clozapine. Six females received prolactin-elevating antipsychotics, with one co-prescribed aripiprazole.

Discussion Prescribing showed partial alignment with INTEGRATE guidelines, particularly through frequent aripiprazole use. However, aripiprazole use was often within polypharmacy, rather than monotherapy. Ongoing olanzapine prescribing without metformin co-prescription, antipsychotic polypharmacy, limited clozapine use, and prolactin-elevating antipsychotic use in young females represent key targets for quality improvement in this young population.

Reference McCutcheon R et al. INTEGRATE: international guidelines for the algorithmic treatment of schizophrenia. The Lancet Psychiatry, 2025; 12, 384–394.

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Let's Make it Happen! Collaboration to Implement a Shared Regional Electronic Oncology Medication Management System

Rhoanna Smith[1], Susan Trevillian[1]

[1]*Northeast Health Wangaratta, Wangaratta, Vic*

EMAIL rhoanna.smith@nhw.org.au

Background Between May and November 2025, a small regional health service implemented an electronic oncology medication management system, CHARM®. The project scope was limited to a single-site public hospital day oncology and infusion service, whose specialist medical workforce are predominantly located at the regional cancer centre 80km away. To prepare for the regional cancer centre's transition from a private funding model, the cancer centre's co-located large public regional health service required an expedited implementation of an electronic oncology medication management system between November 2025 and January 2026.

Objective To extend local project scope and facilitate implementation of a regional electronic oncology medication management system within an 8-week project timeline.

Action Health service leaders and pharmacists collaborated on a shared regional CHARM® instance to support the delivery of inpatient and day-admitted oncology and haematology treatment pathways across two separate health services. A project team was formed including the original project pharmacist.

Evaluation Led by the small regional health service's project pharmacist, an additional 166 treatment pathways were configured within the CHARM® instance, expanding on the 114 pathways from the original project. The successful go live by January 2026 was achieved for the large regional health service. Both health services were recently recognised for the collaboration with a regional digital health award for the project.

Discussion Collaboration and resource sharing directly led to the success of the project, by utilising local application expertise and cutting out time delays associated with training and system familiarisation. Project team members continue to work on optimising the system for current and future patient care, highlighting the importance of continued collaboration.

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Lost in free text: a retrospective audit of medication prescribing and administration despite documented allergies

Wei Hurn Soh[1], Jade Ma[1], Jennifer Tio[1]

[1]*Western Health, Melbourne, Vic*

EMAIL WeiHurn.Soh@wh.org.au

Background Accurate documentation of medication allergies is critical to safe prescribing and administration. Electronic medical records (EMR) allow both structured (coded) and 'free text' allergy entries. Unlike coded entries, free text entries may be ambiguous, incomplete, or lack clinical classification, which may reduce visibility and removes decision-support capabilities within the EMR system.

Aim/Objectives To evaluate the incidence and clinical impact of free text medication allergy entries on prescribing, administration, and adverse drug reaction (ADR) occurrence.

Method A retrospective audit was conducted of patients with a documented free text medication allergy who presented to the Emergency Departments of a major Melbourne tertiary hospital network between July 2023 and October 2025. Patients were identified via EMR-generated reports, with additional ADR cases identified through the hospital risk management system. Data collected included allergy details, prescribing and administration events, and ADR outcomes.

Results A total of 971 patient records met the inclusion criteria, with 1096 free text entries analysed. Ninety-six percent of entries were documented by a nurse or midwife reflecting the workflow in the Emergency Department for nursing-led triage. Most free text entries were misspellings of coded entries, including variations of 'penicillins' (13.6% of all entries with 23 different variations). A medication was prescribed despite a known ADR to the same medicine in 74 instances, with medication being administered in 46 (62.1%) of these instances. There was one (0.09%) reported ADR associated with a free text entry.

Discussion This audit highlights that free text allergy entries which bypass clinical decision support systems in EMR contribute to missed alerts and increase the potential for medication-related harm. Our findings suggest that commonly reported allergies, particularly penicillins and 'sulfa drugs', were over-represented among free text entries, often due to spelling variations. Improving rates of coded ADR entries should be a priority to enhance patient safety.

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More Than Teaching: Evaluating the Impact of a Pharmacy Clinical Educator in Mental Health

Janki Solanki[1], Graham Rivers[1], Sachith Prasad[1], Shobika Sabashan[1], Samanta Wood[1,2]

[1]Pharmacy Department, Monash Health, Clayton, Vic, [2]Centre for Medicine Use and Safety, Monash University, Melbourne, Vic

Background In line with Victoria's Mental Health and Wellbeing Workforce Strategy 2021–2024, a Mental Health Pharmacy Clinical Educator (MHPCE) has been embedded within the Mental Health Pharmacy Team at a large multi-site hospital, since April 2024. Through twice weekly clinical supervision and provision of feedback, the MHPCE is a novel approach to supporting the professional development of pharmacists working within mental health.

Objective To evaluate hospital pharmacists' education experiences, since having a MHPCE embedded in the Mental Health Pharmacy Team.

Action (Method) This retrospective mixed methods study analysed responses from an anonymous evaluation survey completed by pharmacists who received education from the MHPCE between April 2024 and March 2026. The Microsoft® Forms survey consisted of a 5-point Likert scale evaluating pharmacist's perceived skills improvement and learning environment suitability. Open-ended questions gathered information on perceived benefits of having a MHPCE and suggested improvement areas. Quantitative data were analysed using descriptive statistics and qualitative data through thematic analysis.

Evaluation Twenty of twenty-five participants (80%) completed the evaluation survey of which 13 participants (65%) had worked in mental health for less than 18 months. Participants 'agreed' or 'strongly agreed' that the MHPCE: created a safe learning environment (100%), encouraged the use of suitable psychiatric resources to enhance decision making (95%) and supported their professional development (90%). Qualitative responses revealed that participants benefited from receiving structured learning through a supportive relationship with the educator, increasing clinical capability and navigation of mental health processes. Suggested improvements included increased time with the MHPCE and greater integration of education within daily clinical workload.

Discussion Integrating the MHPCE within the Mental Health Pharmacy Team, promotes a positive learning culture and a framework to support pharmacists' education and professional development within speciality practice areas.

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Does Ferric Derisomaltose cause less intravenous iron-induced hypophosphataemia compared to Iron Polymaltose, and Ferric Carboxymaltose?

Sai hyun Song[1], McKenna Broderick[2], Duncan Long[2], Karl Winckel[2]

[1]School of Pharmacy and Pharmaceutical Sciences, University of Queensland, Brisbane, Qld, [2]Pharmacy Department, Princess Alexandra Hospital, Brisbane, Qld

EMAIL hannysong00@gmail.com

Background Australian clinicians prescribe over 500,000 subsidised prescriptions/year for intravenous iron (IVI). Hypophosphataemia, an under-recognised adverse effect of IVI, is associated with increased morbidity, prolonged hospitalisation, and serious complications including cardiac arrhythmias, seizures, respiratory depression, and osteomalacia. Ferric derisomaltose (FDI) is a more expensive formulation of IVI and was listed on the PBS in 2026. Existing trials suggest lower rates of hypophosphataemia with FDI than other IVI formulations, but have largely been conducted in relatively healthy populations, with limited head-to-head comparative data available. This study investigated hypophosphataemia associated with intravenous FDI, iron polymaltose (IP), and ferric carboxymaltose (FCM).

Aim/Objective(s)

1. To determine the prevalence of post-IVI infusion phosphate monitoring.
2. To determine the prevalence of IVI-induced hypophosphataemia following intravenous FDI, IP, and FCM.

Methods This retrospective cohort study was conducted at a large tertiary Queensland hospital. Medical records were reviewed for patients who received intravenous FDI, FCM, or IP between 01/04/2017–11/02/2026. All patients (≥ 18 years) receiving a single IVI infusion were included. Patients with an estimated glomerular filtration rate (eGFR) <30 mL/min/1.73 m^2 or concurrent phosphate supplementation were excluded.

Results The mean number of phosphate measurements within 8 weeks of IVI was 1.2 for FDI, 1.3 for FCM, and 5.3 for IP. Intravenous FDI was associated with a lower prevalence of hypophosphataemia than IP or FCM, 26/82 (31.7%) vs 101/173 (58.4%) vs 78/137 (56.9%), respectively ($p<0.001$). No patient-related factors were associated with an increased prevalence of hypophosphataemia.

Discussion Hypophosphataemia is common with all IVI formulations and likely under-reported due to limited phosphate monitoring. Our study supports existing literature suggesting that intravenous FDI is associated with a lower rate of hypophosphataemia than IP and FCM. A prospective study with more frequent phosphate monitoring is in progress to confirm these findings. In the meantime, increased use of FDI may be warranted.

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The Pharmacist's Role in Correctional Health

Amit Soni[1]

[1]*Hps Pharmacies, Ravenhall, Vic*

EMAIL amit.soni@hpspharmacies.com.au

Background Pharmacists working in correctional facilities face unique clinical and operational challenges. High rates of substance dependence, mental illness, and complex comorbidities among incarcerated populations require pharmacists to operate beyond traditional dispensing and medication review roles. Ensuring safe medication use in a secure environment is critical to both patient care and institutional security.

Objective This presentation aims to highlight the expanded role of the clinical pharmacist in a prison setting, with a focus on harm reduction, substance use treatment, and care continuity. It explores how pharmacists contribute to patient safety and public health initiatives within the correctional environment.

Action In my role as a clinical pharmacist in a women's prison, I provide routine clinical pharmacy services, including medication reviews, therapeutic monitoring, and collaboration with medical staff. Additionally, I supply naloxone nasal spray as a Schedule 3 medication for overdose prevention, ensuring that at-risk individuals can access life-saving treatment. I administer methadone for opioid substitution therapy, both within the medical centre and via 'trap-to-trap' delivery to patients unable to attend clinics due to security or operational constraints. Furthermore, I coordinate discharges, including ordering and preparing discharge medication packs to support seamless transitions back into the community and reduce the risk of relapse or hospital readmission.

Evaluation These expanded practices have enhanced patient outcomes by improving medication safety, reducing illicit drug use and overdose risk, and supporting continuity of care. Methadone administration directly at cell doors improves adherence and mitigates potential for diversion. The proactive supply of naloxone empowers harm reduction efforts within and beyond custody.

Discussion Correctional pharmacists play an essential role in bridging clinical care, public health, and security considerations. By expanding services to include harm reduction, direct medication administration, and transitional care planning, pharmacists contribute significantly to patient safety and rehabilitation in correctional settings.

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Safer Transitions: Enhancing Medication Safety Across Hospital Transfers

Lisa Sorbello[1], Georgina McDermott[1], Jacqueline Donovan[1], Mitchell Smith[1], Jared Anderzipf[1], Sarah Cotterell[1], Brett Sweeney[1]

[1]*Royal Brisbane And Women's Hospital, Brisbane, Qld*

EMAIL lisa.sorbello2@health.qld.gov.au

Background Discharge Transit Centre's assist patient flow, ensuring timely and safe care during admission, transfer, and discharge. Numerous studies have highlighted the importance of pharmacist intervention during transition of care to reduce medication errors. Our quaternary hospital site implemented a DTC pharmacist team in November 2023.

Objective(s) To characterise the pharmacy service for patients who will be admitted via Interhospital Transfer (IHT) to our quaternary hospital via the DTC during a 2-month period.

Action (Method) DTC pharmacists prospectively collected patient, time in motion and medication error data during the study period (1/10/2024–30/11/2024). Retrospective data was then gathered for context on the error and the patient. An expert panel (comprising a nurse, medical registrar, and senior pharmacist) reviewed and assessed all medication errors for preventability, actual/potential adverse events, and potential severity (using the Severity Assessment Code (SAC)).

Evaluation DTC pharmacists completed 129 Best Possible Medication Histories (BPMH) on IHT patients, mostly within one hour of arrival (average 58 minutes). Notably, 96 BPMHs (74%) were completed prior to patient admission by the treating team. A total of 135 medication errors were identified across 48 patients (37% of the cohort). The most common errors were delayed doses (73%) and omissions (52%). Errors involved APINCH medicines (26.7%) and time-critical medications (13%). All errors were deemed preventable, with the majority assessed as SAC4 (no harm/near miss) and only one resulting in SAC3 (minimal harm).

Discussion Pharmacist involvement in the DTC is crucial for the early identification and resolution of medication errors. By intervening before the treating team's assessment, issues are resolved immediately. The SAC3/SAC4 classification of all errors underscores the significant impact of this early intervention model. Future implementation of Collaborative Pharmacist Medication Prescribing (CPMP) could further enhance patient flow and reduce omissions/delays by empowering pharmacists to prescribe collaboratively.

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Preventing Tissue becoming the Issue: The Role of Embedded Pharmacists in Acute Care Settings

Rachael Starkey[1], Anne Worcester[1], Dr Sarah Stevens[1], Dr Than Sien[1], Dr John Nguyen[1]

[1]Royal Brisbane and Women's Hospital, Herston, Qld

EMAIL rachael.starkey@health.qld.gov.au

Objective To describe the successful management of aciclovir extravasation through rapid recognition and multidisciplinary collaboration, resulting in a favourable patient outcome.

Clinical features An 82-year-old woman presented to the emergency department with a first episode of seizure and suspected encephalitis. Empiric intravenous aciclovir, benzylpenicillin and ceftriaxone were commenced.

Literature review Aciclovir is highly alkaline (pH11) and is associated with tissue necrosis and cutaneous vascular eruptions when extravasation occurs. Hospital guidelines recommend urgent specialist review in the event of extravasation.

Pharmacist interventions In this case, two embedded clinical pharmacists in the acute setting played a pivotal role in early detection and intervention. While overhearing discussion of cannula failure during an aciclovir infusion, the pharmacist immediately recognised the risk associated with extravasation before significant clinical signs had developed. The two pharmacists promptly facilitated review of relevant extravasation guidelines, provided clear evidence-based recommendations to the treating team and supported rapid escalation for urgent plastics consultation. This pharmacist-led action helped fast track appropriate management and mitigate potential harm.

Case progress and outcomes The infusion was stopped immediately upon recognition of extravasation. Plastics review occurred within 30 minutes. Following guidelines, the cannula was removed, aspiration attempted, an ice pack applied, and the limb elevated. The patient developed only non-tender subcutaneous swelling without neurovascular compromise or concern for compartment syndrome. The case was managed proactively by the plastics team.

Discussion This case demonstrates the critical value of embedded pharmacists in acute care settings. Beyond addressing referred issues, their presence enables proactive detection of potential medication related problems through observation and engagement with day-to-day clinical discussions. In this case early recognition, effective communication and timely provision of guidelines enabled rapid specialist intervention, preventing potentially severe tissue injury from aciclovir extravasation. Multidisciplinary collaboration remains essential for optimising patient safety in complex medication administration scenarios.

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Limitless Potential: Leveraging Partnerships and Pharmacy Technician Credentialing to Transform Workforce Capacity

Kierra Steer[1], Tara Clayson-Fisher[2], Caitlan O'Keefe[3], Dr Adam Livori[1], Caitlin Yorke[1], Renee Dimond[1]

[1]Grampians Health – Ballarat, Ballarat, Vic, [2]Tasmanian Health service, Hobart, Tas, [3]Royal Hobart Hospital, Hobart, Tas

EMAIL kierra.steer@gmail.com

Background Chronic clinical pharmacist shortages in regional health services severely constrain operational capacity and limit the expansion of advanced, full-scope clinical pharmacy roles. Utilising qualified pharmacy technicians to support clinical workflows represents a critical strategy to optimise workforce resource allocation.

Objective(s) To evaluate the feasibility of adapting and implementing a cross-jurisdictional training program credentialing pharmacy technicians to independently conduct and document BPMH interviews within a large regional health service.

Action Through hospital pharmacy professional networks, we identified an established interstate credentialing framework that trains pharmacy technicians to accurately and independently conduct Best Possible Medication Histories (BPMHs). This framework was collaboratively adapted to align with local institutional requirements and regulatory boundaries. Five pharmacy technicians were selected via expression of interest. Governance was defined across workplace supervising pharmacists and an independent assessment panel. Training involved an onsite orientation from the collaborating health service, followed by a structured 26-week curriculum, with technicians maintaining a formalised logbook documenting clinical practice. Supervising pharmacists utilised entrustable professional activities (EPAs) to assess core competencies throughout training. Participating pharmacists and technicians were surveyed for acceptance of technician roles and the credentialling process.

Evaluation Two technicians completed logbook and EPA milestones within the 26-week timeframe and proceeded to final panel review. They achieved independent credentialing to conduct BPMH workflows, validating the program governance structure, training pathways, and competency assessment tools. Pharmacists are incredibly supportive for the program to expand to support clinical pharmacy services. All technicians enjoyed the program and expanding their roles. Training continues for remaining technicians involved in the project.

Discussion This cross-jurisdictional collaboration demonstrates a scalable, reproducible model for credentialing pharmacy technicians in clinical support roles. Transitioning BPMHs to credentialed technicians expands pharmacy workforce capacity, providing a practical mechanism to mitigate regional/rural pharmacist shortages and ensure all staff work to full scope.

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Implementing electronic Psychotropic Management Plans to support safer antipsychotic use in delirium and dementia

Elizabeth Su[1,2], Dr Sabrina Kohler[3], Dr David Liew[1,4], Dr Christopher McMaster[1,4], Duncan Wellington[5], Jade Eyles[2,5], Janine Alexander[6], Emma Sparham[6], Shefali Gandabhai[1,2], Nadia Mouchaileh[2,7], A/Prof Rohan Elliott[2,7]

[1]Medicines Optimisation Service, Austin Health, Heidelberg, Vic, [2]Pharmacy Department, Austin Health, Heidelberg, Vic, [3]Continuing Care & General Medicine Departments, Austin Health, Heidelberg, Vic, [4]Department of Clinical Pharmacology and Therapeutics, Austin Health, Heidelberg, Vic, [5]Electronic Medical Record and Information Communication & Technology Services, Austin Health, Heidelberg, Vic, [6]Quality Safety & Risk Department, Austin Health, Heidelberg, Vic, [7]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Melbourne, Vic

EMAIL Elizabeth.Su@austin.org.au

Background The Psychotropic Medicines in Cognitive Disability or Impairment Clinical Care Standard emphasises informed consent and regular medication review when prescribing psychotropics, including antipsychotics, in patients with cognitive impairment. Local audits (June-August 2024) identified significant gaps in documenting verbal consent and review plans for patients newly prescribed antipsychotics for behaviours of concern in delirium.

Objective To improve documentation of verbal consent and review plans for newly initiated antipsychotics in patients with delirium or dementia at a major metropolitan hospital.

Action A multidisciplinary working group developed an electronic Psychotropic Management Plan (PMP), implemented in May 2026. When antipsychotics (regular or as needed) are prescribed in delirium or dementia via an electronic medical record PowerPlan, a PMP form is automatically triggered, prompting the prescriber to document indication, verbal consent, and a review plan. Form completion generates a structured inpatient PMP note to facilitate ongoing review and consumer education. Implementation was supported by targeted education for prescribers and pharmacists, led by a senior pharmacist and a geriatrician.

Evaluation In the initial two-week post-implementation period, PMPs were completed for 58% (7/12) of inpatients with new antipsychotics in delirium or dementia under general medicine or aged care medical units, compared with a documented review plan for just 17% (6/36) of eligible inpatients in the pre-implementation audit. Verbal consent for newly initiated antipsychotics was documented for all relevant patients (12/12), compared with 53% (19/36) in the pre-implementation period.

Discussion Embedding a PMP within prescribing workflows addresses key barriers to documenting informed consent and review planning for antipsychotics in delirium and dementia. Ongoing evaluation will assess PMP utilisation and documentation quality to inform future workflow enhancements, including potential auto-population of PMPs into discharge summaries. Improved documentation is expected to strengthen shared decision-making and promote safer, more appropriate use of psychotropic medicines in patients with cognitive impairment.

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How to get more Bang for the Blitz

Kimberley Sugg[1], Avishek Nath[1]

[1]Caboolture, Kilcoy And Woodford Directorate, Caboolture, Qld

EMAIL kimberley.sugg@health.qld.gov.au

Background Australia's 6th National Hepatitis C Strategy 2025–2030 aims to eliminate hepatitis C virus (HCV) as a public health threat. Correctional facilities are a prevalent setting for HCV transmission, including reinfection. Historical data demonstrated that 24% of all direct-acting antiviral treatments were used to retreat prisoners, equating to approximately $60 million in retreatment expenditure.

Opioid dependence treatment (ODT) was introduced in prisons as a primary prevention strategy to reduce illicit drug use and sharing of injecting equipment.

Objective(s) To evaluate the impact of HCV screening and ODT access on HCV infection rates in a large high-security correctional facility.

Action (Method)

- Annual HCV screening and an ODT program were introduced in 2022, with expanded ODT access from 2023.
- A permanent senior pharmacist and senior clinical assistant were appointed to coordinate ODT services, HCV treatment pathways, and medication supply.
- Point of care testing commenced in 2023, reducing result turnaround from one week to one hour.

Evaluation Since 2022, 1371 patients tested HCV positive and received treatment at the correctional facility, representing an estimated cost of $48.1 million to the Pharmaceutical Benefits Scheme (PBS).

Following implementation of annual HCV 'blitz' screening and ODT, diagnosis rates declined from 27% in 2022 to 10% in 2026, corresponding to estimated PBS cost savings of $3.9 million in 2026 compared to 2022. Reduction in HCV diagnosis rates was observed as ODT access expanded.

Discussion The initiative demonstrates the value of dedicated pharmacy workforce models in improving clinical and financial outcomes. This includes pharmacists and pharmacy technicians, in supporting HCV elimination through treatment coordination, ODT delivery, medication stewardship, and program management within correctional settings.

While annual HCV screening is an effective case-finding strategy, sustained reductions in transmission require ongoing access to ODT and broader harm-reduction measures. Long-term elimination depends on integrating treatment, prevention, and policy reform.

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Preparation and administration of first dose antimicrobials for adults with sepsis – establishing consensus guidance

Keli Symons[1], Louise Grannell[1,2], Alicia Thomas[1,3], Cristina Roman[2], AIDH Editorial Committee[1], Emergency Medicine Specialty Practice LC[1]

[1]Advanced Pharmacy Australia, Melbourne, Vic, [2]Alfred Health, Prahran, Vic, [3]Flinders Medical Centre, SA Pharmacy, Bedford Park, SA

EMAIL ksymons@adpha.au

Background Administration of first dose antimicrobials within 60 minutes is a critical component of the sepsis pathway for adults presenting with sepsis. As part of a sepsis response program, an antimicrobial 'cheat sheet' was successfully implemented at a tertiary hospital in Melbourne in 2016, and has since been adapted for use by other hospitals across Australia.[1] However, variation in practices, due in part to limited published evidence for faster administration rates for some antimicrobials, may still lead to delayed administration.

Objective(s) To develop practical, readily accessible consensus guidance for the timely preparation and administration of first dose antimicrobials for adult patients presenting with sepsis.

Action (Method) The preparation and administration instructions in the Australian Injectable Drugs Handbook (AIDH) for 27 antimicrobials were documented and compared against current practice across multiple hospitals and states.

Specialist input was sought from emergency medicine expert pharmacists, and critical review and discussion were undertaken by the Editorial Committee of an Australian injectable medicines resource. Over approximately 10 months, consensus was established, along with defined limits and practice points to ensure appropriate and safe use of the guidance.

Evaluation The final consensus was reviewed by emergency medicine experts and the Editorial Committee and reflected a balance between the limited published evidence for faster administration rates and the consideration of sepsis as a time-critical emergency.

Discussion The resulting practical guidance, presented in a wall poster format will facilitate timely first-dose antimicrobial administration for adults with sepsis. Ongoing AIDH editorial oversight, review and update will maintain currency and relevance to Australian practice

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Weight & See: A retrospective audit of metformin prescribed for antipsychotic-induced weight gain

Vanessa Tan[2,3], Cathy Ngo[1,4], Carolyne Miller[2], Isabella Boussioutas[3], Kelly Liang[3], Parnia Shaban[3], Arad Sadeghi[3], Christina Shaji[4]

[1]Eastern Health Institute, Allied Health Mental Health & Wellbeing, Practice Capability, Melbourne, Vic, [2]Eastern Health Pharmacy Program, Melbourne, Vic, [3]Monash University Faculty of Pharmacy and Pharmaceutical Science, Parkville, Vic, [4]Eastern Health Clinical School, Melbourne, Vic

EMAIL vanessa.tan@easternhealth.org.au

Background Antipsychotic-induced weight gain (AIWG) is a common adverse effect associated with cardiometabolic complications and treatment non-adherence. Metformin for AIWG demonstrated a mean weight difference of -3.27 kg compared with placebo (Hiluy et al., 2019). Carolan et al (2024) international guidelines recommend metformin co-prescription in AIWG, considering patient and antipsychotic factors, however uptake of these recommendations in practice remains unknown.

Aim To determine the prevalence of metformin initiation amongst patients prescribed a new antipsychotic, according to Carolan guidelines.

Methods This retrospective study included patients discharged from mental health inpatient units at a Victorian metropolitan hospital network between April-September 2025. Patients taking metformin pre-admission, not commencing a new antipsychotic, or prescribed metformin for non-weight management, were excluded. Suitability for metformin co-prescribing was assessed at discharge and after 12 weeks according to Carolan guidelines. Hospital medical records were reviewed to determine patient characteristics, metformin prescribing and cardiometabolic parameters.

Results A total of 317 patients were included in the study. The median age was 37 years (IQR: 29–48), and 61.6% were male. Olanzapine and clozapine accounted for 42.1% of prescriptions, with 40.4% of patients on antipsychotic polypharmacy. At discharge and 12 weeks, 59.9% and 56.5% of patients met criteria for metformin co-prescribing. The prevalence of metformin co-prescription was 1.1% at discharge and 2.8% at 12 weeks. Weight change at 12 weeks was assessable in only 27.5% of patients, with a median weight gain of 2.5 kg (IQR: 0–5.2) recorded.

Discussion Most patients in this study were theoretically suitable for metformin co-prescribing according to Carolan guidelines, yet prescribing prevalence remained exceptionally low (<3%). Reasons for lack of metformin initiation are unclear. International guidelines produced since 2024 further support metformin co-prescription for AIWG. Thus, additional education and procedure implementation to promote metformin co-prescription should be explored at this health service to reduce preventable cardiometabolic complications.

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Limitless Sustainability: Leveraging Data and AI for Consumables Optimisation Beyond Pharmacy Walls

Ivy Tan[1], Amy Crow[1]

[1]*The Royal Victorian Eye And Ear Hospital, East Melbourne, Vic*

EMAIL Ivy.Tan@eyeandear.org.au

Background Healthcare consumables contribute significantly to hospital expenditure and environmental impacts. At a tertiary hospital, variability in consumables storage and ordering (within and outside automated dispensing systems) led to misalignment between stockholding and clinical demand. This project demonstrates how pharmacy expertise in inventory management, traditionally focused on medicines, can be applied beyond pharmacy walls to drive sustainable consumables stewardship across multidisciplinary settings.

Objective To optimise consumables stockholding and storage using AI-enabled analytics and interventions to enhance environmental and financial sustainability.

Action A pharmacist-led, staged quality improvement project was implemented from September 2025 to June 2026 across 4 clinical areas. Integrated analysis of automated dispensing data, purchasing data, and financial datasets was used to identify optimisation opportunities.

AI-informed analytics were applied to detect usage patterns, demand variability, and identified low or non-utilised items. Interventions included rationalisation of consumables, standardisation of item naming and unit-of-issue, optimisation of inventory levels, storage consolidation, and implementation of supply chain controls. Stakeholder engagement and targeted staff training supported sustainable change.

Evaluation The project reduced stockholding value by approximately 30% and improved stockturn by an average of 50%, reflecting more efficient use of resources and reduced excess inventory. Consumables expenditure decreased by 5% compared to previous financial year despite increased activity, indicating improved alignment between supply and demand. Over thirty consumables with no utilisation over last 18 months were identified and removed, directly reducing the risk of expiry and landfill waste. In addition to these financial and environmental benefits, improved storage organisation enhanced accessibility and user experience.

Discussion Pharmacists can lead sustainable healthcare transformation beyond traditional practice by applying data and AI-informed stewardship to consumables management. This scalable model demonstrates how extending pharmacy expertise into broader hospital systems can reduce waste, optimise use of resources, deliver financial benefits, as well as reduce the environmental impacts of healthcare.

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Beyond the Operating Theatre: the Downstream Analgesic Effects of Intraoperative Opioids in Total Knee Replacement

Jessalyn Tan[2], Dr Byung Kyu Jun[1], Lisa Xu[2], Associate Professor Patrick Owen[3,4], Dr Gordon Mar[1], Jeremy Szmerling[2]

[1]*Eastern Health Acute Pain Service, Melbourne, Vic,* [2]*Eastern Health Pharmacy Program, Melbourne, Vic,* [3]*Eastern Health Emergency Medicine Program, Melbourne, Vic,* [4]*Eastern Health Clinical School, Monash University, Melbourne, Vic*

EMAIL jessyytan@gmail.com

Background Opioids are prescribed as-needed post-operatively to reduce breakthrough pain, however, their use is limited by adverse effects and risk of dependence. Intraoperative long-acting opioids, such as intrathecal morphine (ITM) and intravenous methadone (MTD), are techniques employed to reduce post-operative opioid requirements. Whilst there is literature in other surgeries, data comparing the effects of these techniques on opioid requirements after total knee replacement (TKR) is limited.

Aim To compare the effects of intraoperative analgesic administration, ITM, MTD and control, on post-operative opioid requirements.

Methods This retrospective cohort study combined two datasets from a metropolitan health network in Melbourne, Victoria from 2023 to 2026. Patients undergoing TKR were matched by age (±5 years) and sex into three groups: ITM, MTD, or control (no long-acting intraoperative opioid) (n=39 per group). Outcomes included post-operative oral morphine equivalent daily dose (oMEDD) and time-to-first-opioid.

Results Baseline characteristics (mean age 68.0 years, female 46%) were comparable between groups. Time-to-first-opioid was significantly prolonged with ITM (mean difference (MD) 412 minutes) and MTD (MD 553 minutes), compared to control. Although differences in oMEDD up to 72 hours post-TKR were not statistically significant, a trend towards lower oMEDD during the first 24 hours post-TKR was observed in ITM (mean 47.9 mg (ITM), 79.4 mg (MTD), 72.3 mg (control) from 0–24 hours post-TKR), with the reduction in oMEDD not observed beyond 24 hours. No patients required naloxone during their admission.

Discussion ITM and MTD were associated with prolonged time-to-first opioid, suggesting improved early post-operative analgesia. ITM was also associated with lower opioid requirements only during the first 24 hours post-TKR, consistent with its expected analgesic duration. These findings suggest intraoperative long-acting opioids may reduce early post-operative opioid requirements following TKR; however, larger multi-centre studies are required to confirm their effectiveness and safety.

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First Nations patient medication-related transitions of care: national survey of health-professionals' perspectives

Susan Bury[2], Bryony Forrest[1], Theresa Pham[1], Maddison Hands[1], Yasmin Fadavi Firooz[1], Parna Khuon[2], Wendy Brooke[2], Danella Webb[2,3], Dr Celene Yap[4,5], Dr Vincent Chan[1,2], Prof. Simone Taylor[2,5]

[1]RMIT University, Bundoora, Vic, [2]Austin Health, Heidelberg, Vic, [3]Northern Health, Mernda, Vic, [4]National Ageing Research Institute, Parkville, Vic, [5]University of Melbourne, Parkville, Vic

EMAIL Susan.Bury@austin.org.au

Background Transitions of care are complex, with additional challenges for First Nations patients. In January 2025, the Closing the Gap (CTG) Pharmaceutical Benefits Scheme (PBS) co-payment program expanded to include public hospitals.

Aim/Objectives To describe hospital-based health professionals' experiences supporting First Nations patients during transitions of care, and their experiences with the CTG program in hospitals.

Methods From September 2025 to March 2026, health professionals completed an online questionnaire distributed through pharmacy professional organisations and networks.

Results Fifty-seven responses were received, representing all Australian states and territories; half were from regional/rural areas, and most were from pharmacists. In the previous 12 months, 37 (65%) had cared for ten or more First Nations patients. Thirty-two (56%) and 36 (63%) felt comfortable/very comfortable asking patients about their First Nations background, and explaining CTG funding, respectively. Forty-nine (86%) had facilitated CTG-funded medicine supply for patients already registered for CTG and 33 (58%) had encountered problems assisting patients to access CTG-funded medicines. Although 22 respondents (39%) had a Provider Digital Access (PRODA) account, most could not register patients for CTG because they were not prescribers or registered Aboriginal Health Practitioners. Respondents described barriers to CTG registration in hospitals, including limited staff knowledge, lack of prescriber PRODA access, and confusion around hospital, PBS and remote S100 funding arrangements – particularly impacting patients from remote communities. Workarounds were often required to avoid delays or out-of-pocket costs, including non-PBS supply, hospital-funded interim support and Aboriginal Hospital Liaison Officer (AHLO) involvement.

Discussion Enablers of effective medicine-related transitions included strong partnerships with AHLOs and proactive planning for post-discharge medicine supply. System-level improvements are needed to reduce fragmentation and ensure CTG registration processes integrate smoothly into hospital workflows. Improved hospital prescriber understanding of the CTG program or expanding the types of health professionals who can register patients is required.

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Discovering GEMs: Chairing rehabilitation discharge planning meetings to develop clinical leadership skills

Julie Taylor[1], Dr Joe Ibrahim[1], Abbey Howell[1]

[1]Barwon Health, Geelong, Vic

EMAIL juliemareetaylor@outlook.com

Background The Geriatric Evaluation and Management (GEM) rehabilitation unit provides comprehensive multidisciplinary care to address the complex medical, functional, cognitive and psychosocial needs of older patients. Weekly rehabilitation discharge planning meetings, traditionally chaired by doctors, require effective leadership to coordinate safe transitions of care. However, leadership skills are often acquired informally and inconsistently. Chairing discharge planning meetings provides a unique opportunity for allied health professionals to develop clinical leadership skills including communication, negotiation, facilitation, time management and collaborative decision making, while demonstrating commitment to patient-centred care.

Objective To describe the development of a leadership skills framework for allied health professionals to chair multidisciplinary geriatric rehabilitation discharge planning meetings.

Action A structured workplace-based leadership framework was employed, integrating experiential learning with self-reflection and mentorship. Consensus was reached to rotate the chairperson every four weeks between occupational therapists, pharmacists, physiotherapists, dieticians, social workers and doctors. Agendas were redesigned to support consistency between clinicians. Materials to guide, monitor and support progressive skill acquisition were refined. Explicit coaching for how to chair a meeting was taught, observed and reinforced by a consultant geriatrician. Chairpersons completed self-reflection activities and colleagues provided formal feedback via written surveys assessing leadership performance across five domains: psychological safety, meeting management, interprofessional decision-making, accountability, and management of dissent.

Evaluation The five-domain framework facilitated development of targeted, measurable learning objectives and individual action plans to promote professional growth from 'novice' to 'competent' to 'expert'. Self-assessments identifying strengths and gaps aligned with formal feedback from colleagues and was used to guide focused coaching. Meeting efficiency improved via formal timekeeping.

Discussion By challenging a traditionally medico-centric forum, this structured training framework demonstrated that leadership skills to effectively chair discharge planning meetings exist across disciplines. The program provided opportunities to extend scope of practice and promote deeper understanding of each discipline.

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A centralised cancer pharmacy model to strengthen regional workforce capability

Amelia Teo[1]

[1]*WA Country Health Service, Perth, WA*

EMAIL amelia.teo@health.wa.gov.au

Background Regional cancer services across Western Australia are expanding, yet workforce shortages constrain access to specialised cancer pharmacists required for safe delivery of anticancer therapy. Many regional sites rely on a single cancer-trained pharmacist, creating vulnerability during leave and turnover. Establishing dedicated specialist roles with built-in redundancy is seldom feasible in regional settings, necessitating models that support generalist clinicians with timely access to specialist expertise to ensure safe, high-quality care.

Objective(s) To evaluate a centralised cancer pharmacy model providing regional leave backfill and virtual clinical support to maintain specialised care and strengthen regional workforce capability.

Action (Method) A 12-month pilot delivered flexible and responsive cancer pharmacy services across multiple geographically dispersed sites. Leave backfill was provided on-site or virtually based on regional needs. Generalist pharmacists were supported virtually through remote clinical service delivery, structured competency-based training, mentorship and education. Evaluation included demand, service continuity, clinical activity, workforce outcomes and staff experience.

Evaluation Six backfill requests were fulfilled (67% delivered virtually), maintaining uninterrupted service delivery during staff leave. Continuous virtual support enabled three generalist pharmacists to progress through training frameworks, with one achieving independent practice. Clinical activity was sustained, with high pharmacist verification rates (87% during backfill; 94% during training) ensuring specialist oversight of dosing, drug interactions and protocol adherence, while 81% of new patients received a medication history review and/or counselling. Staff reported high satisfaction, seamless service continuity and integration into existing workflows.

Discussion This model provides a practical and scalable approach to delivering cancer pharmacy services in regional settings. Optimising specialist resources via centralisation allows generalists to access timely clinical support, thereby enhancing the quality, consistency, and safety of regional patient care. The model displays strong potential for adaptation across rural healthcare settings to improve workforce sustainability and equitable access to specialised care.

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Broaden Horizons: A Purpose-Built Audit Tool to Turn Pharmacy Documentation into Measurable Impact

Katie Thomas[1], Alan Tuxford[1]

[1]*Albury Wodonga Health, Albury, NSW*

EMAIL katie.thomas@awh.org.au

Background High quality pharmacist documentation is essential for safe, effective and coordinated medication management. In our regional paper-based hospital, the absence of a structured audit process limited the ability to measure service delivery, demonstrate patient care impact and identify service improvement opportunities. Variability in documentation and limited available data prevented a holistic understanding of pharmacist activity across the patient journey. A consistent, clinically meaningful, reproducible and objective audit tool and framework was required.

Objective Design a structured, reproducible audit tool to assess documentation quality and consistency across the patient journey using standardised numerical scoring to enhance objectivity, minimise bias and generate analysable data.

Method A multi-component audit tool was developed to align with paper-based workflows. To enable consistent mapping across episodes of care, nine core data fields were defined to capture patient journey stage, document type, navigation cues and measurement parameters. Audit elements used standardised numerical scoring supported by embedded validation rules to improve reproducibility and data integrity. The tool incorporated a validated medication related problem (MRP) classification framework and automated risk scoring, aligned with a Heat Map Risk Matrix to support clinically meaningful analysis. Design considerations addressed handwritten documentation, workflow variability and resource limitations within a low technology environment. Usability, clarity and workflow integration were evaluated to support practical implementation.

Evaluation The audit tool was validated and tested using live clinical data, with iterative refinement undertaken across three formal review cycles. Testing demonstrated consistent and reproducible performance. Staff education and implementation were supported through a comprehensive training package.

Discussion The audit tool provides an objective mechanism to capture documentation quality, MRPs and system level risks, enabling meaningful analysis of pharmacist activity across the patient journey. Future work will focus on data visualisation and targeted service improvement initiatives informed by audit findings.

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Small Patients, Big Problem: Paediatric ADHD Medication Exposures in Australia

Amy Thomson[1,2], Prof Rose Cairns[1,2], Hannah Magotra[1], Dr Firouzeh Noghrehchi[1,2], Prof Nicholas Buckley[1,2]

[1]University of Sydney, [2]NSW Poisons Information Centre

EMAIL amy.thomson@sydney.edu.au

Background Children are particularly vulnerable to poisoning from ADHD medications, especially agents associated with significant toxicity at relatively low doses. Understanding exposure patterns is essential to guide paediatric medication safety initiatives.

Aim/Objectives To describe paediatric exposures to ADHD medications reported to the New South Wales Poisons Information Centre (NSWPIC) and identify opportunities for prevention.

Methods A retrospective study of atomoxetine, clonidine, dexamphetamine, guanfacine, lisdexamfetamine and methylphenidate exposures reported to NSWPIC between 2014 and 2023. Exposure characteristics were analysed by age group, intent and healthcare utilisation.

Results Children aged 5–14 years accounted for 40% of all ADHD medication exposures (n=7,004), while toddlers aged 1–4 years accounted for a further 12% (n=2,011). Female children experienced one of the fastest increases in exposure rates nationally, increasing by 18.5% annually (95% CI 14.7–22.8%). There were 979 exposures involving atomoxetine, clonidine or guanfacine among children under five years of age; 78% required hospital assessment. Clonidine was associated with the greatest healthcare utilisation, with 70.1% of exposures resulting in hospital referral or occurring while the patient was already in hospital. Most paediatric exposures were unintentional.

Discussion The high burden of paediatric ADHD medication exposures, particularly among younger children, highlights the need for targeted prevention strategies. Interventions should include caregiver education, child-resistant storage, optimisation of dispensing quantities and consideration of safer paediatric formulations. Particular attention should be given to clonidine, which demonstrated a disproportionately high poisoning burden and healthcare impact. Reducing preventable paediatric exposures should be a priority as ADHD medication use continues to increase across Australia.

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Haemorrhagic HACs – a costly endeavour

Brittany Thomson[1], Mika Varitimos[1], Ellie Johnson[1]

[1]The Prince Charles Hospital, Chermside, Qld

EMAIL brittany.thomson@health.qld.gov.au

Background Anticoagulants are high risk medicines requiring close monitoring to reduce the incidence of severe bleeding. The Australian Commission for Safety and Quality in Healthcare has defined specific Hospital Acquired Complications (HACs) such as melaena and haematemesis to assist with monitoring these complications within hospitals. These HACs incur a financial penalty for the hospital.

Objective To assess and determine the probability, severity and preventability of haemorrhagic HACS in a tertiary referral hospital.

Method A retrospective chart audit was conducted on patients who had been medically coded for a haemorrhagic HAC over a 12-month period. For each HACs event, causality, severity, and preventability were assessed using the Naranjo algorithm, the Hartwig severity assessment scale, and the Schumock and Thornton criteria, respectively.

Evaluation There were 26 patients audited with a haemorrhagic HAC; with a median age of 70 years old. Most patients were managed in critical care, surgical or cardiac settings with 65% of patients prescribed two or more anticoagulants. Of the 26 patients receiving anticoagulation, intravenous heparin was the most frequently implicated agent (46%), followed by enoxaparin (27%). Using the Naranjo algorithm, anticoagulation was assessed as a possible cause of haemorrhagic HACs in many cases (15/26). Based on Hartwig's severity assessment, 46% of HACs were classified as moderate. According to the Schumock and Thornton criteria, nearly half of cases were considered definitely preventable (12/26).

Discussion This hospital manages a high volume of cardiothoracic and orthopaedic procedures, many of which carry an inherent bleeding risk. However, this underscores an ongoing responsibility to our patients to prevent haemorrhagic HACs wherever possible. These findings will inform targeted medication safety initiatives and be reported through medication safety governance committees. Pharmacists are well placed to identify medication-related and comorbidity-related risk factors, supporting medical teams to optimise anticoagulant management and improve patient outcomes.

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Assessment of fluconazole prescribing practices at a tertiary regional hospital

Kathryn Tidmas[1]

[1]*Townsville University Hospital Pharmacy, Douglas, Qld*

EMAIL kathryn.tidmas@health.qld.gov.au

Background The 2023 National Antimicrobial Prescribing Survey (NAPS) revealed that although fluconazole is the most prescribed systemic antifungal in Australian hospitals, approximately one-third of prescriptions are inappropriate and non-compliant with established guidelines.

Aim/Objective(s) To evaluate the appropriateness of fluconazole prescribing within a regional tertiary hospital and identify methods to improve antimicrobial stewardship.

Methods A retrospective audit of inpatients commenced on fluconazole between 1st January to 31st March 2024. Data was collected using the Antifungal National Antimicrobial Prescribing Survey data collection tool. Appropriateness was assessed using National Prescribing Survey definitions.

Results Fifty patients were included in the study with 59 prescriptions of fluconazole reported. Overall, 69% of prescriptions were appropriately prescribed. Fungal prophylaxis was the most common indication (33.9%) and demonstrated the highest appropriateness (95%). Empiric and directed therapy courses, however, had a 50% and 57.1% rate of appropriate prescribing respectively. Candiduria was the highest indication for empiric and directed fluconazole treatment courses (20.3%) but had low appropriateness (16.6%). The biggest reasoning behind inappropriate prescribing was when the indication did not require the prescribing of an antifungal agent (46%). Guideline compliance was higher for prophylaxis (78.3%) compared to empiric (37.5%) or directed (39.3%) therapy. Infectious diseases consultation and antimicrobial stewardship approval occurred in 30.6% and 30.3% of prescriptions respectively, lower than national comparator data.

Discussion This audit highlighted that the most common indication for fluconazole use in Australian hospitals is fungal infection prophylaxis, with a high rate of appropriateness. However, empiric and directed fluconazole therapy demonstrated lower compliance with guidelines, limited antimicrobial stewardship involvement and a higher rate of inappropriate prescribing. This is consistent with previous NAPS survey results. Asymptomatic candiduria was identified as a key contributor to inappropriate prescribing. Targeted education and increased infectious diseases consultation may improve prescribing appropriateness, reduce unnecessary antifungal exposure and support antimicrobial stewardship initiatives.

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Breaking the cycle of alert fatigue: A data driven EMR optimisation project

Christine Ting[1], Imogen Walpole[1], Gina McLachlan[1], Lauren Randell[1]

[1]*Austin Health, Heidelberg, Vic*

EMAIL christine.ting@austin.org.au

Background Clinical decision alerts are widely regarded as a core safety feature of Electronic Medical Record (EMR) systems and are frequently used as levers for quality improvement. However, excessive exposure to low-value 'soft-stop' alerts – those routinely overridden – leads to cognitive desensitisation, conditioning clinicians to dismiss alerts automatically. This alert fatigue increases the risk of overlooking clinically significant warnings, undermining patient safety and the intended purpose of EMR alerts.

Objective Following a Severity 2 incident in which a patient was readmitted with bleeding after amiodarone initiation and warfarin was resumed without dose reduction, a case review panel recommended a review of EMR drug–drug interaction (DDI) alerts. The objective was to reduce alert fatigue and ensure interruptive alerts reach the right clinicians, with the right information, at the right time to support safe decision making.

Methods A multidisciplinary working group undertook a structured optimisation program to reduce alert fatigue. Key activities included statewide benchmarking, clinician workshop and survey to understand user experience, Pareto analysis of 6-month aggregated baseline alert data, engagement with clinical specialties (pharmacy medicines information, clinical pharmacology, cardiology, haematology, toxicology) to identify low-value alerts, suppression of those of low-value alerts, and development of a governance framework for ongoing alert management.

Evaluation Clinician survey responses confirmed alert fatigue as a common user experience. To address this, 282 alerts were optimised. On comparable index days before and after implementation, standard DDI alert firings decreased from 49 to 17 (65% reduction). This potentially mitigates alert fatigue and enhances clinical usability. A post implementation survey and repeat 6-month aggregated alert data extraction are planned.

Discussion Resource limited health services often lack capacity for continuous alert optimisation. This project demonstrates how targeted strategies can reduce alert fatigue and potentially improve the effectiveness of clinical alerts.

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From Soft Stops to Hard Truths: Reducing Anticoagulant Errors Through Targeted EMR Interventions

Christine Ting[1], Lauren Randell[1], Hy Lim[1], Connor Palmer[1], Caroline Dix[1]

[1]*Austin Health, Heidelberg, Vic*

EMAIL christine.ting@austin.org.au

Background Anticoagulants carry a significant risk of bleeding and therapy is almost always limited to a single agent. Despite the presence of interruptive 'soft-stop' clinical alerts – those that may be overridden – our health service experienced repeated incidents of inadvertent co-prescribing of direct oral anticoagulants with enoxaparin. A similar incident at another organisation resulted in a Sentinel event, underscoring the seriousness of this risk. Alert fatigue, driven by over exposure to and routine overriding of low value soft stop alerts, was identified as a key contributor.

Objective To reduce alert fatigue, enforce meaningful review, shift prescribing behaviour, and prevent accidental prescription of concomitant anticoagulants, a custom 'hard-stop' alert was developed to prevent prescribers from overriding critical alerts.

Methods To ensure the alert did not inadvertently block clinically appropriate therapies (e.g. warfarin with enoxaparin), the design and development process involved:

- stakeholder engagement,
- rigorous review of inclusion and exclusion criteria,
- use of silent log to test and refine alert logic and workflows before and after deployment.

Evaluation Despite extensive stakeholder engagement and careful refinement of inclusion and exclusion criteria, the silent log revealed three clinical workflows in which the hard-stop alert would have blocked clinically appropriate prescribing. Monitoring prescriber behaviour through the silent log enabled the improvement team to adjust the alert logic prior to activation. In the seven months preceding implementation, five medication incidents were reported involving inappropriate concomitant anticoagulant prescribing; in contrast, no incidents occurred in the two months following deployment. During this same post deployment period, the alert triggered 267 times, indicating both its high capture rate and its role in preventing potential duplication errors.

Discussion This project demonstrates how silent logs can support the safe development of targeted hard-stop alerts, reduce alert fatigue by reinforcing desired prescribing behaviours, and thereby prevent high-risk medication errors.

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Small Label, Big Impact: Standardising Safety in Injectable Medicines

Diana Shipp[1], Rosa Jun[1]

[1]*Australian Commission on Safety and Quality in Health Care, Sydney, NSW*

EMAIL diana.shipp@safetyandquality.gov.au

Background The preparation, administration and monitoring of injectable medicines is complex with many discrete steps translating to opportunities for error. The National Standard for User-applied Labelling of Injectable Medicines, Fluids and Lines (the Labelling Standard) supports consistent identification and communication of injectable medicines information. It provides a national approach to mitigate risks posed by injectable medicines no longer able to be identified by the labelling on their original packaging.

Objective To review and update the Labelling Standard published in 2015.

Action (Method) Revision of the Labelling Standard was informed by:

- a literature review and environmental scan of national and international guidance
- analysis of issues registered since 2015, with a focus on intensive care, the perioperative area, interventional cardiology and renal dialysis
- targeted site visits to health services reflecting these focus areas
- a national audit conducted using the Labelling Standard Audit Collection Tool, supplemented with additional questions on issues reported since implementation.

Evaluation Targeted consultation on the revised Labelling Standard was undertaken to ensure its continued applicability across Australian health care settings where injectable medicines are used. This included multidisciplinary experts in anaesthesia, nursing, pharmacy, critical care, and interventional cardiology.

In the 2026 revision, the container and line labels remain largely unchanged and processes for labelling are consistent with the 2015 version. However, the audit reveals inconsistencies with incorporation into clinical practice.

Discussion Consistent and standardised labelling reduces the risk of error and patient harm by clearly communicating the contents of injectable medicine containers, routes of administration, and patient identification. Clinical pharmacists play a key role in supporting implementation of the Labelling Standard, promoting safer administration practices, and addressing inconsistencies identified in the national audit. The 2026 revision presents an important opportunity to strengthen implementation and drive greater adherence across clinical settings.

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Medicinal Cannabis: Ensuring Safety and Quality Use in Clinical Practice

Diana Shipp[1], Suzanne Quader[1]

[1]*Australian Commission on Safety and Quality in Health Care, Sydney, NSW*

EMAIL diana.shipp@safetyandquality.gov.au

Background The use of medicinal cannabis has increased substantially in recent years, creating challenges for clinicians in safe prescribing, dispensing and administration. Most medicinal cannabis products are unapproved therapeutic goods. Limited high-quality evidence of clinical efficacy, complex regulatory pathways and issues related to supply, handling, storage and labelling further complicate clinical decision making in clinical practice.

Objectives To support safe and quality use of medicinal cannabis through the development of a multidisciplinary resource suite for health care professionals.

Methods A structured literature review was conducted to identify and synthesise the recent evidence on the efficacy and safety of medicinal cannabis. This was complemented by an environmental scan of national and international guidance, clinical resources, and regulatory frameworks to understand the current trends, behaviours and practices. Findings informed the development of discipline-specific fact sheets tailored to prescribers, pharmacists, and nurses, outlining key considerations for prescribing, dispensing, and administration, with a focus on quality use and patient safety.

Evaluation Three clinician-focused fact sheets were developed, addressing prescribing governance, dispensing processes, and administration practices across care settings. A companion evidence summary highlights the limitations of the current evidence base across selected therapeutic indications and summarises associated safety and quality considerations. These include product identification and labelling, standardised access pathways, and adverse event reporting.

Collectively, these resources aim to support consistent clinical practice and strengthen safety and quality processes in medicinal cannabis management.

Discussion Multidisciplinary, safety-focused resources can support health care professionals navigating the complex clinical and regulatory landscape of medicinal cannabis. By promoting informed decision-making in partnership with consumers, these resources aim to reduce risks associated with prescribing, dispensing, and administration.

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Bridging the gap: Exploring challenges in micronutrient supplementation in critically ill patients undergoing gastrointestinal surgery

Quynh Tran[1]

[1]*Western Health, St Albans, Vic*

Background Micronutrient deficiencies are common in critically ill patients undergoing major gastrointestinal surgery and are linked to poorer outcomes including delayed recovery, infection and prolonged hospitalisation. Despite international guidance, there is no consistent, evidence-based guideline to micronutrient supplementation in Australia, leading to variable care, particularly in high-risk patients.

Objective To identify local barriers and gaps to optimal micronutrient supplementation practices within a tertiary hospital setting to help improve patient care and clinical outcomes.

Methods A mixed methods gap analysis was conducted. An anonymous survey of surgical and ICU pharmacists and dieticians (n=17) assessed knowledge, current practices and perceived barriers to micronutrient supplementation. This was complemented by a review of local protocols, formulary restrictions and alignment with international guidelines. Thematic analysis identified key clinical and system level barriers.

Results Knowledge gaps were significant: 29% of respondents reported no confidence in knowledge of current guidelines. Eighty-two percent were unfamiliar with recommended daily intakes for less common micronutrients such as selenium, copper and vitamin A. Major practice barriers reported included absence of institutional guidelines (76%) and uncertainty around IV and oral dosing (71%). System level barriers included limited product availability and lack of decision support tools within electronic prescribing systems and infusion devices. These findings highlight a clear gap between existing resources and those required to support clinician confidence and consistent practice.

Discussion Micronutrient supplementation practices vary due to both knowledge deficits and system constraints. Identifying these gaps provides a practical framework for targeted interventions, including standardised protocols, decision support integration and multidisciplinary education. In the absence of national Australian guidance, these findings have broader relevance and can inform practice improvement strategies across similar institutions.

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WHO Medication Without Harm at 5 years: Progress, Lessons and the Path Forward

Pranavan Sothirajah[1], Rosa Jun[1], Suzanne Quader[1]

[1]*Australian Commission on Safety and Quality in Health Care, Sydney, NSW*

EMAIL Pranavan.SOTHIRAJAH2@safetyandquality.gov.au

Background Australia's response to the third World Health Organization (WHO) Global Patient Safety Challenge – Medication Without Harm (the Response) was published in 2020, with the goal of reducing avoidable medication errors, adverse drug events, and medication-related hospital admissions by 50% by 2025. The Response outlined existing medication safety programs and initiatives across Australia and identified 12 priority actions across three flagship areas: polypharmacy, high-risk situations, and transitions of care.

Objective To provide a 5-year status update on Australia's Response to the third WHO Global Patient Safety Challenge – Medication without harm.

Action (Method) A comprehensive review of Australia's progress toward the stated goal and priority actions was undertaken, including:

- literature review and environmental scan
- data collection and analysis across key areas, including polypharmacy, high-risk medicines, and transitions of care
- targeted consultation with key stakeholders on the strategic direction of the update
- targeted consultation on the draft update report.

Evaluation Targeted consultations on the approach and draft five-year update will be conducted in mid to late 2026. Incorporating stakeholder feedback and recommendations will support ongoing review and evaluation of Australia's progress in reducing medication errors and avoidable harm.

Discussion Available literature and national data show medication-related harm remains common and largely preventable, particularly among older people, those with multimorbidity, and during transitions of care. Despite multiple initiatives, progress towards a 50% reduction has been uneven, with gaps in implementation, data consistency and system integration. Pharmacists play a critical role in supporting the safe and quality use of medicines at a national level.

The five-year review represents an important opportunity to shift from fragmented initiatives to coordinated, system-wide action. It supports reflection on progress, identification of gaps, and drives strengthened, targeted actions to further reduce medication-related harm and improve patient safety outcomes.

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From Old Walls to New Workflows: Forecasting Pharmacy Workforce Demands During Hospital Transition Periods

Julina Tran[1], Grace Easaw[1]

[1]*Western Health, Footscray, Vic*

EMAIL julina.tran@wh.org.au

Background Large-scale hospital relocations involving transfer of all inpatients within a single-day move requires significant pharmacy workforce planning. However, there is limited evidence to guide pharmacy workforce forecasting and implementation strategies.

Objective(s) To evaluate workforce planning strategies implemented during a hospital relocation and their impact on service delivery.

Action (Method) A retrospective service evaluation assessed a four-week hospital relocation period. Workforce strategies included temporary workforce uplift, roster redesign, redeployment of non-direct care staff, extended pharmacy hours and a second on-call service. Workforce fill rates, admission and discharge activity, and dispensary activity were reviewed. Structured debrief sessions were conducted two weeks post-move to gather feedback and identify learnings for future change management.

Evaluation An additional 1,729 hours were requested during the relocation period, with 69% allocated to weekdays and 31% to weekends. Sixteen-hundred hours were filled by existing staff (93% of planned hours), with 40% utilised on Patient Move Day (PMD). The largest clinical impact was observed following a 2.4-fold increase in weekend clinical pharmacists. Weekend admission/discharge contacts increased by 138% (21 to 50/day) and included a 371% increase in completion of pharmacist admission notes (7 to 33/day). Earlier completion of pharmacist admission notes expedited discharge processes during rapid bed closures (patient capacity reduced from 93% to 52% by PMD).

Discharge prescription volume increased by 50% (16 to 24/day). Despite the increased prescription volume, turnaround times were maintained at 96% leading up to PMD. Post-PMD, discharge prescription volume returned to pre-PMD levels, while turnaround times decreased to 88% as staff adapted to new workflows and dispensing systems. Pharmacy debrief sessions identified key learnings around communication, role clarity, workflow coordination, issues management, staff resources, training and education.

Discussion Proactive, data-informed workforce planning supported safe pharmacy service delivery during a major hospital relocation. These findings offer practical guidance for future healthcare relocations.

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Scaling Stewardship: A Refresh of Antimicrobial Quality Use of Medicines Modules

Sankit Lalseta[1], Kylie Tran[1], Rosa Jun[1]

[1]*Australian Commission on Safety and Quality in Health Care, Sydney, NSW*

EMAIL sankit.lalseta@safetyandquality.gov.au

Background Structured, evidence-based learning modules play a vital role in supporting early-career health professionals as they transition into clinical practice. They offer a consistent and accessible way to learn and promote medicines stewardship. Following the extensive update to Therapeutic Guidelines: Antibiotic, the national Quality Use of Medicines (QUM) learning modules on antimicrobials required review and revision to ensure the content remained current and clinically relevant.

Objective To establish a coordinated and collaborative approach to review and update the QUM Learning modules on antimicrobials. This includes two case studies, one therapeutic module and five prescribing modules to align with current evidence and national prescribing guidance.

Action (Method) To support safe and quality antimicrobial use, the QUM learning modules were first reviewed internally by an antimicrobial stewardship (AMS) pharmacist to ensure alignment with Therapeutic Guidelines: Antibiotic and current evidence base. This was followed by targeted consultation with pharmacists and medical officers across Australia with expertise in antimicrobial stewardship. The modules were subsequently updated and enhanced through the incorporation of videos and animations to improve user engagement. Following content finalisation, updates were implemented by a learning management system developer. The revised modules then underwent user testing with relevant stakeholders to assess clinical accuracy, usability and alignment with health system needs.

Evaluation The structured review process and national approach ensured the QUM Learning modules maintained clinical relevance and aligned with best practice. Collaboration with learning management system developers enabled effective translation of updated material into an engaging format. Stakeholder user testing further strengthened the process, confirming clinical accuracy, usability and health system relevance.

Discussion The QUM Learning modules on antimicrobials provide contemporary, guideline-aligned educational resources that support antimicrobial stewardship principles and safe prescribing practices. Ongoing evaluation and periodic updates will ensure the modules remain aligned to future guideline revisions and evolving clinical practice needs.

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An Empirical Analysis of Hospital Pharmacists' Perspectives on Off-Label Prescribing

Joshua Trembath[1], Jessenya Fites[1]

[1]*Slade Pharmacy, Auchenflower, Qld*

Background Off-label prescribing is the intentional use of a medication for a medical purpose outside the specifications of the authorised product information. It presents a challenge for pharmacists, who must uphold ethical principles while navigating uncertainty around quality of evidence. There is a paucity of data regarding hospital pharmacists' perceptions of the prevalence of off-label prescribing and their conceptualisations of their role with respect to off-label prescribing.

Objectives Establish hospital pharmacists perceived prevalence of off-label prescribing.

Examine whether hospital pharmacists identify and differentiate between ethical and epistemic considerations related to off-label prescribing.

Methods A mixed-methods survey including a case study was distributed to pharmacists practicing for at least 6 months at an Australian private tertiary hospital. Responses were anonymised and collected via Qualtrics.

Evaluation Twenty-one responses were received. 71% of respondents reported moderate or high confidence in recognising off-label prescriptions. 66% reported identifying an off-label prescription at least once a day. 95% of responses identified prescriptions for an unapproved indication, 62% for unapproved doses, 29% for unapproved routes of administration, and 14% for unapproved populations. In the case study involving an off-label quetiapine prescription, 57% of respondents characterised their primary concern as 'ethical and epistemic equally', 29% as 'primarily epistemic', and 14% as 'primarily ethical'. 66% of respondents perceived a meaningful distinction between ethical and epistemic concerns related to off-label prescribing.

Discussion Pharmacists perceived a high prevalence of off-label prescribing. Most respondents characterised their concerns with the case study in terms of adverse effects. Despite many respondents articulating ethical considerations with off-label prescribing and how they differ from epistemic considerations, few explicitly recognised ethical dimensions like informed consent and distributive justice associated with the case. This may reflect past approaches to pharmacy education which emphasised the pure sciences over ethics, as opposed to modern approaches emphasising patient-centred care and advocacy.

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Cold Chain, Big Gain: A Fridge Alarm That Changed the Game

Dr Susan Welch[1,2], Nicholas Trethewy[1], Darren Scott[1], Thomas Slater[1]

[1]*St Vincent's Hospital, Sydney, Darlinghurst, NSW,* [2]*Faculty of Medicine and Health, University of Sydney, Sydney, Camperdown, NSW*

EMAIL susan.welch@sydney.edu.au

Background Maintaining cold chain integrity is essential to ensure medication efficacy and patient safety. In a tertiary metropolitan hospital Emergency Department (ED), the medication fridge experienced an average of one temperature breach per month, primarily due to the door being accidentally left ajar. Although continuous back-to-base temperature monitoring was in place, alerts were often delayed, not received, or not actioned promptly in the busy ED environment. This resulted in unnecessary disposal of temperature-sensitive medications and avoidable costs/ time.

Objective To describe the implementation of a pharmacist-led fridge door alarm system in the ED and its impact on reducing cold chain breaches, medication wastage, and associated costs.

Action Several strategies were implemented, including staff education, stock rationalisation, fridge reorganisation, and SMS alerts to nurse unit managers when out-of-range temperatures were detected. However, these measures remained reactive, identifying breaches only after they occurred. To address this, an ED pharmacist installed a low-cost fridge door alarm ($6.50), supported by ED managers. The device emits a continuous audible alarm whenever the door remains open and stops once it is closed.

Evaluation Since installation, no cold chain breaches have been reported over a 16-month period, compared with the previous average of one breach per month. Each breach incurred an average replacement cost of $2,918, in addition to approximately three hours of pharmacist and technician time for stock replacement, procurement, and expiry-date management. Preventing monthly breaches has equated to $46,688 in saving, since fridge door alarm implementation.

Discussion This simple, low-cost intervention significantly improved cold chain compliance and medication safety. The alarm provides a proactive, real-time solution in a high-pressure clinical environment where delayed alerts were insufficient. Its success has led to expansion into other departments, highlighting the value of pharmacist-led initiatives in reducing medication waste and healthcare costs.

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Incorporating First Nations health into Pharmacy student education – making change.

Dr Susan Welch[1,2], Dr Alex Burke[1], Jocelyn Bussing[1], Dr Jack Collins[1], Dr Monika Dzidowska[1], A/Prof Joanna Harnett[1], Professor Andrew McLachlan[1], Jazmyn Pearson[1], Professor Bandana Saini[1], Prof Rebekah Moles[1]

[1]*University of Sydney, Sydney, NSW,* [2]*St Vincent's Hospital, Sydney, NSW*

EMAIL susan.welch@sydney.edu.au

Background Producing health practitioners who are culturally competent is paramount to provide culturally safe healthcare for First Nations People.

Objective(s) To illustrate the process used to incorporate First Nations health into the pharmacy curriculum of a metropolitan University.

Action/(Method) Aligned with university First Nations Strategy, the Faculty formed a First Nations Curriculum Subcommittee. The Pharmacy School (PS) formed a First Nations Working Group (FNWG) that includes First Nations academic staff/student. FNWG meets bimonthly to determine curriculum to focus on and ways to implement First Nations themes consistently across the pharmacy programs.

Evaluation The PS developed a Framework to guide implementation of First Nations theme. Key elements include: (1) Cultural Safety, (2) Recruitment/Retention and (3) Connections, informing First Nations Curriculum/Research.

Inclusions for change have a school-wide, staff and student focus. Examples include:

1. Cultural Safety [school: First Nations artwork; staff: (cultural immersion days; First Nations research/education retreats), staff/students: 'white privilege' education];
2. Recruitment/Retention (First Nations academic employment; First Nations high school student camps);
3. Connections (collaboration with First Nations scholars, community members/organisations to inform change).

New curriculum implementation has occurred based on this focus shift, enabling strengths-based inclusions, including: First Nations community involvement in student education (lectures/seminars, co-design of simulated cases), inclusion of First Nations ways of knowing, being and doing (8-Ways of Aboriginal Learning, placement options).

Post-graduate research developed an accreditation mapping system to ensure progress, and ongoing success. A tool enables staff/student cultural competence self-monitoring.

Discussion Producing culturally competent pharmacists, able to provide culturally safe care for First Nations People, starts with education. This is a road map for the PS to work together with First Nations People to ensure that it does. It provides a way to map change and allows for cultural competence self-monitoring over time, to inform future initiatives and facilitate change by staff for students.

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Effect of vancomycin loading dose on clinical outcomes in patients with methicillin-resistant Staphylococcus aureus bacteraemia

Laura Triggs[1,2], Dr Ian Marr[2], Fiona Doukas[1,3]

[1]*Canberra Health Services Pharmacy Department, Canberra, ACT,* [2]*Canberra Health Services Infectious Disease Department, Canberra, ACT,* [3]*Australian Commission on Safety and Quality in Health Care, Sydney, NSW*

EMAIL laurahayley.triggs@health.nsw.gov.au

Background Methicillin-resistant Staphylococcus aureus (MRSA) bacteraemia is associated with substantial morbidity and mortality in Australia, with reported 30-day mortality of 14%. Vancomycin is first-line therapy for MRSA bacteraemia. Guidelines recommend vancomycin loading doses in critically-ill patients. However, evidence linking loading doses to improved clinical outcomes remains limited, particularly in the Australian context.

Aim To examine the impact of vancomycin loading doses on morbidity and mortality.

Methods A multicentre retrospective cohort study was conducted across two hospitals within an Australian health service between January 2012 and December 2025. Adult participants with MRSA bacteraemia treated with intravenous vancomycin were included. Participants were classified as receiving a loading dose (≥20 mg/kg) or no loading dose (<20 mg/kg). The primary outcome was a composite of 7- and 30-day mortality. Secondary outcomes included acute kidney injury (AKI) and hospital length of stay (LOS).

Results Of the 114 participants analysed, 54 (47.4%) received a loading dose. There was no statistically significant difference between non-loading and loading dose groups in both 7-day mortality (10% (n=6) vs 1.9% (n=1), p=0.188) or 30-day mortality (14% (n=8) vs 9.8% (n=5), p=0.565). Rates of AKI (33.3% vs 25%, p=0.391) and LOS were similar between groups.

Discussion Vancomycin loading doses were not associated with reduced mortality, reduced hospital LOS, or increased AKI in MRSA bacteraemia, consistent with international studies. However, fewer deaths were observed in the loading dose group, suggesting a potential clinical benefit which lacked statistical significance due to sample size. Loading doses were not associated with increased nephrotoxicity, providing reassurance regarding safety. These findings contribute local evidence and support larger prospective studies to define clinical impact of vancomycin loading doses and inform future Australian guidelines, whilst providing evidence to support pharmacist-led vancomycin dosing strategies.

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Implementation Challenges and Support Needs: Oncology Management System Rollout across Regional WA

Deborah Trotta[1], Sarah Heward[1], Susana Correia[1], Lindsay Adriaansen[1], Ashleigh Chester[1], Amber Hingston[1]

[1]*WA Country Health Service, Perth, WA*

EMAIL deborah.trotta@health.wa.gov.au

Background Prescribing and administration of Systemic Anticancer Treatment (SACT) is a high-risk, multidisciplinary process. Prior to implementing an Oncology Management System (OMS), regional cancer services relied on manual paper-based processes and legacy scheduling systems. The OMS was implemented in eight regional sites as a shared multi-site rollout across two WA health service providers, with approximately 1,200 staff provisioned for system access.

Objective(s) To identify and categorise support requests, technical issues, and training needs during OMS implementation and provide transferable recommendations for future clinical application rollouts.

Action (Method) A prospective thematic analysis of logged requests was conducted. Data was captured via a structured issues log, categorised by type (Support, Issue, Enhancement), issue subtype, site, and days to resolution.

Evaluation A total of 1,702 requests were logged between October 2024 and May 2026. Requests comprised 86% (n=1,461) support queries, 12% (n=207) technical issues and 2% (n=34) enhancements. Training-related queries were the largest subtype (n=992, 58%), followed by workflow (n=169, 9%) and user-related issues (n=151, 9%). Most requests (n=1,189, 70%) were resolved same-day, with 12% (n=199) within seven days. Requests by discipline were (n=1,655, excluding 47 project team entries): pharmacy (n=928, 56%), nursing (n=518, 31%), medical (n=133, 8%), nurse practitioners (n=54, 3%), clerical (n=22, 1%).

Discussion Training needs accounted for most support required across all sites, reinforcing the complexities of implementing specialised clinical applications. Training was delivered prior to each site go-live via eLearning, online pharmacist sessions, face-to-face instructor-led training, and three weeks increased post-implementation support. Requests reflected queries addressable through existing materials rather than formal training gaps, distinguishing them from workflow issues. The predominance of pharmacy requests (56%) reflects pharmacists' role in SACT workflows. Support requests (86%) represent clarification rather than failures, and 70% same-day resolution reflects strong responsiveness within the project team. These findings offer a transferable framework for future implementations.

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Optimising therapeutic target attainment in vancomycin therapy for patients requiring intermittent haemodialysis

Dr Danny Tsai[1,2,3], Dr María Patricia Hernández-Mitre[3], Dr Amy Legg[3], Jacqueline Martin[2], Dr Cherian Sajiv[2], Dr Sachin Kodgire[2], Dr William Naughton[2], Dr Sonja Janson[4], Prof Jaquelyne Hughes[1,4], Dr Xin Liu[3], Prof Jason Roberts[3,5,6,7]

[1]Flinders University, Alice Springs, NT, [2]Alice Springs Hospital, Alice Springs, NT, [3]University of Queensland, Brisbane, Qld, [4]Royal Darwin Hospital, Darwin, NT, [5]Royal Brisbane Women's Hospital, Brisbane, Qld, [6]Herston Infectious Diseases Institute , Brisbane, Qld, [7]University of Montpellier, Nimes, France

EMAIL danny.tsai@flinders.edu.au

Background A high incidence of methicillin-resistant Staphylococcus aureus infections is observed among patients requiring chronic intermittent haemodialysis (iHD), particularly in those residing in rural or remote regions. Vancomycin remains the first-line empirical antibacterial therapy, however, there is limited evidence to guide optimal dosing in iHD patients.

Aims To describe the pharmacokinetics of vancomycin in patients requiring iHD and provide guidance for optimised dosing for a three-times-weekly post-iHD regimen.

Methods A population pharmacokinetic study using retrospectively collected data was conducted in a remote Australian dialysis centre. Adult patients receiving post-iHD vancomycin therapy between 1st January 2017 and 31st July 2023 were screened. Inclusion criteria: ≥3 months of iHD, prescribed vancomycin, and recorded ≥1 vancomycin concentration. Pharmacokinetic analysis was performed using Monolix®. The probability of pharmacokinetic/pharmacodynamic target attainment (PTA) for pre-iHD trough concentrations of 15–20 mg/L was simulated for various loading and maintenance doses.

Results A total of 302 vancomycin concentrations were available from 80 courses (58 patients, 45 were female) with a median age of 52 (IQR 45–61) years and weight of 75 (66.5–85.5) kg. A one-compartment model adequately described the data. Actual body weight was the only covariate retained in the final model. The estimated vancomycin clearance during non-iHD periods, during iHD periods, and volume of distribution were 0.54 L/h, 4.84 L/h, and 87.02 L, respectively. The simulations supported weight-based loading doses. The time to the next iHD session also significantly influenced the PTA of loading doses. Subjects with higher weight required lower weight-based doses, and vice versa. The PTA of maintenance doses was associated with the pre-iHD trough concentrations and the dosing intervals. Weight had a limited impact on the PTA of maintenance doses.

Discussions A comprehensive vancomycin dosing nomogram was suggested for patients requiring iHD. Validation in future prospective studies is recommended.

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Capturing the Early Voice of Automated Medication Cabinet Users to Drive Timely Post-Implementation Optimisation

Kathy Valenzuela[1], Shu Loh[1], Sarah Dinh[2]

[1]Western Health, Footscray, Vic, [2]Bayside Health – Alfred Care Group, Melbourne, Vic

EMAIL Kathy.Valenzuela@wh.org.au

Background Automated Medication Cabinets (AMCs) were implemented at our organisation to progress closed-loop medication management. Following the post-go-live hypercare period, feedback was sought from nursing, pharmacy, and medical staff to understand early experiences and identify opportunities for optimisation.

Objective(s) We sought to evaluate staff experiences with AMCs in the immediate post-implementation period, assess impacts on Drugs of Dependence (DD) and imprest management workflows, identify emerging clinical and operational issues, and inform optimisation strategies.

Action (Method) A voluntary, anonymous five-question survey was distributed to AMC users, including nursing, pharmacy, and medical staff, commencing two weeks after go-live and remaining open for approximately four weeks. The survey QR code was displayed on all AMCs and promoted via email, Teams channels, and Unit Manager (UM) meetings. Twenty-two online responses and seven offline submissions were received. Quantitative and qualitative data were analysed to identify key themes and opportunities.

Evaluation Respondents were predominantly nursing staff. Participants reported a median experience rating of 4/5 and identified benefits including faster DD counts, reduced medication room time through remote queuing, and improved accountability in DD management. Challenges included lack of electronic medical record integration, inventory inaccuracies, workflow inefficiencies, inconsistent education, and communication gaps. In response, waste management workflows were revised, additional education delivered, Unit Manager engagement strengthened, and early imprest reviews undertaken.

Discussion Early staff feedback provided valuable insights into AMC implementation, demonstrating strong initial acceptance while identifying workflow, education, and system challenges requiring optimisation. Findings informed targeted improvements in waste management workflows, staff education, communication strategies, and imprest management. Although participation was modest and responses were predominantly from nursing staff, the survey identified actionable opportunities that may otherwise have remained unrecognised. These lessons will inform future AMC implementations across the network and support ongoing evaluation of medication safety, workflow efficiency and adoption.

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The clot thickens: consumer perspectives on Venous Thromboembolism (VTE) care

Mika Varitimos[1], Jessica Schluter[1], Erin Dunn[1], Janette Marshall[1]

[1]*The Prince Charles Hospital, Chermside, Qld*

EMAIL mika.varitimos@health.qld.gov.au

Background Venous thromboembolism (VTE) represents a significant burden of preventable patient harm. In 2020, the Commission published the first VTE Prevention Clinical Care Standard, with a key objective to inform and partner with patients in developing their VTE care plan.

Objective(s) To explore and describe the inpatient experience with information on VTE prevention and engagement in their care plan to prevent VTE.

Action (Method) A point prevalence survey of adult consumers was undertaken across all wards of a tertiary-referral hospital, excluding Mental Health, Intensive Care Unit, Emergency Department and Palliative Care. Consumers were excluded if they had reduced capacity or if prophylaxis was not prescribed. 10% of consumers were surveyed at random, with the paper-based survey comprising ten questions relating to information provided about the risk of blood clotting in hospital, consumer inclusion in plans to prevent blood clots and experience with mechanical prophylaxis. A mix of closed and open response questions were utilised.

Evaluation A total of 27 consumers were surveyed. Most consumers reported receiving information about the risk of blood clotting (81%) and how to prevent it (70%), primarily through verbal communication from clinical staff. Of note, participants volunteered that doctors, nurses and pharmacists were all involved in providing information on VTE prevention. Only 63% of consumers felt included in the planning process to some extent, and 37% did not recall receiving information about the risks and benefits of their prevention plan. During open response questions, consumers emphasised the role of mechanical prophylaxis (including compression stockings, movement and position changes).

Discussion Consumers were commonly provided verbal information about the risk of VTE and prevention strategies, however there are further opportunities to improve their involvement in VTE care planning. Future work should assess the impact of multimodal education including written and video resources, particularly with regard to chemoprophylaxis.

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Identifying Opportunities for a Heart Failure Pharmacist Using an SGLT2 Inhibitor Prescribing Audit

Ali Laith Safi[1], Vincent Viengkhou[1], Dr Arwa Abu Sardaneh[1,2], Prof Jan-Willem Alffenaar[1,2]

[1]*Westmead Hospital, Department of Pharmacy, Westmead, NSW,* [2]*University of Sydney, Faculty of Medicine and Health, School of Pharmacy, Sydney, NSW*

EMAIL Ali.Safi1@health.nsw.gov.au

Background Sodium–glucose co-transporter 2 (SGLT2) inhibitors are a core component of guideline-directed medical therapy (GDMT) for heart failure (HF), reducing hospitalisation and cardiovascular mortality across HF phenotypes. Despite strong evidence, variation in real-world prescribing patterns persists.

Objective(s) To evaluate the appropriateness of SGLT2 inhibitor prescribing in cardiology inpatients and identify practice gaps to inform development of a HF pharmacist role.

Action (Method) A retrospective audit was undertaken at an Australian quaternary hospital. Electronic medical records for cardiology inpatients prescribed an SGLT2 inhibitor between April 2025 and January 2026 were reviewed. SGLT2 inhibitor initiation during admission, HF phenotype, ejection fraction (EF), renal function and concomitant GDMT were extracted. Appropriateness of prescribing was assessed against contemporary Australian HF guidelines.

Evaluation A total of 263 patients were included (mean age 68 years; 73% male; mean estimated glomerular filtration rate 68 mL/min/1.73 m^2). Of these, 51% had HF with reduced EF, 17% had preserved EF, 3% had no documented EF, and 29% had no recorded HF diagnosis. SGLT2 inhibitors were initiated in 64% of patients admitted with an exacerbation of HF (n=48/75) compared with 43% of patients admitted for non-HF cardiac conditions (n=29/67). Dosing was appropriate in over 90% of cases, with inappropriateness primarily related to renal function (4.5% of patients with preserved EF and 3.0% of those with reduced EF). Among patients with reduced EF, use of other GDMT was high (beta-blocker 86%, angiotensin-pathway therapy 83%, mineralocorticoid receptor antagonist 68%), yet only 57% received all four pillars.

Discussion This audit highlights gaps in systematic identification of eligible patients for SGLT2 inhibitor therapy and incomplete prescribing of GDMT. A HF pharmacist could address these gaps by proactively identifying candidates for SGLT2 inhibitor initiation especially for patients admitted for non-HF cardiac conditions, ensuring appropriate dosing and supporting consistent application of GDMT to optimise HF management.

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From counter to bedside, without limits: community pharmacist reflections on specialist palliative care placements

Khoa Vo[1]

[1]*North Canberra Hospital, Canberra Health Services, Canberra, ACT*

EMAIL khoa.vo@act.gov.au

Background Community pharmacists routinely care for patients approaching the end of life, yet many report low confidence in palliative medication management, anticipatory prescribing, opioid conversions, and public medication supply pathways. The Program of Experience in the Palliative Approach (PEPA), a Commonwealth-funded initiative, offers short clinical placements within specialist palliative care services to address this capability gap, with the specialist palliative care pharmacist anchoring the pharmacist learner journey.

Objective To analyse written feedback from community pharmacists completing PEPA placements and to review the contribution of the specialist palliative care pharmacist in building learner confidence, clinical knowledge, and interprofessional engagement.

Method Twelve community pharmacists completed two-day PEPA placements across separate placement blocks throughout 2025, attending ward rounds, multidisciplinary team meetings, home-based palliative visits, and specialist pharmacist-led tutorials covering symptom management, opioid rotation, deprescribing, and public medication supply pathways. Written feedback collected through standard PEPA evaluation forms at placement conclusion was analysed using Braun and Clarke's six-phase reflexive thematic analysis framework.

Evaluation Feedback from all twelve placements was uniformly positive, with four recurring themes: clarity in explaining first-, second-, and third-line palliative medicines; demonstration of the pharmacist's value within the multidisciplinary team; warm, approachable mentorship; and translation of complex pharmacology into community-applicable practice. Learners described the placement as relevant and enlightening, and recommended uptake by all community pharmacists.

Discussion Specialist palliative care pharmacists play a central part in upskilling the community pharmacy workforce. By demystifying end-of-life prescribing, modelling collaborative care, and bridging hospital and community settings, they extend safe, person-centred palliative care beyond specialist services and strengthen continuity of care for dying patients in community. Embedding pharmacist-led education within PEPA represents a scalable model for national workforce development.

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Clinical–Procedural Gaps in COVID-19 Prescribing: A Hospital Audit of Restricted Therapies

Kim Vo[1], Louise Lord[1], Christina Vytilingam[1]

[1]*The Royal Melbourne Hospital, Melbourne, Vic*

EMAIL k.vo5339@gmail.com

Background The COVID-19 pandemic prompted rapid adoption of novel therapies. To support standardised, evidence-based prescribing, a metropolitan quaternary hospital implemented a COVID-19 prescribing flowchart with a digital approval system and electronic order panel. Compliance with guidelines for hospital-funded, highly restricted COVID-19 therapies (HRCT) – non-PBS nirmatrelvir-ritonavir, remdesivir, tocilizumab, baricitinib and molnupiravir – remained unclear.

Aim/Objective(s) To assess clinical, procedural and overall compliance with local COVID-19 prescribing guidelines and identify factors contributing to noncompliance.

Method This retrospective audit identified HRCT prescriptions in reverse chronological order from 31 December 2025 to 1 October 2024 – sampling capped at 20 prescriptions per therapy. Clinical (appropriate therapy selection) and procedural (completion of digital and/or Infectious Diseases (ID) approval) compliance were assessed. Secondary analyses examined compliance by medication, clinical unit, reasons for noncompliance, and electronic order panel use.

Results Of 64 prescriptions audited, 25% (16/64) demonstrated both clinical and procedural compliance. Clinical compliance (40/64, 62.5%) exceeded procedural compliance (27/64, 42.2%). Severe disease immunomodulators, baricitinib and tocilizumab, demonstrated 100% clinical compliance and high procedural compliance (7/9, 77.8% and 3/4, 75% respectively). Clinical compliance was lowest for nirmatrelvir-ritonavir (10/20, 50%) and molnupiravir (1/11, 9.1%) – primarily due to incorrect treatment choice (4/20, 20% and 3/11, 27.3%), and additionally for nirmatrelvir-ritonavir, incomplete documentation (4/20, 20%).

Among non-compliant prescriptions (n=48), the prevailing reasons were procedural failures – absent digital (26/48, 54.2%) and ID (16/48, 33.3%) approvals.

Electronic order panel use was low (7/64, 10.9%).

Discussion Suboptimal compliance with COVID-19 prescribing guidelines was driven by procedural noncompliance despite digital prescribing supports. Higher immunomodulator compliance likely reflected greater ID involvement and clearer prescribing indications, while lower oral antiviral compliance suggested variability in treatment selection. Limited order panel use indicated underutilisation of decision-support tools. Targeted education, streamlined approval processes, and improved uptake of electronic prescribing supports may enhance adherence to evidence-based prescribing practices.

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A retrospective audit evaluating bleeding outcomes of anticoagulant use in patients with chronic kidney disease

Sandy Wang[1], Neha Alex, Padraig Kilkenny, Cindy Yang, Tessa Anish, Arman Kolar

[1]*Peninsula Care Group, Frankston, Vic*

EMAIL wang.hs.sandy@gmail.com

Background Chronic kidney disease (CKD) is associated with an increased risk of both thrombotic and bleeding complications due to imbalances in the coagulation cascade and fibrinolytic system. Anticoagulants which include vitamin K antagonists (VKAs), direct oral anticoagulants (DOACs) and heparins are commonly prescribed for the prevention of stroke in AF and the treatment and secondary prevention of venous thromboembolism (VTE). However, renal impairment significantly affects the pharmacodynamics and pharmacokinetics of many anticoagulants, increasing the potential risk for major bleeding. The balance between prevention of thromboembolic events and bleeding risk in patients with CKD receiving anticoagulant therapy remains a key clinical challenge.

Aim/Objectives The primary objective of the project is to conduct a retrospective observational audit using local electronic medical record data from 2024 to evaluate the incidence of bleeding events in patients with CKD on anticoagulants.

Methods A retrospective cohort study was conducted evaluating 545 patients with CKD who were admitted to a metropolitan health service in 2024 and were administered an anticoagulant during their admission. Data was collected to determine patient characteristics, dose appropriateness and presence and location of the bleed.

Results Dabigatran was shown to have the highest proportion of patients with a bleeding outcome (27%), where enoxaparin had the lowest proportion (11%). When directly comparing DOACs with warfarin in patients with CKD stage IV, DOACs demonstrated 14% bleeding rate compared to warfarin with 21.2%.

Discussion This retrospective audit highlights the variability in bleeding risk across anticoagulants in patients with CKD. Dabigatran showed the highest bleeding proportion, likely due to renal clearance, while enoxaparin had the lowest. DOACs were associated with lower bleeding rates compared to warfarin in CKD stage IV, suggesting a potential safety advantage. These findings highlight the importance of individualised dosing and careful anticoagulant selection in this high-risk population.

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Assessing the Clinical Impact of an Anticoagulant Stewardship Service on Bleeding Events

Sandy Wang[1]

[1]*Peninsula Care Group, Frankston, Vic*

EMAIL wang.hs.sandy@gmail.com

Background Anticoagulants are high-risk medications associated with adverse drug events, particularly bleeding events. Inappropriate prescribing, dosing errors and inadequate monitoring of anticoagulants can all contribute significantly to bleeding complications in hospitalised patients. Hospital acquired complication (HAC) measures are outcome indicators developed to monitor the quality of care in Australian hospitals. They include a range of outcomes which are considered as avoidable harms, this includes haemorrhagic disorder due to circulating anticoagulants (HDCAC). The implementation of an anticoagulant stewardship (ACS) service aims to optimise anticoagulant use and improve patient outcomes, thereby reducing HDCAC incidents.

Aim To evaluate the impact of an anticoagulant stewardship service on HDCAC.

Method A retrospective observational study was conducted comparing HDCAC before and after the implementation of an ACS service in a metropolitan hospital. Data was extracted from coded HAC reports over 12 months pre-ACS implementation (Mar 2024 – Feb 2025) and post-ACS implementation (Mar 2025 – Feb 2026) to assess HDCAC incidents. The stewardship initiative included pharmacist-led interventions such as proactive real-time monitoring of anticoagulants via a dashboard and clinical decision support.

Results A reduction of HDCAC was observed, from 24 incidents in the 12 months prior to the service to 16 incidents in 12 months after the service implementation. Thereby demonstrating a 33% reduction in HDCAC incidents.

Discussion Implementation of the ACS service has shown to reduce the incidents of HDCAC by 33%, supporting its role in optimising anticoagulant use and improving outcomes in hospitalised patients. Continued investment in an anticoagulant stewardship program may help to further reduce anticoagulant-related harm.

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Postpartum Venous Thromboembolism Prophylaxis: Local Guidelines Versus Risk-Stratified Assessment Tools

Rita Wardan[1], Charis Lau, Dr Simone Da Cruz, Philippa Bywaters, Priscilla Rose Tran, Irene Mach, Massara Shmoae, Dr Briony Cutts

[1]*Western Hospital, St Albans, Vic*

EMAIL rita.wardan@wh.org.au

Background Venous thromboembolism (VTE) is a leading cause of preventable maternal morbidity and mortality. Several published risk assessment tools exist to guide postpartum thromboprophylaxis decisions based on maternal and obstetric risk factors.

Aim To compare postpartum thromboprophylaxis recommendations from local guidelines with two published risk-stratified assessment tools, evaluating differences in risk stratification, treatment recommendations and duration.

Methods A retrospective audit of all births at our institution in January 2025 was conducted. Demographic and clinical data were extracted from electronic medical records. VTE prophylaxis recommendations were assessed via three different methods (local guidelines, Thrombocalc, and the Sultan calculator) for the same cohort. Data were analysed using SPSS software.

Results A total of 551 patients were included. The proportion of inpatients requiring no thromboprophylaxis was higher when assessed using local guidelines (n=261) compared with Thrombocalc (n=228, p<0.001) and Sultan (n=153, p<0.001). Thromboprophylaxis was ceased on discharge for all methods unless patients were identified as 'at-risk'.

Local guidelines recommended an extended 42-day course of thromboprophylaxis for 165 at-risk patients. This was significantly higher than Thrombocalc (n=38, p<0.001) and Sultan (n=15, p<0.001). However, Thrombocalc (n=73) and Sultan (n=78) offered an alternate extended thromboprophylaxis duration of 10 days for 'lower' at-risk patients.

Between tools, there was no significant difference in 10-day thromboprophylaxis recommendations (p=0.702); however, Sultan recommended fewer 42-day courses than Thrombocalc (p<0.001).

Discussion Risk assessment tools provide a structured, risk-stratified approach to postpartum thromboprophylaxis. Compared with local guidelines, Thrombocalc and the Sultan calculator identified more women requiring inpatient prophylaxis while reserving 42-day courses for only the highest at-risk patients. Lower at-risk patients received an alternative 10-day course recommendation. This approach may optimise anticoagulant use, reduce unnecessary prolonged exposure, and improve resource utilisation. Further evaluation of VTE and bleeding outcomes is needed to confirm the safety and effectiveness of these tools in clinical practice.

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A Bypass to Encephalopathy: Hyperammonaemia After Roux-en-Y Gastric Bypass (RYGB)

Allie Yang[1], Namita Warrior[1]

[1]*Western Health, St Albans, Vic*

EMAIL allie.yang@wh.org.au

Objectives To describe a case of life-threatening hyperammonaemiac encephalopathy following RYGB and highlight the critical role of pharmacists in coordinating time-sensitive ammonia lowering therapies.

Clinical Features A 45-year-old male presented to hospital 15 months post RYGB with altered conscious state. Intracranial and infective causes were excluded. Investigations revealed severe hyperammonaemia (126 microg/L), mild liver derangement, hyperbilirubinaemia (48 micromol/L), hypoalbuminaemia (14 g/L) and hepatic steatosis without cirrhosis. Micronutrient deficiencies included zinc (8.8 micromol/L), copper (5.2 micromol/L), vitamin D (19 nmol/L) and undetectable vitamin A levels. Further, significant protein malnutrition raised suspicion of a secondary metabolic disorder.

Literature Review Hyperammonaemia following RYGB is rare but associated with high mortality and often delayed diagnosis due to non-specific presentation. Proposed mechanisms include malabsorption, protein deficiency, small intestinal bacterial overgrowth and impaired nitrogen metabolism. Early therapy includes lactulose and trimethoprim/sulfamethoxazole, nutritional supplementation, dietary protein restriction and ammonia scavengers such as sodium benzoate and sodium arginine for severe cases.

Pharmacist Intervention, Case Progress and Outcome The ICU team and a metabolic disorder specialist confirmed multifactorial hyperammonaemia secondary to severe protein malnutrition (Kwashiokor). The patient received lactulose to acidify the colon and trap ammonia into ammonium, with sulfamethoxazole/trimethoprim to reduce ammonia producing gut bacteria. Intravenous sodium arginine and sodium benzoate was commenced. Pharmacists coordinated urgent access to specialised therapies that were not routinely stocked, including intravenous sodium arginine and sodium benzoate and provided administration guidance to facilitate timely treatment. Dietitians coordinated protein reintroduction and micronutrient supplementation. Ammonia concentrations decreased from 126 to 79 umol/L with neurological improvement, enabling transfer to a state metabolic service.

Discussion Early recognition and rapid access to specialised therapies are crucial in post bariatric hyperammonaemia. Pharmacists play a pivotal role in sourcing, coordinating and optimising time critical treatments, contributing to improved patient outcomes in this rare and potentially fatal condition.

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Rewriting the Script: Innovative Onboarding Program to standardise training and improve staff engagement and retention

Priscilla Han[1], Amy Watson[1]

[1]*Ramsay Pharmacy Group, Melbourne, Vic*

EMAIL hanp@ramsayhealth.com.au

Background Early investment in staff training is critical for retention and engagement. Internal data identified 25% of new employees left within 12 months; above the national average for large organisations (21%). Anecdotal feedback indicated inconsistent onboarding across sites, with the responsibility placed on local teams. This highlighted a need for a corporately supported onboarding program, to improve career development, job satisfaction and retention.

Objective To provide a structured, consistent onboarding experience with clear expectations for employees, pharmacists-in-charge and support office team throughout the first 12 weeks of employment. The program also connects new employees to broader learning and development, including linkage to a clinical pharmacist educator.

Action Launched in January 2026, the program has onboarded 163 new employees to date.

Key components include:

- A welcome pack outlining key organisational information
- Virtual orientation and Workplace Health and Safety
- Leadership videos
- Role-specific 12-week onboarding checklist
- Scheduled check-ins
- Survey mid-way to indicate progress and opportunity for feedback
- Centralised training resources aligned to distinct competencies
- Manager engagement and support via MS Planner® to streamline onboarding tasks

Evaluation Preliminary survey results (n=20) show encouraging outcomes.

- 89% reported clear communication
- 84% received all necessary information prior to commencement
- 90% found the program useful
- 84% felt adequately trained to perform their duties

Training in operations, systems and software, policies and procedures was rated strongly, with improvement needed for training on navigation of online ticketing system. Manager feedback is being collected for ongoing program refinement.

Discussion Preliminary results indicate the program is achieving its key objectives. Qualitative feedback from the surveys is key to maintaining the program's relevance in dynamic operational landscapes. A structured onboarding program is expected to enhance professional development, retention and workforce agility, with long-term program success to be measured through retention data.

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Limitless Pharmacy: Leading Clinical Pharmacy Service Redesign Through Hospital Redevelopment and Health Network Formation

James Wei[1], Lynette Ear[1], Nicholas Jones[1]

[1]*Peninsula Care Group, Bayside Health, Melbourne, Vic*

EMAIL jwei@phcn.vic.gov.au

Background The commissioning of a tertiary hospital redevelopment occurred alongside the early stages of a large-scale health network change. While strategic alignment was underway, pharmacy services were required to adapt to new physical infrastructure, workflows and models of care. Continued change has extended beyond move day, requiring sustained adaptation post-occupancy.

Objective(s) To design, implement, and sustain a unit-based clinical pharmacy service that supports medication safety, patient flow, and workforce engagement during a major hospital redevelopment, within the context of emerging system-level change.

Action (Method) Actions were aligned with the Kotter's model, supported by adaptive and complexity-informed change principles. Leaders acknowledged that not all decisions could be made with known outcomes and instead provided clear intent, priorities, and decision-making frameworks. Pharmacy services transitioned from location-based to unit-based models through early multidisciplinary engagement, co-design workshops, focus groups, and continuous feedback cycles. Workflows were deliberately tailored to new infrastructure, digital capabilities, and anticipated logistical considerations, including ward configuration, patient flow pathways, staffing visibility, and medication access. Clear governance, escalation pathways, and visible leadership were prioritised on move day. Post-move, workflows were intentionally iterative, with ongoing refinement informed by clinical and operational feedback.

Evaluation Evaluation focused on clinical unit feedback, accountability within care teams, and clinical impact. Unit-based pharmacy services improved accessibility, continuity, and ownership of medication stewardship. Embedded pharmacists were better positioned to prioritise pharmacist-led medication management, discharge prescription planning, and service innovation. These initiatives supported improved patient flow and access, enhanced integration with medical units, and mitigated medication-related harm through earlier intervention.

Discussion This experience demonstrates that limitless pharmacy practice requires comfort with uncertainty, sustained change beyond transition point, and alignment of services to infrastructure and clinical need. Embedding accountability at unit level, maintaining continuous feedback, and accepting ongoing redesign as standard practice enables pharmacy to lead safely through large-scale healthcare transformation.

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Pharmacists Advancing Handover: improving accuracy of medicines information at discharge

Tim Wendt[1]

[1]*Slade Pharmacy Warragul, Warragul, Vic*

EMAIL tim.wendt@sladepharmacy.com.au

Background At one regional public hospital, Electronic Medical Records (EMRs) were found to unintentionally reduce the accuracy of medicines information at discharge. A baseline audit showed that only 35% of EMR populated medical discharge summaries were accurate, even though patients received correct details through Pharmacy-supplied Patient Friendly Medicines Lists (PFMLs). This mismatch caused confusion for both patients and general practitioners (GPs). Root cause analysis revealed that many medical officers were unaware the EMR was auto-populating discharge summaries with outdated information from admission notes. Safer Care Victoria's Safer Medicines at Transitions of Care initiative provided a framework for improvement.

Objectives To align medical discharge summaries with PFMLs, standardise information presentation, enhance staff job satisfaction, and ensure sustainability of the intervention.

Action An interprofessional transitions of care working party was established. Feedback was sought on current performance from a range of disciplines including GPs. An agreed intervention introduced an advanced pharmacist role to author the 'medicines on discharge' section in the EMR. Pharmacists followed nationally recommended formatting standards for discharge summaries.

Evaluation Accuracy improved from 35% to 85% over three months. Improvement aligning with expansion of the intervention from one medical team to all teams.

The pharmacist-led review averaged seven minutes per patient making it a sustainable intervention within current resourcing.

Survey responses from both medical and pharmacy staff showed strong support for the expanded pharmacist role. Respondents reported improved job satisfaction and highlighted increased trust and collaboration between disciplines as key benefits of the intervention.

Discussion Future work will focus on utilising My Health Record to improve accessibility and timeliness of this information for primary care providers. Advocating for this expanded role advances patient handover and reduces the risk of patient readmission to hospital.

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Outnumbering the Amoeba: A Multidrug Approach to Granulomatous Amoebic Encephalitis

Emma Whitney[1], Dr Ian Marr[1]

[1]*Canberra Health Services, Canberra, ACT*

EMAIL emma.whitney@act.gov.au

Objective To report on the use of a multidrug therapeutic approach in the management of granulomatous amoebic encephalitis (GAE).

Clinical Features A 63-year-old female presented to the emergency department following a fall and was subsequently discharged. She re-presented after an outpatient MRI brain revealed a frontal lobe lesion. Her past medical history included erosive arthritis, Hashimoto's thyroiditis, and allergic rhinitis. Progressive neurological symptoms of unclear aetiology prompted further investigation, with the detection of Acanthamoeba DNA in cerebrospinal fluid confirming the diagnosis of GAE.

Literature Review GAE caused by Acanthamoeba is a rare but often fatal condition, with a mortality rate exceeding 90%. Treatment regimens are not well established due to limited clinical trial data, with current recommendations based on in-vitro studies and case reports. In consultation with the United States Centers for Disease Control and Prevention, a five-drug antimicrobial regimen was recommended.

Pharmacist Interventions, Case Progress and Outcomes The patient was commenced on flucytosine, miltefosine, nitroxoline, sulfadiazine, and voriconazole. Pharmacists played a key role in the procurement of these antimicrobial agents, therapeutic drug monitoring (TDM) with subsequent dose adjustments, and optimisation of complex medication scheduling.

Medication-related adverse effects necessitated regimen modification. Miltefosine was discontinued due to nausea and vomiting. Additionally, the patient developed an N4-acetylsulfadiazine renal calculus, requiring surgical management and the initiation of a urinary alkalinising agent.

She remains clinically stable at home on the modified antimicrobial regimen, and has completed 11 months of therapy, with a treatment target of 24 months. Ongoing fortnightly follow-up, including TDM, is coordinated by pharmacists in collaboration with the Infectious Diseases team.

Discussion This case highlights the critical role of pharmacists within multidisciplinary teams, particularly when complex treatment regimens involving unregistered medications are recommended. The patient's current therapeutic response supports the potential effectiveness of a multidrug therapeutic approach in the management of GAE.

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When Opioids Don't Work: Case Report of Naltrexone Implant and Multimodal Analgesia in Perioperative Setting

Joanne Wickens[1], Ian Huby[1], Benjamin Fellner[1]

[1]*Pharmacy Department, Sunshine Coast University Hospital, Sunshine Coast, Qld*

EMAIL joanne.wickens@health.qld.gov.au

Objective To describe the perioperative management of pain in a high-risk patient with a naltrexone implant requiring emergency surgery and highlight the clinical pharmacist's role in supporting safe analgesia in an area with limited evidence.

Clinical Features A 61-year-old male presented to the Emergency Department with a distal femur fracture following a horse-riding accident, requiring urgent open reduction and internal fixation. His history was significant for previous opioid dependence managed with a naltrexone implant in situ in the abdomen. Naltrexone implants are not approved by the Therapeutic Goods Administration in Australia but can be prescribed under the Special Access Scheme. Active mu-opioid receptor blockade created significant challenges for perioperative analgesia, sedation and anaesthetic management. Attempts to overcome receptor blockade require substantially higher opioid doses, potentially causing delayed respiratory depression as antagonism diminishes.

Literature review Evidence regarding perioperative management of patients with implanted naltrexone is limited, particularly in emergency surgical settings. Available literature consists primarily of expert guidance and isolated case reports, with no established perioperative management guidelines.

Pharmacist Interventions, Case Progress and Outcomes The clinical pharmacist obtained a medication history, identified the naltrexone implant details, reviewed available evidence and facilitated collaboration with specialist anaesthetic teams. A multimodal opioid-sparing regimen was implemented, including ketamine, regional anaesthesia, gabapentinoids, alpha-2 agonists and simple analgesia. Effective analgesia was achieved without requiring opioid therapy, avoiding escalation to high-dose opioid administration and the associated risks of respiratory failure, mechanical ventilation and postoperative intensive-care-unit admission.

Discussion The successful use of a multimodal opioid-sparing strategy in a patient with active naltrexone blockade provides a transferable approach for perioperative pain management in the absence of established clinical guidance. This case contributes new practice knowledge and may inform future clinical guidelines, highlighting the clinical pharmacist's role in preventing opioid-related harm and supporting safe, effective analgesia across the perioperative setting.

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Improving Anticoagulant Safety in Clinical Practice with Digital Innovation and State-wide Collaboration

Amelia Williams[1], Kim Chau[1], Francisco Gubatina[1], Olimpia Nigro[1], Ellen Pedler[1], James Sallis[1], Win Greenshields[2]

[1]*Clinical Information Systems, Digital Health SA, Adelaide, SA,* [2]*Office of the Chief Medical Information Officer, Digital Health SA, Adelaide, SA*

EMAIL amelia.williams@sa.gov.au

Background Following an observed increase in hospital inpatient anticoagulant incident reports, targeted electronic prescribing improvements in the Electronic Medical Record (EMR) system were prioritised.

Objective(s) Reduce the risk of over-anticoagulation from unintended duplicate anticoagulant order(s).

Action (Method) Electronic Medication Management (eMM) pharmacists facilitated stakeholder consultation to identify the underlying causes of anticoagulant incidents and possible EMR improvements. Clinicians across sites and from medication governance groups collaborated to select the solutions that were subsequently developed by eMM pharmacists in consultation with Clinical Subject Matter Experts:

1. New alert when warfarin is ordered and a dose has already been administered today (Warfarin double-dose alert)
2. Clinically meaningful options for prescribers to select when bypassing a duplicate anticoagulant alert.

Evaluation In the 3-month period post-implementation, the Warfarin double-dose alert presented 95 times. In 67 cases (71%), the alert resulted in prescribers modifying or cancelling the warfarin order. In the other 28 cases where the prescriber proceeded with the warfarin order, a meaningful rationale was documented within the alert 26 times (93%). Additionally, with the inclusion of clinically meaningful options when bypassing duplicate anticoagulant alerts, appropriate documentation within the alert increased from 69/6728 cases (1%) to 2965/6177 cases (48%) pre-and post-implementation, respectively.

Discussion The Warfarin double-dose alert was successful in reducing the risk of unintentional warfarin administration within the same day. Reliance on nursing/midwifery staff to detect prescribing errors was reduced and prescribing workflows improved. This double-dose alert concept could be further applied to other high-risk medications, such as gentamicin.

The data also highlighted that clinically meaningful options when bypassing duplicate anticoagulant alerts supports improved documentation of decision-making, and has since been applied to other duplicate medication alerts in the EMR. The improved visibility of prescriber decisions within the alert is useful for clinicians reviewing medication orders in real time and for retrospective audits.

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Electrolyte Stewardship in ICU: Unlocking oral potassium replacement

Michael Williams[1], Cassandra Vale[1]

[1]*The Prince Charles Hospital, Chermside, Qld*

EMAIL mikey.d.williams@gmail.com

Background Electrolyte management, particularly potassium replacement, is critical in post–cardiothoracic surgery care. In the Intensive Care Unit, potassium is routinely prescribed intravenously (IV) using a nomogram however intravenous replacement is considerably more expensive than oral options and poses a higher risk of adverse events. Optimising potassium administration practices presents both clinical and economic opportunities.

Objective(s) To evaluate potassium replacement practices in adult ICU patients following cardiothoracic surgery at a tertiary referral hospital.

Method (Method) A retrospective audit was conducted of patients who had undergone cardiothoracic surgery in September 2025. Potassium replacement from ICU admission to midnight on day 2 post-operatively was reviewed. Data collected included potassium route and doses, product prescribed, timing of administration, and indicators of suitability for oral therapy such as prior oral medication use and antiemetic administration.

Evaluation Seventy-eight patients were audited with 60% receiving potassium (200 total potassium doses). Replacement was predominantly IV, primarily via 40 mmol/100 mL bags. Oral potassium was infrequently used despite 50% of IV doses occurring after patients had already received oral medications. Only 47% of patients had PRN oral potassium prescriptions available for use. Antiemetics were administered to 51% of patients receiving potassium, indicating nausea and vomiting as a frequent but not universal barrier. Median total potassium dose administered to patients in ICU during the audit timeframe was 40 mmol. Individual doses administered were most commonly 10 and 20 mmol (46% and 41.5% respectively).

Discussion Findings highlight a strong reliance on IV potassium despite potential suitability for oral administration in many cases. Increasing oral prescribing could improve cost-effectiveness without compromising care. Addressing perceived barriers and reinforcing appropriate prescribing practices may enhance resource utilisation and inform future ICU electrolyte management strategies.

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Post-operative Anticoagulation Reinitiation in Orthopaedic Patients: A Retrospective Review

Chenxi Li[1], Geoff Wills[1]

[1]*Sutherland Hospital, Sydney, NSW*

EMAIL chenxi.li@health.nsw.gov.au

Background Therapeutic anticoagulation is routinely withheld in patients undergoing orthopaedic surgery to minimise peri-operative bleeding risk. However, delayed recommencement may increase the risk of stroke, venous thromboembolism, prosthetic valve thrombosis, prolonged hospitalisation and morbidity. Surgical guidelines suggest recommencing therapeutic anticoagulation around 48 to 72 hours following high bleeding risk surgery if haemostasis is achieved.

Aim/Objective(s) To determine the proportion of patients receiving therapeutic anticoagulation who experience delayed post-operative recommencement following orthopaedic surgery.

Methods A retrospective review was conducted on patients undergoing orthopaedic surgery requiring interruption to therapeutic anticoagulation for atrial fibrillation, venous thromboembolism or mechanical heart valves. Medication charts and clinical documentation were reviewed to determine time from procedure note to the first recommenced dose of therapeutic anticoagulation. Documentation was assessed for justified delays including ongoing bleeding concerns.

Results Forty-three patients were included. The median age was 78 years, and the average hospital stay was 8 days. Emergency procedures comprised 58% of cases. Major orthopaedic procedures accounted for 84%, while skin and soft tissue surgery accounted for 16%. Anticoagulant use included apixaban (67%), rivaroxaban (26%), warfarin (5%), and dabigatran (2%). Venous thromboembolism prophylaxis, administered between surgery and recommencement of therapeutic anticoagulation, was provided to 88% of patients. Therapeutic anticoagulation was recommenced within 72 hours in 66% of patients, between 72 and 96 hours in 12%, and beyond 96 hours in 22%. For those restarted after 96 hours, the median time to recommencement post-operatively was 5.35 days (range 4 –21). Two patients with recommencement beyond 72 hours had a documented justification for delay.

Discussion One-third of patients experienced delayed recommencement of therapeutic anticoagulation, one in five beyond 96 hours post-operatively. These findings highlight an opportunity for pharmacists-led interventions. Implementation of a standardised post-operative anticoagulation checklist or clinical decision tool may improve adherence to guidelines to reduce preventable thromboembolic complications.

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Pushing methadone's traditional limits: Methadone in critical care prescribing practices

Aeryn Wilson[1], Jonathon Beck[2], Dr Nazanin Ghahreman-Falconer[1]

[1]University Of Queensland, Dutton Park, Qld, [2]Logan Hospital, Meadowbrook, Qld

EMAIL aeryn.wilson@student.uq.edu.au

Background Methadone; a high-risk medication, is an emerging option in critical care for analgesia and sedation weaning. Its benefits include reduced opioid requirements, faster discontinuation of sedation, and earlier liberation from mechanical ventilation. However, highly variable pharmacological properties lead to significant dosing complexities which are exacerbated in the intensive care unit (ICU) as patient variability is pronounced. Weaning methadone is the preferred evidence-based approach for discontinuation.

Objective To describe methadone prescribing practices in ICU patients at a Queensland metropolitan hospital.

Action (Method) We conducted a retrospective audit of patients at a Queensland metropolitan hospital who received methadone in the ICU between December 2012 to March 2026. Patients who were indicated methadone for opioid-use disorder were excluded. Data was extracted from the hospitals digital health systems and was descriptively analysed.

Evaluation Of 89 patients screened, 40 patients met inclusion criteria. Methadone was indicated for opioid weaning for mechanical ventilation liberation for 95% (n=38) of patients, and for pain for 5% (n=2) of patients. Both initial doses and final doses before ceasing ranged from 2.5 mg to 60 mg and were administered between once daily to four times daily. No methadone titration plans were provided for 85% (n=34) of patients. Of the 35 patients that were discharged from the ICU, methadone titration was continued in three patients in step-down wards, and in two patients after hospital discharge.

Discussion Our findings exhibit variability of methadone prescribing practices in critical care regarding dosing strengths and intervals. Additionally, it was found that a significant proportion of patients were not provided titration plans which may increase the risk of opioid withdrawal effects and poor patient outcomes. The creation of a methadone prescribing guideline for patients in the ICU is planned. This will support safe and patient-centred dosing and weaning procedures of methadone within a critical care setting.

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Training Hub: Addressing an Operational Training Gap Across Pharmacy Services

Maryanne Wilson[1]

[1]Slade Pharmacy, Gold Coast, Qld

EMAIL maryanne.wilson@sladepharmacy.com.au

Background Structured training supports safe, efficient and consistent pharmacy services. Operational training across a national organisation providing pharmacy services to partner facilities is complex, variable and nuanced across sites. Existing training was often informal and site-dependent. The development of structured, standardised operational training was identified as essential to support the consistent delivery of core practices, strengthen workforce capability, and reduce variability in practice. However, delivering training across a national network with differing operational requirements and multiple time zones presents significant challenges.

Objective To develop and implement a Training Hub that provides virtual structured, relevant and scalable operational training aligned to frontline workflow and service delivery needs.

Action A multi-site pharmacy practice project identified unmet operational training needs through engagement with frontline teams, managers and support staff. Feedback shaped a centralised Training Hub focused on operational capability. Resources were organised to support onboarding, role development and operational consistency. A training calendar was established to provide regular 30-minute micro-learnings for staff. Sessions cycle through to meet the ongoing needs of onboarding across the network.

Evaluation The Training Hub introduced a clear training pathway, addressing a previous gap in structured operational training, it also enhanced visibility of operational capability gaps. Frontline engagement directly shaped the content, with the library expanding from 9 to 25 sessions. Topics included systems training, inventory management, data visualisation platform reporting, dispensary hygiene, workflow and general operations. This improved alignment between training and everyday practice, increased access to education in core operational areas, and created a scalable approach to meet emerging training needs across services.

Discussion A centralised Training Hub is a practical strategy to address operational capability gaps. By responding to frontline feedback, it delivered a broader and more relevant training offering that supports consistent practice, strengthens operational capability and enables scalable workforce development across pharmacy services.

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Daratumumab for treatment resistant antibody mediated rejection following kidney transplantation: an emerging therapeutic approach

Harmony Wilton[1], Angela Netluch[1]

[1]*John Hunter Hospital Pharmacy Department, New Lambton Heights, NSW*

EMAIL Harmony.Wilton@health.nsw.gov.au

Objective briefly describe the rationale for the case report.

To examine the role and utility of Daratumumab for treatment resistant antibody mediated rejection (ABMR) in a renal transplant recipient. Daratumumab offers an attractive option in patients who are resistant to traditional therapies by targeting the CD38 glycoprotein, depleting antibody producing natural killer and plasma cells.

Clinical features relevant demographic information, medical history, presenting problems and diagnoses.

The patient had end-stage renal disease due to reflux nephropathy, with a complex medical history including antibody-mediated rejection and graft nephrectomy following a previous living-donor kidney transplant.

The patient is a current recipient from a deceased donor. Antithymocyte globulin (ATG) induction and standard maintenance immunosuppression was prescribed. Delayed graft function and ABMR was diagnosed post-transplant and the patient remained dialysis dependant. Unsuccessful ABMR treatments included ATG, rituximab, plasmapheresis and IVIG. Daratumumab was considered as salvage therapy to avoid a splenectomy.

Literature review briefly examine current literature relating to or surrounding the case report.

There is a paucity of robust evidence to support the use of daratumumab for this indication. Case reports exist in the literature; however no higher-level studies were identified during literature review.

Pharmacist Interventions, Case Progress and Outcomes these may be presented together or separately and should detail the pharmacist's role in the case.

Pharmacy was involved in review of evidence, dosing guidance, inventory management and medication education.

Antibody mediated rejection resolved after two doses of Daratumumab 1800 mg subcutaneously weekly. Splenectomy was no longer indicated. The patient clinically improved and has remained dialysis free.

Discussion outlining lessons learnt and/or implications/importance of the case report on pharmacy practice.

This case report highlights the vital role of pharmacists in promoting the quality use of medicines in complex patients and highlights the importance of understanding emerging therapies for the treatment of antibody-mediated rejection.

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Pharmacy Olympics: A Pharmacist-Led Gamified Initiative Promoting Medication Safety and Workforce Wellbeing

Carolyn Woods[1], Sabrina Jiayi Wu[1], Julianne Chong[2], Rosemary Burke[1]

[1]*Sydney Local Health District, Sydney, NSW,* [2]*Concord Repatriation General Hospital, Concord, NSW*

EMAIL carolyn.woods@health.nsw.gov.au

Background Pharmacists play a pivotal role in medication safety and optimisation of patient care through diverse clinical and technical expertise extending beyond traditional dispensing roles. However, opportunities that simultaneously showcase pharmacy practice, reinforce medication safety skills, and promote workforce wellbeing remain limited. 'Pharmacy Olympics', an innovative, gamified initiative, using competition-based activities to highlight medication safety principles and showcase the diverse roles of pharmacists, was introduced as part of a week-long, district-wide Medication Safety Week program.

Objective To develop a pharmacist-led, gamified initiative showcasing pharmacy expertise while promoting medication safety, workforce wellbeing and multidisciplinary collaboration.

Method Five pharmacy-specific challenges were developed by medication safety pharmacists to showcase pharmacy expertise and reinforce medication safety skills, including tablet counting, opioid dose calculations, blister packing, dispensing label accuracy, and extemporaneous compounding. Competition rules, assessment criteria and scoring systems were predefined and reviewed by senior pharmacists. Teams comprised of pharmacists and pharmacy technicians, with participation extended to other healthcare professionals. Performance was assessed and scored by independent judges to ensure consistency and fairness.

Evaluation Six teams comprising of thirty participants across five facilities took part, including pharmacists (n=22), pharmacy technicians (n=3), nurses (n=2), medical staff (n=2) and occupational therapy (n=1). Non-pharmacy disciplines represented 17% of participants. The winning team completed activities with 100% accuracy in the shortest time (22 minutes) and received a $50 food hamper. Post-event survey feedback identified this as the most positively received Medication Safety Week initiative.

Discussion This pharmacist-led 'Pharmacy Olympics' initiative successfully showcased pharmacy expertise while promoting medication safety, workforce wellbeing and multidisciplinary collaboration. Challenges involving opioid dose calculations, dispensing label accuracy and extemporaneous compounding reinforced key safety principles and practical skills relevant to safe medication practice. Strong engagement supports sustainability and expansion as an annual initiative, providing a novel, scalable platform for workforce wellbeing, professional recognition and interdisciplinary engagement.

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Making Medication Harm Visible: Using HACs to Drive Safer Care

Carolyn Woods[1], Seniha Kasif[2], Shivani Patel[2], Rosemary Burke[1]

[1]*Sydney Local Health District, Sydney, NSW,* [2]*Mental Health Services, Sydney Local Health District, Sydney, NSW*

EMAIL carolyn.woods@health.nsw.gov.au

Background Unrecognised medication-related harm represents risk within healthcare systems. Hospital Acquired Complications (HACs) provide an opportunity to identify and evaluate this harm, however, without structured review, preventable events remain invisible. Local discussion within a metropolitan Local Health District (LHD) identified that existing HAC monitoring processes could be further optimised by standardising the review process to inform system-level, pharmacist-driven medication safety interventions.

Objectives To apply and extend a pharmacist-led adverse drug reaction review methodology to medication complication HACs (respiratory depression and psychotropic-related movement and consciousness disturbances) across five LHD facilities, and to incorporate medication-, formulation- and route-level analysis to identify preventable harm and support targeted improvements.

Method A pharmacist-led, district-wide review of medication complication HACs occurring between October 2024 and December 2025 was undertaken, forming the basis of an ongoing HAC monitoring process. HAC data were extracted from the NSW HAC reporting system and analysed via Microsoft PowerBI®. HAC reviews used validated tools to determine preventability (modified Schumock and Thornton Scale), severity (Hartwig's Severity Scale) and causality (Naranjo Algorithm). Additionally, implicated medications were analysed by drug, formulation and route to identify trends across facilities.

Evaluation Of the 63 HACs reviewed, 17% were considered preventable, 10% were considered severe and 6% were considered definitely caused by the implicated medication. Preventable HACs were mostly due to inappropriate prescribing, including dosing, unsuitable formulation or route, and failure to account for allergy history or prior reactions. Psychotropic medicines predominated with oral and intramuscular formulations most common.

Discussion This project demonstrates the feasibility and value of pharmacist-led scaling of a HAC review methodology to a district-wide setting while identifying medication- and system-level contributors to preventable harm. Findings inform targeted medication safety interventions while establishing a standardised, ongoing HAC review process within the LHD, demonstrating the value of translating identified risk into sustained, actionable practice improvement.

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Breaking Health Literacy Barriers: Empowering Consumers for Safer Medicines Use

John Woodward[1], Lisa Pulver[1]

[1]*MedicinesEd, Peregian Springs, Qld*

EMAIL john@medicinesed.com.au

Background Around 60% of Australian adults have limited health literacy, affecting their ability to understand and act on health information. This gap impacts patient safety and quality of care, as individuals struggle to navigate the healthcare system, follow medical instructions, and manage treatments. Additionally, 60% of Australians aged 15–74 lack the basic skills needed to understand pharmacy labels.

Objective To demonstrate how targeted education on health literacy, focused on interpreting pharmacy labels, can improve individuals' ability to accurately read, understand, and safely use their medicines.

Action Between 2022 and 2025, 22 workshops were delivered face-to-face and online to consumers across regional NSW and Queensland. Sessions provided practical, evidence-based education co-designed with consumers and experts, and delivered using adult learning principles so that the content was accessible, engaging, and applicable to everyday life. A key focus was understanding pharmacy labels. Participants answered five questions about a sample label before and after the workshop to assess changes in knowledge and understanding.

Evaluation A total of 261 participants (pre) and 244 (post) completed the assessment. Those answering all questions correctly increased from 51% to 72% (+21 percentage points). Improvements were observed across all questions, including identification of active ingredient (82%–92%), medicine strength (88%–95%), number of tablets per day (85%–92%), timing of doses (76%–89%), and purpose of the medicine (82%–91%). The largest gain was seen in understanding when to take the medicine. This demonstrates an overall enhancement in participants' ability to accurately interpret pharmacy labels.

Discussion These findings demonstrate that targeted, practical health literacy education can significantly improve consumers' ability to interpret pharmacy labels, a critical component of safe medicine use. Scaling and embedding such interventions more broadly may help address widespread health literacy gaps and contribute to improved patient safety and healthcare outcomes.

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Intravenous heparin infusion prescribing in state public hospitals – a retrospective audit of practice

Patrick Wright[1], Justine Ayre[1], Dr Ianthe Boden[2], Jay Fitch[1], Alistair Gofton[1]

[1]*Pharmacy Department, Launceston General Hospital, Launceston, Tas,* [2]*Physiotherapy Department, Launceston General Hospital, Launceston, Tas*

EMAIL patrick.wright1998@gmail.com

Background Unfractionated heparin (UFH) is used to treat thromboembolic disorders. Activated partial thromboplastin time (APTT) or anti-Factor Xa (anti-Xa) are used for therapeutic monitoring. UFH can be dosed by weight or non-weight-based strategies. Practice variations may stem from a lack of strong evidence for one strategy over another. The proportion of UFH prescribing and monitoring strategies within the state's public hospitals are currently unknown.

Objective To analyse intravenous UFH prescribing and monitoring strategies across the state's public hospitals and measure time to reach therapeutic range.

Method A multicentre, retrospective 12-month medical record review of patients who received an UFH infusion. Data for analysis was collected from a randomised list of eligible episodes until a pre-determined sample of 276 infusions was reached. Dosing strategy, monitoring assay and time to therapeutic range were collected.

Evaluation 276 infusions were randomly selected from 390 patients receiving 430 UFH infusions. 156 (57%) infusions used non-weight-based and 120 (43%) weight-based dosing. Of non-weight-based infusions, 135 were monitored with anti-Xa, and 1 with APTT. 90 weight-based infusions were monitored with APTT, and 29 with anti-Xa. 20 non-weight-based infusions and 1 weight-based infusion did not state a monitoring assay. A higher proportion of patients receiving weight-based dosing with APTT monitoring achieved a therapeutic range within 24 hours compared to non-weight-based with anti-Xa (44/90 (49%) vs 53/135 (39%); RR 1.25 (95%CI 0.92 to 1.68)).

Discussion Patients receiving weight-based dosing and APTT monitoring may be 25% more likely to reach therapeutic range within 24 hours, although this estimate requires confirmation in a larger sample. Further audits are underway to investigate factors that may be associated with differences detected including assay turnaround time and adherence to 6-hourly monitoring. Further investigation will also help elucidate the clinical impact that time to reach therapeutic range may have on patients.

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'Blue to the sky, orange to the thigh': Evaluating Post Anaphylaxis Discharge Management

Thi Khanh Vy Nguyen[1], John Wsol[2]

[1]*North Canberra Hospital, Canberra Health Services, Bruce , ACT,* [2]*North Canberra Hospital, Canberra Health Services, Bruce, ACT*

EMAIL thikhanhvy.nguyen@act.gov.au

Background Anaphylaxis is a potentially life-threatening allergic reaction requiring prompt recognition and management. Appropriate discharge care following an anaphylaxis episode is equally critical, yet adherence to national standards remains inconsistent across Australian healthcare settings.

Aim/Objective(s) To evaluate post-anaphylaxis discharge management at a public hospital, benchmarked against a local guideline aligned with the Acute Anaphylaxis Clinical Care Standard.

Methods A retrospective review was conducted using electronic medical records (EMR) of patients of any age discharged with a diagnosis of anaphylaxis between 1 January and 31 December 2024. Data on demographics, anaphylaxis management, and discharge care were extracted and assessed against guideline recommendations.

Results A total of 187 patients were reviewed. Of these, 158 had an unavoidable trigger requiring provision of an outpatient adrenaline autoinjector (AAI) prescription as well as a hospital supplied AAI at discharge. 22.8% of patients were appropriately provided both. Documentation of AAI counselling occurred in 27.8% of patients, and provision of an Anaphylaxis Action Plan (AAP) was recorded in 19.4%. Allergies were updated in the EMR for 60.6% of patients, and adverse drug reaction (ADR) reports were submitted for 25% of medication-related cases. 31.4% of patients were discharged during business hours; among these, 39.5% received pharmacist-supported AAI provision and education.

Discussion This audit identified significant gaps in post-anaphylaxis discharge management, particularly in provision of AAIs, AAPs, patient education, allergy documentation, and ADR reporting. These findings are consistent with similar studies conducted within the Australian hospital setting. Greater integration of pharmacists into discharge workflows during business hours represents an important opportunity to improve provision of AAIs and AAPs, and to enhance overall adherence to guideline-recommended care. Targeted education and practical interventions, such as reducing barriers to hospital-supplied AAIs and embedding discharge checklists into the EMR are proposed measures to improve post-anaphylaxis discharge care.

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Real-world retrospective study of lipegfilgrastim patterns, febrile neutropenia, and (R)-CHOP-like treatment in NHL patients

Miss yun xie[1], Josephine Foo[1], Sam Maleki[1], Dr Tamara Marconi[2]

[1]Eastern Health Pharmacy Program, Melbourne, Vic, [2]Eastern Health Cancer Services, Melbourne, Vic

EMAIL sophieyxie@gmail.com

Background (R)-CHOP-like chemotherapy regimens (rituximab, cyclophosphamide, doxorubicin, vincristine, prednisolone) are standard treatment for many non-Hodgkin lymphoma (NHL) subtypes and carry an intermediate to high risk of febrile neutropenia (FN). FN may result in hospitalisation, treatment delay, or reduced dose intensity. Real-world use of long-acting granulocyte colony-stimulating factor (G-CSF) such as lipegfilgrastim for prophylaxis varies in practice, highlighting an important role for pharmacists in supportive care optimisation.

Aim To evaluate real-world patterns of lipegfilgrastim use and associated clinical outcomes in patients with NHL receiving (R)CHOP-like chemotherapy.

Methods A retrospective medical record review was conducted in adults treated (R)CHOP-like regimens between January and December 2024. Patients were categorised by lipegfilgrastim use strategy: primary prophylaxis, secondary prophylaxis, intermittent or non-standard use (including delayed or omitted prophylaxis). Outcomes included FN-related hospital admission and grade 3–4 neutropenia per chemotherapy cycle. Timing of lipegfilgrastim administration within each cycle was recorded to assess alignment with recommended practice.

Results Sixteen eligible patients received a total of 82 chemotherapy cycles, with an overall chemotherapy completion rate of 87.2%. Average age was 70.7 years old (SD:10.0 years), 57.3% were female and most had preserved renal function at treatment initiation. FN-related hospital admissions occurred in 4/82 cycles (4.9%), and grade 3–4 neutropenia occurred in 16/82 cycles (19.5%). Primary prophylaxis was used in 9 patients (56%), typically administered on days 4–6 of the cycle. All FN-related admissions occurred in cycles where primary prophylaxis was not used: one during CHOP-21 and three during R-CHOP-21. No FN-related hospital admissions were observed in patients receiving primary prophylaxis.

Discussion In this small real-world cohort, FN-related admissions occurred exclusively in the absence of primary lipegfilgrastim prophylaxis. These findings support review of supportive care pathways and highlight the pharmacist's role in promoting consistent G-CSF use to minimise treatment disruption and maintain chemotherapy dose intensity.

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Limitless care: a case report on gilteritinib in haemodialysis-dependant AML patient

Catherine Yan[1], Dr Sun Loo[1,2,4], Dr Matthew Murphy[1,2,3]

[1]Pharmacy Department, Northern Health, Epping, Vic, [2]Department of Haematology, Northern Health, Epping, Vic, [3]Department of Haematology, Eastern Health, Box Hill, 3128, [4]Department of Clinical Haematology, Alfred Health, Melbourne, 3004

Objective To describe gilteritinib treatment of relapsed FMS-like tyrosine kinase 3 (FLT3)-mutated acute myeloid leukaemia (AML) in a haemodialysis patient. Treatment for relapsed AML patients with end-stage kidney disease (ESKD) presents a significant clinical challenge, with no access to clinical trials and limited management guidelines. Gilteritinib, a FLT3 inhibitor indicated for the treatment of relapsed/refractory FLT3-mutated AML, is hepatically metabolised and primarily excreted in faeces. The manufacturer has not recommended renal dose adjustment.

Clinical feature A 70-year-old male was diagnosed with relapsed AML on bone marrow biopsy in August 2025. Patient had a past medical history of ESKD on haemodialysis, hypertension and type 2 diabetes mellitus. After progression on multiple lines of treatment and comorbidities excluding them from clinical trials, best supportive care was provided initially. Further testing confirmed FLT3 mutation and gilteritinib was commenced. Consent from the patient was obtained to report the case.

Literature review To the best of our knowledge, only one prior case report describes the administration of gilteritinib in a haemodialysis patient. This appears to be the first case to be reported in Australian literature.

Case progress and outcomes Gilteritinib was started at a reduced dose of 80 mg daily (standard 120 mg) given baseline QTc prolongation and the absence of haemodialysis data. As gilteritinib is highly protein-bound and not appreciably dialysable, no supplemental post-dialysis dosing was used. Treatment was initially well tolerated with a transient haematological response. Unfortunately, disease progressed after three months. Further increase of gilteritinib dose to 120 mg oral daily was ineffective and patient passed away after transition to palliative care.

Discussion This case highlights the challenge in managing relapsed AML in patients with kidney impairment. The pharmacokinetics of gilteritinib were carefully considered, balancing treatment goals. Our case describes the successful administration of gilteritinib in a haemodialysis patient.

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Impact of STOPP/START criteria on Medication Optimisation in Transitional Geriatric Home Care: A Pre-Post Study

Ka Fai Benny Yao[1]

[1]*Eastern Health, Melbourne, Vic*

Background Hospital-to-home transitions expose older adults to potentially inappropriate medications (PIMs) and prescribing omissions (PPOs), contributing to medication-related harm and hospital readmissions. A 2023 study by Hui et al demonstrated pharmacist-led deprescribing using STOPP criteria (v2); however, the utility of the START framework in transitional care remains under-examined.

Objectives This study evaluated the impact and feasibility of STOPP/START criteria for identifying PIMs and PPOs in older adults receiving transitional care.

Methods This pre- and post-intervention study was conducted within a home-based transitional care program in a tertiary hospital network in Melbourne, Victoria over eight weeks (four weeks each). Pharmacists' usual practice (pre phase without tool use) was compared against a post phase where STOPP/START (v3) was utilised alongside routine practice. Primary outcomes were the number of PIMs and PPOs. Secondary outcomes included barriers to implementation of STOPP/START recommendations. Descriptive statistics and Mann-Whitney U tests were used.

Results A total of 53 patients were included in this study (28 pre and 25 post) with a median age of 83 years (range: 68–98) and 60.3% male. Compared to pre-intervention, use of STOPP identified a median of 0.5 additional PIMs per patient, although this was not statistically significant ($p=0.68$). START identified a median of two actionable PPOs per patient ($p<0.05$) and one impractical recommendation ($p=0.09$). While STOPP/START improved PPO identification, several implementation barriers were noted, including time constraints, need for specialist referrals, and clinically necessary continuation of PIMs.

Discussion STOPP/START improved identification of PPOs in transitional geriatric home care but had limited impact on PIM identification. Implementation challenges, including time constraints, specialist referral requirements and clinically justified continuation of PIMs, may limit translation of recommendations into practice. Future studies should explore integration of STOPP/START into routine workflows and evaluate whether improved PPOs identification translates to better patient and health service outcomes.

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Development of a Pharmacist-Integrated Virtual Ward Service in Heart Failure

Jie Wen Yap[1], Dr Kamil Pufal[1], Dr Jessica Yao[1], Dr Noor Lammoza[1], Dr Seok Lim[1]

[1]*Royal Melbourne Hospital, Parkville, Vic*

EMAIL jiewenyap97@gmail.com

Background Virtual wards are an evolving model of care enabling early discharge and continuity of care for patients with heart failure (HF). Despite this, optimisation of guideline-directed medical therapy (GDMT) and management of iron deficiency remain suboptimal following discharge due to fragmented transitions of care and competing clinical priorities. Embedding pharmacists within multidisciplinary team (MDT) workflows may support structured medicines optimisation in routine care.

Objective(s) To develop and implement a pharmacist-integrated HF Virtual Ward service to support medicines optimisation through active participation in MDT ward rounds.

Action (Method) A pharmacist-integrated model was established within a HF Virtual Ward over a 12-week pilot. Pharmacists participated in regular MDT virtual ward rounds via telehealth alongside medical and nursing teams. Pharmacists delivered real-time medication review, identified GDMT optimisation opportunities (initiation, titration, switching), and contributed to shared decision-making. Pharmacists also conducted medication reconciliation, longitudinal medication review, and follow-up of therapy changes. Iron studies were reviewed within MDT discussions, with pharmacists facilitating referral pathways for intravenous iron where indicated. Standardised workflows supported documentation, communication across inpatient and community interfaces, and escalation of medication-related issues.

Evaluation Service activity was evaluated by measuring the number of patients reviewed during MDT ward rounds, types of pharmacist-led interventions, and uptake of GDMT optimisation and iron deficiency management pathways. Data collection informed ongoing service refinement and helped direct evaluation of clinical and health service outcomes, including avoidance of inpatient bed days, reduced hospital utilisation and readmission rates, delivery of acute-level care in the home, patient satisfaction and experience, and cost-effectiveness.

Discussion Embedding pharmacists within MDT ward rounds in a Virtual Ward setting enabled proactive medicines optimisation and integration of evidence-based therapy into routine care. This service highlights the value of pharmacist integration within virtual care models, addressing key post-discharge gaps and strengthening continuity across care transitions.

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Falls and FRIDs: A Review of Pharmacist Consults and Medication Trends in Inpatient Falls

Jie Wen Yap[1], Melanie Hoang[1], Louise Lord[1]

[1]*Royal Melbourne Hospital, Parkville, Vic*

EMAIL jiewenyap97@gmail.com

Background Falls are a major cause of hospital-acquired complications in older adults, leading to increased morbidity, mortality, and healthcare costs. Medications, particularly fall-risk-increasing drugs (FRIDs), are a modifiable risk factor. Pharmacy consults refer to structured fall risk assessments by clinical pharmacists for patients at high risk of falling or following an inpatient fall. This study explores medication-related fall risks and the role of pharmacist consults.

Aim/Objectives To review FRIDs and pharmacist consult referrals in inpatients.

Methods A retrospective study was conducted at a metropolitan hospital (Dec 2022–Feb 2023). Patients with ≥2 documented inpatient falls were electronically identified. Data on medications, pharmacy consults, and pharmacist interventions were extracted from electronic medical records and analysed.

Results A total of 56 patients who experienced two or more inpatient falls were included, accounting for 128 falls. The most commonly associated FRID classes were antiepileptics 50% (64/128), opioids 43% (55/128), beta-blockers 33% (42/128), loop diuretics 23% (30/128), and antipsychotics 23% (30/128). An initiation of at least one new FRID during admission was identified in 53% (68/128) of falls. Overall, 19 pharmacy consults were received: 58% (11/19) of consult requests were placed prior to a fall, with the remaining 42% (8/19) placed post-fall. Of these 19 consults, three were actioned – defined as completion of the pharmacist assessment and documented intervention.

Discussion This study highlights the high prevalence and frequent initiation of FRIDs around the time of inpatient falls, alongside the low utilisation and implementation of pharmacist consults. The low rate of proactive pharmacy referrals and limited follow-up post-fall suggest underutilisation of pharmacists in both fall prevention and response. Furthermore, the low rate of consults actioned points to system-level barriers in integrating pharmacist recommendations into patient care. These findings underscore the need to integrate medication reviews into routine clinical workflows and improve EMR-based referral processes.

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Proportion of unplanned readmissions that are medication-related in rural and remote hospitals: retrospective cohort study

Kingston Yeung[1], Gi Kon Nam[1], Klaudia Englezos[1], Aagam Bordia[1], Stephen Carter[1], Prof Rebekah Moles[1], Manya Angley[2], Brett Chambers[3], Jenny Chen[1], Deirdre Criddle[4], Rohan A Elliott[5,6], Tara Emadi[1], Cristen Fleming[3], Deborah Hawthorne[7], Linda Krogh[3], Anna Packer[3], Simon Poon[8], Paul Yates[9,10], Jerry Yik[11], A/Prof Jonathan Penm[1,12]

[1]*Faculty of Medicine and Health, University Of Sydney, Sydney, NSW,* [2]*University of Western Australia, Crawley, WA,* [3]*Western NSW Local Health District, NSW,* [4]*Sir Charles Gairdner, Nedlands, WA,* [5]*Pharmacy Department, Austin Health, Heidelberg, Vic,* [6]*Faculty of Pharmacy and Pharmaceutical Science, Monash University, Parkville, Vic,* [7]*Deborah Hawthorne Consultancy, Vic,* [8]*Faculty of Engineering, University of Sydney, Sydney, NSW,* [9]*Department of Geriatric Medicine, Austin Health, Heidelberg, Vic,* [10]*Department of Medicine, Austin Health, Heidelberg, Vic,* [11]*The Pharmacy Guild of Australia, Vic,* [12]*Prince of Wales Hospital, Randwick, NSW*

EMAIL kingston.yeung@sydney.edu.au

Background Rural and remote populations face barriers to healthcare access and fragmented continuity of care, placing them at heightened risk of medication-related harm, including readmissions. Despite this risk, the proportion of unplanned readmissions that are medication-related and the drivers of these readmissions in these settings remain poorly understood.

Aim/Objective To determine the proportion of unplanned 30-day readmissions to rural and remote hospitals in New South Wales, Australia, that were medication-related. Secondary objectives included categorising medication-related readmissions and identifying factors associated with them.

Methods The medical records of patients aged ≥18 years who were readmitted to rural and remote hospitals between June 1, 2022, and August 31, 2023, were assessed to determine whether the readmissions were medication-related using the AT-HARM10 tool. Medication-related readmissions were reviewed by an expert panel and classified using the Basger Aggregated Classification System. Univariable and multivariable logistic regression models were used to identify factors associated with medication-related readmissions.

Results Among the 133 patients readmitted within 30 days, 23% of readmissions were medication-related. Most were attributed to drug treatment goals not being achieved. Multivariable logistic regression identified three significant factors associated with the likelihood of a readmission being medication-related: older age (aOR 1.31) and a higher number of medications (aOR 1.15) were associated with increased odds, whereas the presence of heart, stroke, and vascular comorbidities (aOR 0.10) was associated with lower odds.

Discussion Nearly one in four 30-day readmissions to rural and remote hospitals were medication-related, highlighting a substantial and potentially preventable burden in these settings. These findings suggest that further effort should be given to older patients and those with higher medication burden to reduce medication-related complications in rural and remote settings. Pharmacists are well positioned to identify at-risk patients and optimise medication management at transitions of care. However, further research is needed to validate these predictors.

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Proportion of patients admitted to rural and remote hospitals that experience a 30-day medication-related readmission

Kingston Yeung[1], Gi Kon Nam[1], Klaudia Englezos[1], Aagam Bordia[1], Stephen Carter[1], Prof Rebekah Moles[1], Hana Amer[1], Manya Angley[2], Charley Budgeon[3,4], Brett Chambers[5], Jenny Chen[1], Deirdre Criddle[6], Rohan A Elliott[7,8], Tara Emadi[1], Cristen Fleming[5], Deborah Hawthorne[9], Linda Krogh[5], Anna Packer[5], Simon Poon[10], Frank Sanfilippo[3,4], Paul Yates[11,12], Jerry Yik[13], A/Prof Jonathan Penm[1,14]

[1]Faculty of Medicine and Health, University Of Sydney, Sydney, NSW, [2]Manya Angley Research and Consulting, Adelaide, SA, [3]School of Population and Global Health, University of Western Australia, Perth, WA, [4]Cardiovascular Epidemiology Research Centre, University of Western Australia, Perth, WA, [5]Western NSW Local Health District, NSW, [6]Sir Charles Gairdner, Nedlands, WA, [7]Pharmacy Department, Austin Health, Heidelberg, Vic, [8]Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Parkville, Vic, [9]Deborah Hawthorne Consultancy, Vic, [10]Faculty of Engineering, University of Sydney, Sydney, NSW, [11]Department of Geriatric Medicine, Austin Health, Heidelberg, Vic, [12]Department of Medicine, Austin Health, Heidelberg, Vic, [13]The Pharmacy Guild of Australia, Vic, [14]Prince of Wales Hospital, Randwick, NSW

EMAIL kingston.yeung@sydney.edu.au

Background Medication errors are a significant and preventable cause of patient harm. Patients living in rural and remote areas face inequitable access to healthcare and fragmented continuity of care, increasing their vulnerability to medication-related harm. Despite this, the burden and drivers of medication-related harm in these settings remain poorly understood. Quantifying the current burden and identifying factors associated with medication-related readmissions is essential to inform targeted strategies that improve medication safety.

Aim/Objective To determine the proportion of adult patients who experienced a medication-related readmission within 30 days of discharge from rural and remote hospitals, and to identify factors associated with these readmissions.

Methods Medical records of patients admitted to rural and remote hospitals between June 1, 2022 and August 31, 2023, were reviewed. Readmissions within 30 days were assessed as medication-related using the AT-HARM10 tool. Univariable logistic regression was used to identify factors associated with 30-day medication-related readmissions.

Results Of the 2220 patients admitted during the study period, 6% (n=133) experienced a 30-day readmission, of which 22.5% (n=30) were medication-related. Overall, 1.4% of all admitted patients experienced a 30-day medication-related readmission. Older age, a higher Charlson Comorbidity Index (CCI) score, and greater numbers of regular medications and insulin use were associated with increased odds of experiencing a medication-related readmission.

Discussion In rural and remote hospitals, approximately 1.4% of admitted patients experienced a 30-day medication-related readmission. Older age, higher CCI score, greater number of medications, and insulin use were associated with increased risk. These results support the need for targeted medication safety strategies in rural and remote settings, with a focus on older patients, those with multimorbidity and those prescribed insulin. Pharmacists are well positioned to identify high-risk patients and prioritise those who require further support during their transitions of care. However, further studies are needed to confirm these associations.

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From Values to Vision: Shaping a Shared Purpose in Hospital Pharmacy

Caroline Zeitoun[1], Sylvia Behary

[1]The Sutherland Hospital, Caringbah, NSW

EMAIL cthalabi@yahoo.com.au

Background A shared vision can strengthen team cohesion and support person centred pharmacy practice. In complex clinical environments, facilitated vision development can align team values and shared purpose, supporting safe medication management.

Objective To collaboratively develop a pharmacy team vision statement through facilitated workshops, aligned with the NSW Health CORE Values to enhance staff engagement in clinical practice.

Action(Method) Three structured facilitated workshops were conducted within a hospital pharmacy department. Prior to commencement, staff completed value card exercises to identify the five most common that informed development of the vision statement.

The first workshop introduced the concept of a shared team vision and explored how the identified values shaped workplace culture, clinical practice and shared purpose. The second workshop used reflection and in-depth small group discussions to further examine the emerging themes, followed by whole group consolidation of ideas. The final workshop involved group brainstorming and a voting process. Collaborative discussions generated nine vision statements aligned with the agreed values. Voting supported inclusive decision making, with the final statement, 'Meds with Meaning – Every Patient, Every Time,' receiving 48% of 23 votes. To integrate in everyday practice and promote positive workplace culture the statement was displayed in the staffroom.

Evaluation Strong engagement was demonstrated through active participation across all workshops. At 12 months post implementation, a survey evaluation demonstrated sustained impact, with 100% of survey respondents identifying that a shared vision remains relevant and 89% agreeing the statement reflected departmental values. Feedback suggests the initiative was well received, had reinforced shared values, supported person centred care and contributed to positive workplace culture.

Discussion This initiative demonstrated that co-developing a shared vision can align teams around a shared purpose and provide a valuable model for pharmacy departments seeking to strengthen staff engagement, promote a positive workplace culture and support values-driven practice.

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Designing a Pharmacist-Led Digital Referral and Task Management Workflow in a Regional Private Hospital

Annie Zheng[1]

[1]*Slade Pharmacy, Geelong, Vic*

EMAIL Annie.zheng@sladepharmacy.com.au

Background Regional hospitals face increasing patient complexity, discharge pressures and workforce constraints, requiring efficient use of limited pharmacy resources. In paper-based environments, referrals are managed through emails, phone calls and verbal requests, leading to fragmented workflows, poor visibility of outstanding work and difficulty tracking completion. Cost-effective alternatives to commercial workflow systems are needed.

Objective To develop and implement a pharmacist-led digital referral and task management workflow using existing Microsoft infrastructures to improve visibility, allocation and tracking of clinical pharmacy activities in a regional private hospital.

Method A frontline pharmacist designed and implemented a digital workflow using Microsoft Teams, Power Automate and Microsoft Planner without additional software procurement. Referral for medication management plans (MMPs) received via email and electronic pathways were converted into trackable tasks within Microsoft Teams. Tasks were assigned to pharmacists, monitored in real time and tracked to completion. Workflow data were captured through Excel-based reporting, providing visibility of referral volumes, task status and workload distribution. Pre-implementation MMP referrals were reviewed.

Evaluation Implementation of the centralised referral process was associated with a 3-fold increase in identified patients requiring MMP (96 to 286/month). Referral requests became visible to the pharmacy team, supporting equitable workload allocation, proactive identification of high-risk patients and reducing missed referrals. The digital workflow improved timeliness, with pharmacists seeing 99% of patients within 24 hours of referral. Automated data capture eliminated manual tracking and enabled real-time monitoring of workflow activity, referral volumes and task completion, generating operational insights previously unavailable in the paper-based environment.

Discussion A pharmacist-led digital workflow using existing Microsoft infrastructure is a low-cost and scalable approach to improving referral management, workload visibility and timeliness of clinical pharmacy review. This project demonstrates how frontline clinician-led innovation can leverage widely available digital tools to enhance pharmacy service delivery in resource-constrained healthcare settings without significant financial investment.

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Evaluating and optimising clinical pharmacy and aseptic production workflows in paediatric oncology

Siying Zhou[1]

[1]*The University of Queensland*

EMAIL siying.zhou@student.uq.edu.au

Background Pharmacists play a central role in ensuring safe chemotherapy delivery; however, workflows within clinical oncology pharmacy and aseptic production unit (APU) services remain poorly characterised, limiting opportunities for evidence-based service optimisation.

Objectives To evaluate clinical oncology pharmacy and APU workflows to identify structural inefficiencies and generate evidence-based recommendations to support safer, more efficient chemotherapy care.

Action (Method) A prospective observational time-and-motion study was conducted in the pharmacy department of a tertiary paediatric hospital. Pharmacy staff activities associated with the care of paediatric oncology patients, including preparation, dispensing, monitoring, supportive care, and family liaison, were mapped and analysed in real time using a purpose-designed tool. Task duration, sequencing, interruptions, and communication patterns were captured to assess workflow dynamics. Activities were categorised as value-added (directly benefiting patient care), necessary non-value-added (required but not directly beneficial to patient care), or non-value-added (avoidable).

Evaluation 17 pharmacy staff across the APU and Clinical Oncology Pharmacy participated, contributing 99.5 hours of structured observation.

Necessary non- value-add activities dominated workflow time (APU: 67.8%; Clinical Oncology Pharmacy: 57.6%), interruption frequency was high (APU: 18.1/hour; Clinical Oncology Pharmacy: 20.2/hour), and workflow intensity varied significantly across the day, collectively indicating that operational inefficiencies are pervasive and extend beyond direct clinical tasks. Structural analysis identified three contributing origins: both services navigated multiple digital platforms simultaneously (APU: 11; Clinical Oncology Pharmacy: 14 systems), with system-related activity embedded throughout routine tasks; overlapping operational responsibilities were observed across all roles in both services; and communication tasks were the largest shared task category, with over 69% co-occurring with concurrent clinical decision-making, reflecting fragmented coordination pathways and contributing to operational bottlenecks within the chemotherapy pathway.

Discussion Findings provide an evidence-informed foundation for targeted workflow redesign and quality improvement initiatives to enhance patient safety, care efficiency, and outcomes for children and their families.

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From Stockings to Squeezers: Are We Getting Mechanical VTE Prophylaxis Right?

Sam Zlotnik[1], Gillian Oates[1], Leng Cam[1], Martha Turek[1]

[1]*Bayside Health Peninsula Care Group, Frankston, Vic*

EMAIL szlotnik@phcn.vic.gov.au

Background Venous thromboembolism (VTE) in hospitalised patients can be reduced through pharmacological or mechanical prophylaxis (MP). Pharmacological prophylaxis is the cornerstone; however, MP is indicated when anticoagulation is contraindicated. There is limited literature on MP use in general medical settings, existing studies primarily focus on higher-risk environments, with reported uptake rates of approximately 80% in intensive care units. The Safer Care Victoria (SCV) Guideline for the Prevention of Venous Thromboembolism in Adult Hospitalised Patients recommends documentation of device type, duration, daily skin assessments, application, and recording in both medication orders and progress notes. Despite these evidence-based recommendations, adherence in acute-care settings remains inconsistent.

Aim/Objective(s) To evaluate compliance with SCV guideline recommendations for mechanical VTE prophylaxis in adult inpatients with contraindications to pharmacological prophylaxis.

Methods A retrospective audit was conducted of adult inpatients with contraindications to pharmacological VTE prophylaxis admitted to a metropolitan hospital between 1 July and 31 December 2024 across nine medical and surgical wards. Electronic health records were reviewed for demographic data and documentation of MP plans. The primary outcome was the proportion of patients receiving MP in accordance with SCV guidelines; the secondary outcome was compliance with SCV documentation requirements. Descriptive statistics were performed using Microsoft Excel.

Results Seventy patients were included of which 13% received MP in full accordance with SCV guidelines. 69% had some form of MP documentation. MP was documented in 64% of progress notes and 21% of medication orders, however, only 15% had MP documented in both.

Discussion Marked gaps exist between SCV guideline standards and current MP practice. Documentation and prescribing inconsistencies appear to be key barriers to implementation. Pharmacist-led review identified opportunities to strengthen multidisciplinary awareness and standardise prescribing processes. Embedding MP within electronic medication charts represents a practical systems-level intervention with potential to improve compliance and patient safety.

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Outcomes with varying venous thromboembolism prophylaxis in obese patients: a retrospective cohort study

Seif Ghaly[1,2], Ruby Ridgway[3], Dr Timothy Tanzer[1,3], Viv Klyza[3], Karl Winckel[1,3]

[1]*University of Queensland School of Pharmacy , Brisbane, Qld,*
[2]*Prince Charles Hospital Pharmacy Department, Brisbane , Qld,*
[3]*Princess Alexandra Hospital Pharmacy Department, Brisbane, Qld*

EMAIL ghalyseif3@gmail.com

Background Morbid obesity (BMI ≥30 kg/m²) is associated with a two-to threefold increased risk of venous thromboembolism (VTE) and often necessitates higher prophylactic doses of agents such as enoxaparin and unfractionated heparin (UFH). However, the effectiveness of these increased doses in preventing VTE remains unclear.

Aims/Objectives This study evaluated VTE and bleeding event rates associated with enoxaparin and UFH prophylaxis in patients weighing >120 kg.

Methods All patients weighing >120 kg who were prescribed enoxaparin or UFH for VTE prophylaxis in a single-centre hospital between April 2017 and February 2026 were retrospectively audited. VTE was defined as clinically documented pulmonary embolism or deep venous thrombosis occurring >48 hours after admission. Bleeding was defined as a clinically documented non-surgical bleed or a haemoglobin decrease of ≥20 g/L after VTE prophylaxis initiation.

Results Seven hundred and forty-five patients were audited (120–140 kg: 473; 140–160 kg: 223; >200 kg: 49). Overall, 30.5% received UFH, 62.5% received enoxaparin 40 mg twice daily/0.5 mg/kg/day, and 7.5% received standard dose enoxaparin of 40 mg daily. VTE occurred less commonly in patients receiving enoxaparin compared to UFH, 9/518 (1.7%) versus 4/227 (6.2%), respectively (p=0.0013). The lowest rate of VTE occurred in patients receiving enoxaparin 0.5 mg/kg/day, with 3/242 (1.2%) of this cohort experiencing a VTE. Bleeding occurred less commonly in patients receiving enoxaparin compared to patients receiving UFH, 26/518 (5.0%) versus 33/227 (14.5%), respectively (p=0.0063).

Discussion In hospitalised patients weighing >120 kg, enoxaparin was associated with fewer VTE and bleeding events than UFH. A dosing strategy of enoxaparin 0.5 mg/kg/day led to the lowest risk of VTE. This study compares fixed/weight-based enoxaparin and UFH in a single cohort, addressing evidence gaps in thromboprophylaxis for underrepresented patients and informing anticoagulant choice in obese inpatients. Pharmacists should proactively intervene to change VTE prophylaxis in obese patients from UFH to dose-adjusted enoxaparin.

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A Team-Based Pharmacy Workforce Model Improving Medication Safety and Clinical Service Delivery

Tulita Liyadipitiya[1], Ethan Chanthalusy[1], Rebecca Broom[1]

[1]*Liverpool Hospital, SWSLHD, Liverpool, NSW*

EMAIL tulita.liyadipitiya@health.nsw.gov.au

Background Increasing clinical workload, discharge pressures, and workforce challenges can compromise timely delivery of clinical pharmacy services. In a tertiary referral hospital, a team-based ward cover model was developed to improve continuity of care, optimise workforce utilisation, increase Best Possible Medication History (BPMH) completion, and support National Safety and Quality Health Service Standard 4.

Objective To implement and evaluate a collaborative pharmacy framework that standardised pharmacist, intern, and technician roles while improving efficiency, workforce flexibility, and patient safety outcomes.

Action A framework was introduced, defining clinical, operational and communication responsibilities across the pharmacy team. The pilot Medical Team (MT1) consisted of three pharmacists, one intern, and one technician providing coordinated care across three medical wards. Pharmacists, supported by the intern, undertook BPMHs, medication reconciliation, clinical review, discharge planning, and patient counselling. Technicians coordinated medication supply and discharge workflows, enabling pharmacists to focus on clinical activities. Ward allocations, rotating dispensary responsibilities, structured handovers, and leave-cover arrangements were implemented. Three months later, a Surgical Team (ST1) was established using the same model. Performance was evaluated using Cerner Discern Analytics 2.0.

Evaluation BPMH completion within 72 hours of admission was higher in MT1 (72%) and ST1 (77%) compared with the remainder of the hospital (65%). The average time to complete medication histories was 34.2 and 34.3 hours respectively, compared with 75.2 hours hospital-wide. Average discharge prescription turnaround times were 2.33 hours (MT1) and 1.33 hours (ST1), compared with 2.75 hours hospital-wide BPMH completion increased by 5–7% across nine wards and consistently exceeded organisational targets. Following the positive outcomes observed during the six-month pilot, the framework was expanded hospital-wide.

Discussion This scalable model improved clinical service delivery, discharge efficiency, workforce flexibility, staff wellbeing, and patient safety. Successful hospital-wide adoption demonstrates its potential to support sustainable, patient-centred pharmacy services across large tertiary health networks.

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Evaluating the impact of the Aged Care On-site Pharmacist program on medication management quality indicators

Christine Muller[2], A/Prof Lahn Straney[1,3], Filip Reierson[1]

[1]*Evaran, Melbourne, Vic,* [2]*Choice Aged Care, Melbourne, Vic,* [3]*Monash University, Melbourne, Vic*

EMAIL christine@choiceagedcare.com.au

Background The Aged Care On-site Pharmacist (ACOP) program funds aged care homes to employ an on-site pharmacist, with the aim of improving medication management. Polypharmacy and antipsychotic use without a corresponding diagnosis are monitored through the National Quality Indicator (QI) Program and are both associated with adverse outcomes.

Aim To evaluate ACOP's impact on these indicators.

Methods National QI data were obtained from quarterly Star Ratings extracts. ACOP commencement dates were supplied by a national provider of on-site pharmacist services. We used a staggered-adoption difference-in-differences design, estimating treatment effects with the Callaway and Sant'Anna (2021) doubly robust estimator. An event-study specification estimated effects on the treated over the first five full quarters following implementation.

Results 2,890 homes contributed at least two QI quarters, including 122 that implemented ACOP. Averaged over the first five post-implementation quarters, ACOP was associated with a 1.89 percentage-point reduction in polypharmacy (95% CI 0.41 to 3.38; p=0.013). Applied across the 204,000 residents in Australian residential aged care, this equates to approximately 3,900 fewer residents (95% CI 800 to 6,900) receiving nine or more medications. Larger reductions were generally observed with longer exposure to ACOP. For antipsychotic use without a corresponding diagnosis, the estimated reduction was 0.65 percentage points (95% CI -0.32 to 1.61; p=0.188). Pre-tests did not reject parallel trends (polypharmacy p=0.053; antipsychotic p=0.412).

Discussion ACOP was associated with a reduction in polypharmacy, with the pattern of effects suggesting increasing benefit with longer exposure. Because commencement dates were only available from one provider of on-site pharmacist services, some ACOP homes were likely misclassified as controls, biasing estimates toward zero. The true effect may therefore be greater. Evidence for an effect on antipsychotic use was weaker and non-significant. These findings provide preliminary support for ACOP as a strategy to reduce polypharmacy in residential aged care.

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Pharmaceutical Waste Management in Victorian Hospitals: A Benchmarking Study

Lisa Ho[1], Jianyu Chen[2], Khadijah El-Hennawi[2], Nicholas Hayhoe[2], Sheis Sharief[2], Dr Zahid Hussein[1,2], Grace Wong[3], Prof. Simone Taylor[1,4]

[1]Austin Health, Heidelberg, Vic, [2]RMIT University, Bundoora, Vic, [3]Pharmacists for the Environment, Parkville, Vic, [4]University of Melbourne, Parkville, Vic

EMAIL lisa.ho@austin.org.au

Background Pharmaceutical waste management in hospitals presents risks to public health and the environment. The Victorian Therapeutic Advisory Group (VicTAG) published a Pharmaceutical Waste Framework in 2020.

Objective To describe pharmaceutical waste management in Victorian health services, benchmark the Framework implementation, and identify barriers to implementation.

Methods A sequential explanatory mixed-methods study was conducted. All Victorian public health services were invited to participate, and private hospitals were recruited via professional networks. Included sites had an onsite pharmacy, operating theatre and at least one overnight surgical ward. Staff responsible for pharmaceutical waste management completed a questionnaire on pharmaceutical waste bin types, handling of Scheduled 8 (S8) and Schedule 4 Drugs of Dependence (S4D), and operational procedures. Follow-up videoconference interviews clarified responses. Endpoints included bins used, disposal practices, and perceived challenges.

Results Twenty health services participated; most were public (n=18) and metropolitan (n=16). Pharmacy departments used combinations of 20L pails (n=11, 55%), secure P22 (n=12, 60%) and larger P64 bins (n=6, 30%), and 240L wheelie bins (n=6, 30%), while surgical wards mainly used the secure P22 bins (n=14, 70%), or sharps containers (n=3, 15%). S8/S4D disposal practices varied widely: about half used P22 bins (with or without denaturing products), while others used crushing and mixing with absorbent materials. Key challenges included staff education (staff turnover, inconsistent advice between contractors), bin costs (unclear funding responsibility between pharmacy, wards and waste services), logistical constraints (limited bedside availability of specific bins to fit within workflows), barriers to recycling non-pharmaceutical waste, (e.g. blister packaging), and inconsistent interpretation of S8/S4D disposal requirements.

Discussion While Framework recommended waste bins were widely implemented within pharmacy departments, implementation on wards was inconsistent. Variability reflected differences in resources, infrastructure and staff interpretation of regulatory requirements. Priorities include addressing legislative ambiguities, strengthening collaboration between sustainability staff and clinicians, and delivering targeted education.

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When Cosmetic Botox Turns Toxic: A Case of Iatrogenic Botulism Managed with Delayed Botulinum Antitoxin

Patricia Yee[1], Nicholas Harrison[1], Dr Samuel Easey[2], Dr Owen Chan[2,3], Dr Elizabeth Shiner[2]

[1]Department of Pharmacy, St George Hospital, Kogarah, NSW, [2]Department of Neurology, St George Hospital, Kogarah, NSW, [3]School of Clinical Medicine, UNSW Medicine and Health, Sydney, NSW

EMAIL patricia.yee1@health.nsw.gov.au

Objective Iatrogenic botulism is rare but increasingly recognised with rising cosmetic use of botulinum toxin (BoNT). Management is primarily supportive, with botulinum antitoxin as the only specific therapy. We report the case of a 43-year-old woman presenting with botulism eight days after BoNT administration by a trainee beautician in a residential setting.

Clinical features Eight days following administration, mild motor symptoms had progressed to dyspnoea, prompting emergency presentation. Examination revealed bilateral mydriasis, ptosis, facial weakness and reduced lingual, neck and upper limb strength. Forced vital capacity was reduced to 46%, consistent with evolving neuromuscular respiratory compromise.

Literature review Iatrogenic botulism has been increasingly reported, with at least four cases in Australia in the past three years. Whilst administration of antitoxin in late-presenting patients has not been studied broadly, case reports suggest symptom progression may slow after delayed administration.

Pharmacist interventions, case progress and outcomes In consultation with the neurology team, pharmacists identified that the implicated product was unlicensed, purchased online, subject to cold-chain breaches, and administered at an estimated dose of 150–200 units. One vial of heptavalent botulinum antitoxin was urgently sourced and administered on the day of presentation.

A nasogastric tube was placed and pharmacists modified medications, including converting the patient's regular desvenlafaxine to venlafaxine for administration. She required no ventilatory support, improved gradually and was discharged after an 11-day admission and resolution of airway and some motor symptoms. After eight months, she had regained motor control, with only ongoing left sided temporal pain.

Discussion Antitoxin is traditionally administered in the first 24–48 hours of symptom onset due to its inability to reverse already-bound BoNT. This case suggests that delayed administration may provide clinical benefit by limiting progression. It also highlights the risks associated with unregulated cosmetic BoNT use and the importance of early recognition and pharmacist involvement.

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Automated Electronic Interdisciplinary Workflow to Optimise Inpatient Dose Administration Aid Trials

Trong Nhan Do[1], Cheryl Teoh[1], Ying Sun[1]

[1]*Department of Pharmacy, Fremantle Hospital, Fremantle, WA*

EMAIL he171321@health.wa.gov.au

Background Safe and effective transition from hospital to community care requires robust medication management systems. Patients requiring dose administration aid trials are at increased risk of delayed discharge when processes are inconsistent. Existing paper-based workflows and variable screening practices limited clinical governance, resulting in inefficiencies, delayed initiation of trials, and suboptimal medication management planning.

Objective(s) To enhance the safety, consistency, and governance of inpatient dose administration aid trials through interdisciplinary collaboration and implementation of an automated electronic medication management workflow.

Action (Method) An interdisciplinary team redesigned the workflow using digital solutions. A structured, algorithm-driven screening questionnaire was developed to assess critical domains including cognitive function, manual dexterity, vision, and medication regimen stability. Automated processes triaged referrals, generated standardised documentation, and issued alerts for inappropriate referrals, enabling early multidisciplinary review. Nursing and occupational therapist administration observation tools were revised, and trial signage implemented to improve communication and staff awareness during trials.

Evaluation A preliminary evaluation compared referrals managed prior to implementation (n=10) and post-implementation (n=4). Automated referral was utilised for all referrals post-implementation. The electronic system identified and appropriately gated unsuitable referrals, reducing premature trial initiation. Median time from referral to availability of dose administration aids improved from 2.5 to 2.0 days. Documentation quality improved substantially, including observation form completion (50% to 100%) and pharmacist electronic medical record communication (10% to 75%). Staff feedback demonstrated improved documentation and enhanced interdisciplinary communication.

Discussion Implementation of an automated, interdisciplinary workflow strengthened clinical governance and standardised practice. Improved screening, enhanced documentation, and streamlined communication contributed to safer and more efficient trial processes and discharge planning. This model demonstrates strong potential to improve medication management, with future scalability supported by further evaluation of user experience and system integration.

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Compliance with the Psychotropic Medicines Clinical Care Standard across geriatric and neurobehavioral units in SA

Jessica Coddo[1], Nicholas Scarfo[1], Wesley Hall[1], Natasha Smith[1], Harry Mirasgentis[1], Rachel Cheung[1], Vidya Menon[1], Susan Kenny[1], Liz Learhinan[1]

[1]*SA Pharmacy, Southern Adelaide Local Health Network (SALHN), Adelaide, SA*

EMAIL jcoddo01@hotmail.com

Background The Psychotropic Medicines in Cognitive Disability or Impairment Clinical Care Standards were published in 2024 by the Australian Commission on Safety and Quality in Health Care (ACSQH). Within this framework, eight quality statements and seven indicators guide monitoring to ensure patients receive high-quality care while safeguarding the appropriate use of psychotropic medicines.

Objective(s) To determine compliance with the indicators outlined in clinical care standards with respect to management of Behavioural and Psychological Symptoms of Dementia (BPSD).

Action/Method A retrospective audit of hospitalised inpatients with a diagnosis of dementia and BPSD admitted to geriatric and neurobehavioral units in South Australia between January and May 2025 was conducted. Following randomisation, data was collected from the electronic medical record and assessed to evaluate compliance against the clinical care standards. The psychotropic class of focus was the use of antipsychotics.

Evaluation All patients (n=62) had a diagnosis of cognitive impairment with BPSD. In patients prescribed newly initiated antipsychotics, consent was documented in 13 (21%) patients. Documentation of a Behaviour Support Plan (BSP) was found in 43 (69%) patients. Indications for regular antipsychotics was documented in 53 (85%) patients and 54 (87%) patients had indications documented for when required orders. Documentation for timeframes to review antipsychotics was found in 44 (71%) of patients, and only 17 (27%) had a documented plan for the antipsychotic beyond discharge.

Discussion This study highlights scope for improvement across several aspects of the clinical care standard, including the consenting process, documentation of the timeframes for review, particularly on discharge, and development of BSPs. The results from this audit are being presented across multiple forums within the network. A network-wide audit comprising of three teaching hospitals is currently underway to contribute to a gap analysis, which will also guide improvements.

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Analysing activities of pharmacists` in hospitals using time and motion studies: A systematic review

Jessica Coddo[1,2], Tiernan McDonough[2], Hana Amer[1,2,3], Molly Astley[1,2], Nur Adila Mohd Mosnin[1], Dr Joshua Inglis[4], A/Prof Lisa Kalisch Ellett[1], Dr Nazanin Ghahreman-Falconer[5], Prof Andrew Booth[6], Sally Marotti[1,2], Dr Mirela Prgomet[7], Jacinta Johnson[1,2]

[1]School of Pharmacy and Biomedical Science, Adelaide University, Adelaide, SA, [2]SA Pharmacy, Adelaide, SA, [3]Faculty of Medicine and Health, School of Pharmacy, University of Sydney, Sydney, NSW, [4]College of Medicine and Public Health, Flinders University, Adelaide, SA, [5]University of Queensland, Woolloongabba, Qld, [6]University of Sheffield, Sheffield, United Kingdom, [7]Macquarie University, Sydney, NSW

EMAIL jcoddo01@hotmail.com

Background Pharmacy practice within the hospital setting is evolving as innovative modes of service delivery are being implemented. Evaluating the workflow of hospital pharmacists through time and motion studies provides insight into the tasks and activities pharmacists perform, as well as the proportion of time these tasks and activities take.

There are currently no systematic reviews that synthesise the types of tasks undertaken and the proportion of time these tasks take hospital pharmacists to perform.

Aim/Objective(s) This review aimed to collate and critically appraise studies that have evaluated the proportion of time pharmacists in a hospital setting spend on different activities as measured by time and motion observational studies.

Methods A systematic search for full-text papers published in English, post-2000 was conducted across Medline, Embase, Emcare, Scopus, CINAHL and Cochrane Library. Studies utilising time and motion methodology to measure pharmacist activities in a hospital setting were included. Eligibility screening, data extraction and critical appraisal was conducted by two independent reviewers using Covidence. Consensus was reached for all papers included in the review. Results were reported narratively.

Results 6,955 papers were reviewed for eligibility and 19 met the inclusion criteria. Most studies were conducted in Australia (42%) and the US (26%). Pharmacists were most commonly observed in an inpatient hospital setting (74%), followed by the dispensary setting (16%). A range of pharmacist activities were reported in the studies. Common activities included medication histories, reviews and discharges, which accounted for 1–28.9%, 14–32.6% and 0.8–21% of work time observed in the studies respectively.

Discussion This systematic review has highlighted the range of activities pharmacists perform in the hospital setting. The results will serve as a guide to clinicians and researchers when evaluating pharmacist workflow, particularly when implementing new services, such as pharmacist prescribing, or deployment of new systems.

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Valproate Induced Pancreatitis: A Pharmacist Led Case Review

Sylvia Behary, Maria Lambros[1]

[1]The Sutherland Hospital, Sydney, NSW

EMAIL sylvia.behary@health.nsw.gov.au

Objective To describe a case of valproate induced pancreatitis identified through multidisciplinary medication review in a patient receiving long-term psychotropic therapy.

Clinical features A 60-year-old male with schizoaffective disorder presented with severe abdominal pain, fever, nausea and vomiting. Investigations were consistent with acute pancreatitis, with an elevated lipase (1000 U/L), C-reactive protein (CRP,383 mg/L) and white cell count (WCC,18.7 $\times 10^9$/L), and supported by CT imaging. Abdominal ultrasound did not demonstrate biliary obstruction or cholecystitis. Regular medications included long term clozapine 250 mg nocte and sodium valproate 700 mg twice daily. During admission, the patient developed drowsiness and tachypnoea consistent with progressing severe acute pancreatitis, requiring intensive care unit admission.

Literature Review Sodium valproate is a recognised but rare cause of drug-induced pancreatitis, with product information warning of severe and fatal outcomes. The mechanism remains unclear, with onset reported from weeks to years after initiation. In contrast, clozapine associated pancreatitis is rare and typically occurs early in therapy.

Pharmacist Intervention The clinical pharmacist conducted a medication review to assess potential drug-induced causes of pancreatitis. Evidence regarding psychotropic-associated pancreatitis was reviewed with intensive care and psychiatric teams. The pharmacist highlighted valproate as the more likely contributor, and balanced the risk of psychiatric destabilisation associated with clozapine cessation. A shared decision was made to cease valproate while continuing clozapine with monitoring.

Outcome The patient demonstrated resolution of clinical symptoms, normalisation of lipase (12U/L) and down trending CRP (25 mg/L) within days of cessation of valproate. Patient was cleared by psychiatrist upon discharge.

Discussion This case highlights the importance of not overlooking rare but serious adverse effects in patients with long-term medications, such as pancreatitis. It also demonstrates the key role of pharmacists in multidisciplinary collaboration in balancing medical management with ongoing therapies, including psychotropic treatment, and supporting evidence-based clinical decision-making in complex presentations.

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Successful Integration of Pharmacists into Residential Aged Care Teams: A Qualitative Study

Tiernan McDonough[1], A/Prof Lisa Kalisch Ellett[1], Alison Pano[2], Christopher Etherton-Beer[2], Jacinta Johnson[1], Amy Page[2]

[1]Adelaide University, Adelaide, SA, [2]University of Western Australia, Perth, WA

EMAIL tiernan.mcdonough@adelaide.edu.au

Background Australia's Aged Care Onsite Pharmacist program aims to support quality use of medicines in residential aged care homes. This is a novel role introduced into existing teams in a complex environment. Factors associated with successful integration since the program's implementation are currently unknown.

Aim/Objective(s) This study aims to explore the perspectives of pharmacists and other stakeholders within aged care homes regarding successful integration of the novel aged care pharmacist service into healthcare teams.

Methods A qualitative approach, using interpretive descriptive methodology, was used to explore perspectives. Semi-structured focus groups and interviews with pharmacists, nursing and care staff, allied health professionals, general practitioners, residents, and family members were undertaken. Data were collected via Zoom™, audio and video-recorded, and transcribed verbatim. Two researchers undertook inductive thematic analysis to identify key themes.

Results 30 participants across focus groups, focus-group interviews, interviews, and member-checking processes contributed. An overarching theme of proactivity and showing a genuine interest in others underpinned three key themes. Theme 1: Pharmacists needed to be seen, through physical presence and availability, as well as developing a distinct identity. Theme 2: Pharmacists needed to build trust, through collaboration in real time and demonstrating value. Theme 3: Pharmacists needed to develop an understanding of the aged care home environment, including social and contextual norms, as well as procedures, routines and roles.

Discussion This research complements existing understandings of interprofessional collaboration and teamwork amongst healthcare professionals. Themes were interlinked; we used a sensitising framework, social cognitive theory, to present and explain the findings and interactions that can support pharmacist integration into existing teams.

Aged care services should structure onboarding to prioritise early visibility, clarify roles and organisational needs, and foster in-person collaboration. Pharmacists should demonstrate proactivity and an authentic interest in all staff, residents and families.

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Healthcare professionals' perspectives of pharmacist roles in residential aged care: a systematic review and meta-synthesis

Tiernan McDonough[1,3], Emily Griffin[2], Amy Page[3], A/Prof Lisa Kalisch Ellett[1], Christopher Etherton-Beer[3]

[1]Adelaide University, Adelaide, SA, [2]Monash University, Bendigo, Vic, [3]University of Western Australia, Perth, WA

EMAIL tiernan.mcdonough@adelaide.edu.au

Background Pharmacist roles are expanding into aged care teams. Successful integration requires an understanding of team member perspectives.

Aim/Objective(s) To identify, analyse and present the published literature pertaining to healthcare professional perspectives of the roles of pharmacists working in residential aged care.

Methods A systematic search of literature published between 2000 and 2025 was undertaken across Embase, Medline, CINAHL and Web of Science. Primary studies addressing the research aim were eligible for inclusion. The Mixed Methods Appraisal Tool was used to assess methodological quality of each paper. Two researchers independently reviewed and reached consensus agreement for all studies to include. Both researchers undertook a thematic synthesis of qualitative data to identify analytic themes.

Results After screening, we included 39 papers for data extraction. Three themes were identified. Theme 1: 'Supporting the role' describes how pharmacist roles in aged care are supported through building trust with the team, education and experience, access to information, specific attributes, organisational buy-in, favourable models of care, and role clarity. Theme 2: 'Medicines expertise activities' describes how pharmacists perform three key roles valued by healthcare staff: knowledge/communication brokers, filling existing gaps in care, and optimising quality use of medicines. Theme 3: 'Helping the team' illustrates health professionals' perception of three distinct outcomes of pharmacist input (enhanced confidence, improved capacity and capability, and improved person-centred care).

Discussion This meta-synthesis of the evidence regarding the perceptions of healthcare professionals on the role of pharmacists in aged care provides contextual information for individuals, organisations and policy-makers for future implementation. Pharmacists are perceived to improve stakeholder confidence, staff capacity and capability, and overall person-centred care. Embedded roles that foster interdisciplinary collaboration are preferred to irregular visiting roles. These embedded roles are enabled through a range of mechanisms that policymakers, organisations and individuals may leverage for successful implementation in future iterations.

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Stop Flozin' Around: Reviewing Patients' Understanding of SGLT2i Sick Day Management and Pharmacists' Role

Ms Cara Thompson[1], Miss Maddison White[1], Miss Lily Hatt[1], Ms Amelia Renton[2], Ms Belinda Chappell[1]

[1]*Caboolture Kilcoy Woodford Clinical Directorate, Caboolture, Qld,* [2]*The University of Queensland, St Lucia, Qld*

EMAIL cara.thompson@health.qld.gov.au

Background SGLT2 inhibitors (SGLT2i) are used to treat type 2 diabetes, heart failure and chronic kidney disease. During acute illness, inappropriate use can lead to ketoacidosis and subsequent hospitalisation, making sick day management education to patients essential.

Objective(s) To assess patient understanding of SGLT2i-related complications and sick day management and evaluate documentation of sick day management advice on pharmacist-prepared discharge medication records (DMRs) before and after an educational intervention.

Action (Method) A prospective survey of inpatients taking an SGLT2i prior to admission between 21st July and 14th August 2025 was conducted to investigate their understanding of the indication of their medicine and sick day management principles. Additionally, DMRs prepared between 1st April and 30th June 2025 were audited to determine whether written sick day management advice was provided to patients discharged on an SGLT2i, whether newly initiated or pre-existing. Findings were presented to pharmacists through an education session emphasising the importance of verbal counselling and written documentation. Six months later, a re-audit of DMRs was conducted.

Evaluation Thirty-four patients participated in the survey. Overall, 41% were unable to recall the indication for their SGLT2i and 94% could not describe sick day management principles. Among 244 audited DMRs, only 16% included sick day management advice. Patients newly commenced on an SGLT2i were twice as likely to receive documented advice compared to those established on therapy. The re-audit of 220 DMRs showed that documentation increased to 48%, representing a 32% improvement following the education intervention. Newly initiated patients remained more likely to receive written advice than those of pre-existing therapy (74% vs 42%).

Discussion Patient understanding of sick day management was poor, and written documentation by pharmacists was initially inconsistent. A simple departmental education session substantially improved documentation practices, demonstrating that target education can enhance medication safety and support effective patient counselling.

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When Less Is More: The Benefits of Subcutaneous Efgartigimod

Sarah Noori[1], Sheryn Loh[1]

[1]*Austin Health, Austin Health, Vic*

EMAIL sarah.noori@austin.org.au

Objective To describe the transition of a patient with Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) from intravenous immunoglobulin (IVIg) to subcutaneous (SC) efgartigimod alfa and the roleof the pharmacist in supporting home-based therapy.

Clinical Features An adult patient with CIDP was receiving long-term IVIg therapy but experienced a plateaued clinical response despite optimisation of dosing intervals. The patient commenced SC efgartigimod alfa as an alternative treatment option. Following supervised administration, the patient progressed towards self-administration at home, reducing the need for ongoing hospital attendance.

Literature Review CIDP is a chronic immune-mediated neuropathy that often requires long-term treatment. Historically, efgartigimod was only available as an intravenous infusion, requiring hospital attendance, infusion chair utilisation, nursing support, and administration times of over one hour. The recent availability of a SC formulation has simplified treatment delivery, with administration taking less than five minutes. Following appropriate training, patients can self-administer treatment at home. This may reduce treatment burden, improve convenience, and decrease demand on hospital infusion services.

Pharmacist Interventions, Case Progress and Outcomes Pharmacists led the successful implementation of subcutaneous efgartigimod alfa in the home setting by establishing administration processes and ensuring safe delivery of care. They provided education and competency-based training to both nursing staff and the patient. The patient successfully completed four supervised doses without complications and transitioned to self-administration at home. Compared with infusion-based therapy, administration time was reduced from over one hour to less than five minutes per dose, improving convenience, flexibility, and patient experience while significantly reducing the need for hospital attendance.

Discussion This case demonstrates that SC efgartigimod alfa can be successfully implemented as a home-based therapy for patients with CIDP. Pharmacist played a vital role in enabling safe, effective and accessible home-based treatment, reducing reliance on hospital infusion services while maintaining continuity of care.

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Evaluating the management of acute severe hypertension in pregnancy – a retrospective audit

Reyes Loh[1], Dr Wirawan Jeong[1], Natasha Pettet[1], Laura Leung[1]

[1]*The Royal Women's Hospital, Parkville, Vic*

EMAIL reyes.loh@thewomens.org.au

Background Acute severe hypertension in pregnancy, defined as sustained systolic blood pressure (SBP) of ≥160 mmHg and/or diastolic blood pressure (DBP) of ≥110 mmHg, is associated with poor maternal and fetal outcomes. The pharmacological management of acute severe hypertension includes the use of short-acting oral and/or intravenous antihypertensives. However, evidence guiding the prescribing of antihypertensives and optimal blood pressure (BP) target in this setting remains limited.

Aim/Objective(s) To describe the pharmacological management of acute severe hypertension in pregnancy.

Methods Medical records of pregnant patients who were diagnosed with and received treatment for severe hypertension at our institution between 01/09/2025 and 31/03/2026 were reviewed. Patients were followed up from the first antihypertensive administration until BP was deemed adequate by treating clinicians. Data were expressed as median (interquartile range), unless otherwise specified.

Results The current interim analysis included 32 patients. The SBP and DBP at the time of antihypertensive initiation was 169 (160 to 175) mmHg and 101 (100 to 110) mmHg, respectively. 6/32 patients (19%) had repeat BP measurement, 6 (1 to 20) minutes apart, prior to commencement of antihypertensive. Antihypertensives were administered 5 (2.5 to 12) minutes following severe hypertension documentation. These included oral labetalol 200 mg (24/32, 75%) or oral nifedipine immediate release (IR) 10 mg (8/32, 25%). 18/32 patients (56%) received ≥2 doses of antihypertensives; second antihypertensive was administered 51 (45 to 80) minutes after the first. The SBP and DBP after the last antihypertensive dose was 150 (141 to 160) mmHg and 96.5 (84 to 102) mmHg, respectively.

Discussion Our interim findings suggested that antihypertensives were promptly initiated, but often without repeat BP confirmation. Whilst additional doses were frequently required, these may have been administered before the initial antihypertensives had sufficient time to exert their full effect. Pharmacist-led education may help optimise antihypertensive use and minimise unnecessary dose escalation.

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Edaravone at Home: Where Innovation Meets Comfort

Sarah Noori[1], Angela Sullivan[1]

[1]*Austin Health, Heidelberg, Vic*

EMAIL sarah.noori@austin.org.au

Objective To describe safe effective administration of edaravone infusion to a patient with amyotrophic lateral sclerosis (ALS) via Hospital-In-The-Home (HITH).

Clinical features The patient experienced progressive motor decline, fatigue, and reduced mobility. Edavarone therapy began, but daily hospital presentation was challenging due to disease progression. The patient transitioned to HITH, with home infusions reducing travel demands and allowing treatment in a familiar environment.

Literature review Edaravone, a disease-modifying therapy for ALS, slows functional decline. It is usually administered in hospital day infusion centres, with intravenous doses administered daily for 10–14 days every 28-day cycle creating a substantial treatment burden.

Whilst HITH is a well-established model of care for low-risk, short-course therapies, experience with complex, multi-day infusion regimens for progressive neurological disease is limited. Administering edaravone via HITH is a novel approach in Australia, shifting a hospital-dependent ALS therapy to structured home-based care. While home administration of edaravone appears safe and reduces healthcare burden, no Australian HITH studies have yet been published.

Pharmacist interventions, case progress and outcomes Pharmacists led the safe initiation of edaravone in HITH by coordinating supply of cyclical dosing and establishing correct infusion preparation and administration protocols for home use. They educated HITH nurses on infusion protocols and hypersensitivity risks, and counselled patients and caregivers on adherence, storage requirements, and recognition of adverse effects. Ongoing monitoring and collaboration with the multidisciplinary team supported safe initiation and continuation of therapy in the home. The patient completed home infusions without complications and was satisfied with the experience, particularly reduced hospital attendance.

Discussion This case demonstrates that edaravone for ALS may be delivered conveniently via HITH while maintaining safety and efficacy. Pharmacists play a critical role developing the infusion protocols, ensuring safe home administration and coordinating care.

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Validating the PHarmacie-R Readmission Prediction Tool in a Regional Health Service: The REBOUND Study

Dr Adam Livori[1,2], Cameron Clifford[1], Kierra Steer[1], Annmaria Baiju[1], Mel Durdin[1], Paige Follett[1], Elizabeth Gong[1]

[1]Grampians Health, Ballarat, VIC, [2]Baker Heart and Diabetes Institute, Melbourne, VIC

EMAIL adam.livori@gh.org.au

Background Hospital readmission is a significant burden on patients as well as the health systems. Prediction tools such as PHarmacie-R – developed in a Western Australian metropolitan tertiary centre – offer a structured approach to identifying high-risk patients at discharge to provide targeted readmission prevention interventions. However, external validation in diverse settings, particularly regional health services, is essential before clinical adoption. No prior validation has been performed in a regional context.

Aim To externally validate the PHarmacie-R 90-day unplanned readmission prediction tool in patients discharged from general medicine units at a large regional health service.

Methods A retrospective external validation cohort study was conducted using data from the Safer Medicines at Transitions of Care (SMTC) collaborative. Patients discharged from general medicine units between April 2025 and January 2026 were included. PHarmacie-R scores were derived from clinical variables including polypharmacy, high-risk medication use, comorbidities, age, and prior healthcare utilisation. The primary discrimination metric was the C-statistic with 95% confidence intervals, reported against the published benchmark of 0.72 (95%CI 0.68–0.75).

Results A total of 1,407 episodes were included. The cohort was predominantly inner regional (96.2%), with a median age of 71 years (IQR 59–80) and a 37.3% 90-day readmission rate (n=525). Median number of medications on discharge were 11 (IQR 8–16) and comorbidities 6 (4–8). The external C-statistic for PHarmacie-R was 0.55 (95% CI 0.52–0.58), indicating poor discrimination in this population.

Discussion The PHarmacie-R tool demonstrated substantially reduced discrimination when applied externally to a regional Victorian cohort compared to its development population. This underscores the critical importance of external validation before deploying prediction tools in clinical practice. Further work in recalibrating the model is underway to understand how it can be partnered with interventions to reduce readmissions and improve transitions of care into primary care settings.

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Optimising Best Possible Medication History Training via Artificial Intelligence-Supported Patient Avatars

Raveena Chadha[1], Renee Dimond[1], Amna Mazeh[2]

[1]Grampians Health, Ballarat, VIC, [2]Monash University, Parkville, VIC

EMAIL: rcha85@gmail.com

Background Completing a Best Possible Medication History (BPMH) is a core clinical pharmacy task. Standardised training is resource-intensive, requiring extensive supervised patient-facing interactions. In public health, pharmacists often train learners while managing full patient loads. These competing priorities can result in training opportunities being suboptimal or deprioritised. To address this challenge, our regional health service, in collaboration with an internationally recognised university, is evaluating an Artificial Intelligence (AI)-supported simulation platform (ATLAS, Monash University) as a tool for developing baseline BPMH competency.

Aims To evaluate the usability of an AI-supported simulation platform and its impact on learner confidence; to explore supervising clinical pharmacists' perceptions of learner readiness for practice; and to determine whether platform use accelerates progression towards BPMH competency, measured by Entrustable Professional Activity (EPA) scores.

Methods This prospective study involves a rolling intake of learners over two years. Multiple learner groups will practice BPMH processes using three patient-avatars representing distinct clinical scenarios. The platform provides immediate, standardised feedback following each simulation. Multi-stage surveys will assess pre- and post-simulation learner confidence and usability. Supervising pharmacists will complete a qualitative survey regarding perceptions of learner readiness for practice. Each BPMH encounter will be assigned a workplace-based EPA score by supervising pharmacists, and the number of attempts required to achieve EPA progression will be tracked and compared to a control group.

Results Three distinct patient-avatars and dispensing histories have been developed. The avatars have undergone pilot testing and iterative refinement to enhance realism and authenticity. Participant recruitment will commence late 2026.

Discussion AI-supported simulation may provide a scalable and resource-efficient approach to clinical pharmacy training. By providing immediate, objective feedback, the platform aims to improve learners' preparedness and accelerate EPA progression. Integrating AI-enabled training into practice may alleviate workplace-based training pressures whilst enhancing patient care quality in demanding healthcare environments.

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Improving transitions of care via a simple solution

Lauren Bradley[1]

[1]*Department of Pharmacy, Tauranga Hospital Health NZ, Tauranga, New Zealand*

EMAIL: Lauren.Bradley@bopdhb.govt.nz

Background Transitions of care from hospital are associated with high risk of medication errors and adverse events.[1] Discharge summaries continue to have inaccurate medication lists and inadequate explanation of medication changes. A local survey showed all our community pharmacists experience issues with medicine reconciliation following discharge.[2]

Objectives To establish a new channel of communication between primary and secondary care, to be used if usual methods of communication failed to address the community providers' discharge-related query.

Action (Method) An email address was repurposed and shared via GP and Community Pharmacist Liaisons in our region. GPs were invited to report inadequate Transfer of Care (TOC) summaries and Pharmacists requiring help with prescription clarification.

Queries received will be analysed by issue, medication class and whether desired outcome was achieved.

Evaluation Results In the first 12 weeks of operation, 26 enquiries were received. Source of query: community pharmacy (n=22); GP (n=4). Nature of query: TOC issue (n=4); dose clarification (n=4); funding (n=4); product unavailable (n=3); miscellaneous info required (n=3); missing medication (n= 3); missing prescription (n=2); interaction (n=2); incorrect medication (n=1) and allergy (n=1). Of the 23 queries relating to medications, 14 (61%) were high-risk APINCH medications: opioids (n=4); antimicrobials (n=4); anticoagulants (n=2); chemotherapy (n=3); sedative (n=1) potassium (n=1). Antihypertensives were the most common class of medication (n=5).

Desired result was achieved in 22 cases (85%). Time taken to resolve queries was less than 5 minutes in 16/26 enquiries (62%) with answer being found in the hospital record.

Discussion Simple solutions can improve transfer of care in the short-term. Information integration and access between primary and secondary care is essential to reduce medication-related harm at transitions of care.

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Retrospective Audit of Enoxaparin Dosing for VTE Prophylaxis in Obese Inpatients in General and Orthopaedic Surgery

Kate Mohi[1], Arie Ali[1], Yasaman Mohammadi[1]

[1]*Te Toka Tumai Auckland, Department of Pharmacy, Auckland, New Zealand*

EMAIL: kmohi@adhb.govt.nz

Background Obesity (Body Mass Index ≥30 kg/m^2) is an independent risk factor for venous thromboembolism (VTE), further compounded by surgery and post-op immobility1. Enoxaparin is widely used at our tertiary hospital for VTE prophylaxis, typically dosed at 40 mg subcutaneously once daily. While this dose is appropriate for patients with a healthy BMI (18.5–24.9 kg/m^2) and no renal impairment, it may be sub-therapeutic in obese patients due to altered pharmacokinetics[2,3]. No local guidelines exist to guide enoxaparin dosing in obese patients at our tertiary hospital, leading to potential suboptimal prophylaxis.

Aim To investigate enoxaparin dosing regimens currently being prescribed for VTE prophylaxis in obese surgical inpatients.

Methods A retrospective audit of all inpatients prescribed enoxaparin who were discharged from the orthopaedic and general surgery wards over a seven-week period (January-March 2025). Patients with undocumented height, weight and enoxaparin charting, or those with BMI less than 30 kg/m^2 were excluded. Data collected included patient height, weight, renal function, enoxaparin dose and frequency during admission. Patients were divided into obesity classes 1 (30–34.9 kg/m^2), 2 (35–39.9 kg/m^2), 3 (40 kg/m^2+). Statistical analysis was undertaken using descriptive statistics and chi-square testing.

Results The audit included 58 obese surgical inpatients (females n=35, males n=23), aged from 19 to 85 years (average 35 years). NZ Europeans made up 44% of the sample, followed by Maori (15%). Of these obese patients, 31 were of Class 1 (53%), 11 were of Class 2 (19%), 16 were of Class 3 (28%). Most patients received the standard prophylactic enoxaparin dose of 40 mg once daily (n=54, 93%,) for an average of four doses. Adjusted doses of 60 mg once daily (n=3) and 80 mg (n=1) once daily were infrequent and only observed in patients in Class 3 obesity (BMI > 40 kg/m^2).

Discussion It is evident that 40 mg once daily is frequently prescribed to obese inpatients without dose adjustments to account for pharmacokinetic differences.

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Long-term use of inpatient initiated proton pump inhibitors for indications that are anticipated to require short-term use

Oliver Bolton[1], Judith Dalrymple[1], Murray Barclay[1,2]

[1]*Health New Zealand Te Whatu Ora Waitaha Canterbury, Christchurch, New Zealand,* [2]*University of Otago, Dunedin, New Zealand*

EMAIL oliver.bolton@tewhatuora.govt.nz

Background Proton Pump Inhibitors (PPIs) are among the most prescribed medications in New Zealand.[1] District data demonstrates that 30% of inpatient admissions were prescribed a Pharmac funded PPI over 2023. PPIs are widely prescribed for peptic ulcer disease (PUD).[2] Despite evidence supporting short-term use of PPIs for PUD, anecdotally, PPIs are continued long-term. Published reports support this concern[1,2] and suggest up to 70% of patients take a PPI without an appropriate indication.[3]

Aim To quantify long-term PPI use following inpatient initiation for PUD. To evaluate discharge communication regarding intended treatment duration.

Methods A retrospective audit was conducted of patients admitted in 2023 with a primary diagnosis of PUD (ICD-10 codes K25–K28) and were newly initiated on a PPI. Patients with community PPI use in the four months prior to admission, as well as those who did not receive a PPI community dispensing within the first seven days post-discharge, were excluded. Data was collected from discharge summaries and community dispensing records. Long-term PPI use was defined as receiving a community dispensing within 180–360 days after discharge.

Results Eighty-six inpatient prescriptions for PPIs met the audit criteria. Based on community dispensing data, 46 (53%) patients continued their PPI 180 – 360 days after discharge, when up to three months of PPI therapy would be anticipated. Twenty patients (23%) were dispensed a PPI quantity that aligned with the intended duration. Seventy (81%) discharge summaries included a clear treatment duration; including 11 (13%) specified as 'lifelong'. Thirty-one (36%) included tapering advice. Sixty-four (74%) inpatients had one or more of the following: oesophageal reflux, H. pylori positive, NSAID, steroid, antiplatelet or anticoagulant medicine use.

Discussion Inpatient initiation of PPIs for PUD is associated with ongoing use in the community (53%) despite clear discharge communication of intended duration being common (81%) and dose taper specified in 36% of discharge summaries. Relevant comorbidities were prevalent (74%) providing some rationale for continuation.

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