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Poster Abstract Book

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P101

Feasibility of the Optimal AF-HF application (OLa) to promote self-care among patients with atrial fibrillation and heart failure

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Introduction:
Globally, several mobile health applications (MHAs) have been developed to promote self-care among patients with concurrent atrial fibrillation (AF) and heart failure (HF). However, a suitable MHA for use among Malaysians is lacking. We developed the Optimal AF-HF application (OLa) to address this gap, but its feasibility in clinical practice remained unknown.

Aim:
To assess the feasibility of OLa to promote self-care among patients with concurrent AF and HF in a clinical setting.

Methods:
A feasibility study was conducted at a tertiary care hospital. Patients with concurrent AF and HF on oral anticoagulants (OACs) were recruited. Participants downloaded the OLa, entered their personal data, and set medication reminders. A “think-aloud protocol” was used during interviews and captured using audio recorders. The Mobile Health Application Usability Questionnaire (MAUQ) was administered to assess OLa’s usability. Patient engagement was measured via app analytics. An interview was conducted one week later to explore users’ experience with the app's utilities. Data was analysed using thematic analysis.

Results:
15/22 patients were recruited (7 males, median age=62 years). Retention rate for OLa users over one week was 93.3%. Patients used the app from twice a week to daily, each session lasting 5-10 minutes. Five themes emerged: features enhancing self-care, perceived benefits, challenges to adoption, facilitators for adoption, and suggested improvements. Overall median MAUQ score was 6.67/7.00, with 11/15 patients giving a perfect score for user satisfaction. The final app version incorporated personal health information, clinical decision support, and educational modules.

Discussion:
OLa was found to be feasible for use in clinical setting. The strong user retention rate, positive patient experiences, and high usability scores indicate its potential to support self-care in this patient population. The feedback obtained has been instrumental in finalizing the application for broader implementation.

P102

Medication data collection in Frailty Intervention Through Specific Therapies (FITTEST) trial participants: a feasibility study

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Aims.
To assess feasibility and validity of a structured approach for remotely collecting medication data in older people.

Methods.
Informed by literature and investigators' expertise, a data collection tool was developed using Microsoft Excel, to facilitate remote medication data collection for FITTEST trial participants. All participants engaged in structured telephone interviews with a clinical pharmacist. A subset also participated in follow-up video calls to validate the initial self-reported medication list against the 'brown bag' method for clinical trials. Data collected included medication name, dose, frequency, indication, interview duration, data completeness, call completion rate and number of call attempts per participant. Medication regimen complexity index (MRCI), frailty status, medication adherence (using Morisky Green Levine Scale (MGLS-4)) and Drug Burden Index (DBI) were calculated for participants.

Results.
Preliminary findings focused on feasibility measures. Medication data from the first twelve FITTEST trial participants were included in this pilot. Mean participant age was 77 years, 67% (n=8) were female and 83% (n=10) were mildly frail (FI <0.2). Feasibility: 86% of scheduled calls were completed; 92% of participants were reached on the first call attempt; mean interview duration was 33mins. All medication data fields were completed during calls, except for certain generic and brand names (due to confusion between generic versus brand names) and strengths of certain over-the-counter medications. Medication measures: 83% (n=10) of participants were on ³5 regular medications; 42% (n=5) had a DBI>0; MRCI scores ranged from 5 to 43.5; Majority (n=8, 67%) scored 1-2 on the MGLS-4 suggesting moderate levels of medication adherence.

Discussion.
Preliminary findings suggest a structured phone interview is feasible to remotely collect data and calculate medication-related metrics in older people. Analysis of the methodological validity against the gold standard for medication data collection in clinical trials, clinician-observed 'brown bag' is ongoing and will be reported in future work.

P103

Parent's experience and attitudes towards COVID-19 vaccination and their willingness to have their preverbal children vaccinated.

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Introduction:
Childhood vaccination is important in reducing infectious disease morbidity and mortality. However, vaccinations may be associated with adverse drug reactions (ADRs), such as injection site pain, myalgia, and fever. Some ADRs may be difficult for parents to identify in preverbal children (aged 3 years or younger) due to a lack of self-reporting skills. Further, parents' willingness to have their children vaccinated may be influenced by their own personal experience with vaccinations, and may result in vaccination hesitancy.

Aims:
To assess parents' willingness to have their preverbal children vaccinated against COVID-19 and other vaccinations, and to identify factors that may impact this willingness. Methods: This prospective study involved a questionnaire disseminated nationally to target ≃400 parent respondents aged ≥18 years. The five-part questionnaire collected demographic data, as well as data on COVID-19 vaccinations (including perceived benefits and risks, experience of their children following the COVID-19 and other vaccines, and management of post-vaccination pain).

Results:
A total of 402 respondents completed the questionnaire. At least one dose of the COVID-19 vaccine was received by 90.5% (153/169) of preverbal children. Of the 67 who reported ADRs following COVID-19 vaccination, injection site pain was reported in 32/67 (47.8%), muscle pain in 23/67 (34.3%), and headache in 22/67 (32.8%). Similarly, a total of 103 parents who reported ADR after the COVID-19 vaccine, injection site pain was reported in 78/103 (75.7%), muscle pain in 76/103 (73.8%), and headache in 66/103 (64.1%).

Discussion:
In this study, pain-related ADRs following COVID-19 vaccinations appeared to be underreported amongst Australian preverbal children when compared to their parents. Challenges faced by parents in identifying and detecting pain in their preverbal children may lead to underreported and unmanaged pain.

P104

Barriers and facilitators to internationally trained pharmacist integration in New Zealand: implications for healthcare workforce policy

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Introduction:
New Zealand's healthcare system confronts an acute pharmacist workforce crisis, with an estimated shortage of 170 pharmacists and requirements for 15% workforce expansion by 2032. International pharmacist recruitment presents a critical workforce development opportunity; however, regulatory and systemic obstacles limit effective integration of overseas-trained professionals.

Aims:
To explore registration experiences and workplace integration challenges faced by internationally trained pharmacists (ITPs) in New Zealand, with a focus on identifying policy-level barriers and enablers for evidence-based workforce development recommendations.

Methods:
A qualitative descriptive approach utilizing in-depth semi-structured interviews with 24 ITPs who completed registration via Recognised Equivalent Qualification Route (REQR, n=11) and Non-Recognised Equivalent Qualification Route (Non-REQR, n=13) pathways. Data analysis employed systematic thematic coding using NVivo software following Braun and Clarke's methodology.

Findings:
Analysis revealed five primary barrier categories: immigration policy disconnection from professional registration requirements, fragmented multi-agency registration processes, systematic internship placement difficulties, complex healthcare system navigation requirements, and professional workplace integration challenges. Positive facilitators encompassed institutional support mechanisms, successful multicultural workplace integration experiences, and effective organizational diversity policies. Participants consistently recommended coordinated inter-agency approaches, registration pathway simplification, financial barrier reduction strategies, and comprehensive professional support infrastructure development.

Discussion:
Existing policy frameworks significantly impede ITP workforce integration despite critical shortage conditions. Strategic policy interventions emphasizing regulatory coordination, registration process streamlining, and enhanced support mechanisms could substantially improve international pharmacist integration outcomes and contribute meaningfully to addressing New Zealand's healthcare workforce challenges. Findings provide evidence-based recommendations for healthcare workforce policy development, with potential applications across healthcare professional integration initiatives and international workforce development strategies.

P105

The provision of clinical pharmacy services in South Australian Hospitals: a cross-sectional study

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Introduction:
Medication-related problems are the leading cause of patient harm in hospitals. Clinical pharmacy services, including the provision of a medication history and review at admission, inpatient medication assessment, and supporting medication management at discharge, are effective in reducing medication-related problems and harm.

Aims:
This study aimed to evaluate the types, timing, and locations of pharmacy service provision across three South Australian hospitals.

Method:
A retrospective observational study was conducted using de-identified, timestamped data from electronic medical records for all adult inpatients admitted between May and November 2021. Data included the type of clinical pharmacy service provided, day and time of admission and discharge, patient characteristics, and the hospital units to which patients were admitted and from which they were discharged. Descriptive statistics were reported. Chi-square tests of independence were used to assess relationships in service provision across patient groups.

Results:
Of the 21,483 admissions involving 16,939 patients, at least one pharmacy service was provided to 68%, which rose to 77% among patients prescribed regular medications. Admission services were provided in 59% of admissions, of which 43% were provided within 24 hours of admission. Inpatient medication assessment was provided to 21%, and discharge services to 42%.
Weekday admissions were more likely than weekend admissions to have admission services within 24 hours (31% vs 9%, $p<0.001$). Disparities were greatest between Friday admissions and those on other weekdays (15% vs >33%, $p<0.001$), and between Saturday and Sunday admissions (1% vs 19%, $p<0.001$). Similarly, pharmacy discharge services were more likely for weekday discharges than weekend discharges (52% vs 30%, $p<0.001$).

Discussion: Most patients, particularly those on regular medications, received clinical pharmacy services during their hospital stay. However, notable disparities in service provision were evident on Fridays and weekends.

P106

Pharmacist-led metabolic health monitoring for people living with mental illness: the patient and pharmacist experience.

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Introduction:
People living with mental illness have a high prevalence of metabolic syndrome (32.5%). This risk is further compounded by the regular use of second-generation antipsychotics (SGAs). Research on suboptimal metabolic monitoring in this cohort involving pharmacists have mostly been based within tertiary care settings, less is known about the role of community-based pharmacists in addressing this gap.

Aims:
To explore participants' and pharmacists' perspectives and experiences with a community pharmacist-led physical health monitoring service for consumers with mental illness currently taking SGAs.

Methods:
Trained pharmacists provided longitudinal metabolic monitoring and lifestyle advice for individuals living with mental illness and taking SGAs. The service involved three-monthly face-to-face consultations with participants over 12-months.

Semi-structured interviews were conducted with participants and their pharmacists. Interview guides were developed using the RE-AIM framework and data were analysed using reflexive thematic analysis. Participant's satisfaction with the service was measured using the validated Short Assessment of Patient Satisfaction (SAPS) tool.

Results:
Eleven consumers and seven pharmacists participated in the interviews. The study identified three overarching themes, (1) recruitment and participation, (2) feasibility of the service and, (3) participant outcomes. Most participants (62%) either agreed or strongly agreed that the service encouraged them to talk to their doctors about their physical health. The average SAPS was 25.1 (range 19 – 28), indicating a high level of patient satisfaction with the service.

Pharmacists reported that metabolic monitoring within the scope of pharmacy practice and highlighted the need to ensure adequate remuneration to support the sustainability of this service. Challenges include administrative burden associated with follow-up appointments.

Discussion:
Overall, participants and pharmacists perceived the service to be of value, with some highlighting the benefits to their wellbeing. The study design supports the delivery of larger studies that could provide sufficient statistical power to explore the efficacy of the service.

P107

What are the adverse drug withdrawal reactions following deprescribing of cholinesterase inhibitors and/or memantine?

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Introduction:
Cholinesterase inhibitors (ChEIs) and memantine are widely prescribed for dementia, with deprescribing recommended after 12 months if continued treatment is unlikely to provide benefit. However, their discontinuation may lead to adverse drug withdrawal reactions (ADWRs), which remain poorly characterised.

Aims:
To systematically review and evaluate the characteristics of ADWRs following deprescribing of ChEIs and/or memantine.

Methods:
MEDLINE, EMBASE, SCOPUS and COCHRANE were searched up to 25/2/2025. Original studies reporting ≥1 ADWRs following deprescribing of ChEIs and/or memantine in all settings were included. Screening, data extraction and risk of bias assessment were conducted independently in duplicate. A narrative synthesis was conducted.

Results:
Eight studies reporting 10 cases were included. Donepezil-related ADWRs were the most frequently reported (6 cases), followed by memantine (3 cases) and galantamine (1 case). Neuropsychiatric symptoms (e.g. insomnia, agitation, hallucination) were the most commonly reported ADWR symptoms (9 cases). Other symptoms, each reported in a single study, were pyrexia, reduced mobility, paralytic ileus, muscle rigidity (donepezil) and incontinence (memantine). The onset of ADWRs ranged from 2 days to 2 months; onset was shorter with abrupt withdrawal (2 days to 5 weeks; 9 cases) and longer with tapering (2 months; 1 case). ADWR symptoms improved or resolved within 1 day to 4 weeks. In 7 cases the ChEIs or memantine was reinitiated and in 2 cases the symptoms resolved without reinitiation (1 case did not report whether symptoms resolved).

Discussion:
ADWRs following discontinuation of ChEIs and memantine have been reported with neuropsychiatric-related symptoms the most common. The delayed onset of ADWR among the case with tapering, and resolution of symptoms following reinitiation of ChEIs or memantine, highlights the potential role of dose tapering in mitigating ADWRs. Larger, well-designed studies are required to further characterise ADWRs, and to identify optimal tapering strategies that support safe deprescribing.

P108

Exploring policies that support pharmacist-administered long-acting injectable buprenorphine: an Australian and Canadian comparative study

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Introduction:
Patients with opioid use disorder (OUD) face many challenges to accessing effective treatment, including structural stigma, frequent dosing requirements, and patient surveillance. Long-acting injectable buprenorphine (LAIB) is a newer form of opioid agonist therapy with the potential to address some of these barriers. Pharmacists are increasingly involved in administering LAIB in community settings across Australia and Canada, but the nature of policies supporting this administration is unknown.

Aims:
To describe the policies for pharmacist-administered LAIB across two Australian states (New South Wales, Victoria) and four Canadian provinces (Manitoba, Nova Scotia, Ontario, Saskatchewan), and explore the implications for pharmacy professionalism and scope of practice.

Methods:
We conducted a comparative policy analysis using documentary data from national and state/provincial governments and pharmacy professional organisations. Using health systems and professionalism frameworks, data were analysed by creating narrative summaries highlighting governance, financing, resource availability, and the role of professional organisations in supporting pharmacist involvement in OUD treatment delivery.

Results:
Jurisdictions have strengthened resources, including clinical guidance and remuneration, to support pharmacist-administered LAIB. However, the extent to which this facilitates pharmacists' practice varies between and within countries. In Australia, the peak pharmacist professional body developed education resources, providing pharmacists with a recognised and relatively accessible training pathway. Pharmacist remuneration is nationally standardised, but states may offer additional incentives. Across Canadian provinces, there are varying degrees of clinical guidance and remuneration specifically for pharmacists. The training for LAIB delivery is primarily provided by the pharmaceutical sponsor, generating concerns around conflicts of interest.

Discussion:
Given the challenges of both opioid-related harms and health workforce shortages, pharmacist-administered LAIB is an example of expanded scope of practice that addresses a critical health need. Further examination is needed on how pharmacy professionalism, commercial priorities, and political contexts may influence the role of pharmacists in delivering OUD treatment.

P109

Investigating how community pharmacists utilise a patient's discharge medication list

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Introduction:
Care transitions are a vulnerable period for patients, with insufficient handover leading to medication errors and patient harm. Community pharmacies are well-positioned to be involved during this period, however, there is a lack of standardised practice or process. A patient's discharge medication list can enhance community pharmacies' involvement in transitions of care.

Aims:
To understand how community pharmacists utilise a patient's discharge medication list and their perceptions.

Methods:
Cross-sectional study distributing electronic surveys to community pharmacists working in community pharmacies selected by a patient who has recently been discharged from the hospital and was provided a discharge medication list.

Results:
102 community pharmacists agreed to participate in the survey, and 44 (43.1%) responded. From the 39 who saw the list, 27 (73.0%) respondents performed actions with the medication lists, with almost half of them updating their patient's dose administration aid (DAA). Using a 5-point Likert scale, respondents agreed that the medication list provided a good summary of the patients' medication changes whilst in hospital (average rating = 4.6 (SD 0.6), n=36) and that it was easy to follow (average rating = 4.5 (SD 0.5), n=37). Among the 39 respondents, the majority (78.0%) indicated they would like to receive the lists upon discharge from the hospital while 17.1% responded with 'Maybe'. Respondents agreed that the list was accurate and beneficial for their own understanding, however some questioned the relevance of the list for non-DAA patients.

Discussion:
Community pharmacists reported utilising the medication list and found them useful in optimising patient care post-discharge, which was consistent with existing literature. The benefit is most prominent for DAA patients, which could be a rationalisation of the service to maximise resources. More research is needed to improve communication of patients' medicines information on discharge to improve continuity in care.

P110

Tracking stress, job satisfaction and compassion fatigue in early career Australian community pharmacists: A longitudinal study

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Introduction:
Early Career Pharmacists (ECPs) experience higher levels of stress and burnout compared to their more experienced colleagues. Many of these pharmacists began their careers at the height of the COVID-19 pandemic, experiencing heightened demands for immediate services, as well as many rapid changes to legislation and provisions.

Aim:
This study aims to investigate current baseline levels of stress, compassion fatigue and job satisfaction among Australian ECPs, as well as their chosen avenues of managing feelings of stress.

Method:
ECPs were recruited through social media platforms (Facebook and LinkedIn) and through professional and pharmacy banner groups. A QR code linked to an anonymous Qualtrics survey, which collected demographic data, responses to validated questionnaires (PSS-10, JSS, ProQoL Health), and short-answer questions about peer support and stress management. The survey was conducted at three time points: May-July 2023, November 2023- April 2024, and July-September 2024.

Results:
A total of 730 responses were collected from the three surveys. Most pharmacists worked in urban areas (75.2%) and ≥35 hours per week (66.3%). Respondents consistently reported moderate stress levels, with data showing an inverse relationship between PSS-10 scores, age and experience level. ECPs also reported mixed feelings on job satisfaction, valuing collegial relationships but dissatisfied with working conditions. All ProQol Health sub-measures remained within average range. Confiding to colleagues was the preferred stress management strategy. While unfamiliar with formal peer support, many ECPs supported the idea of a dedicated peer support model.

Discussion:
Despite the end of the COVID-19 public health emergency, ECPs continue to report moderate stress levels, potentially influenced by workplace culture and conditions. There is a strong interest in peer support programs, but further research is required to determine their feasibility and effectiveness in this cohort.

P111

A retrospective review of rituximab prescribed for idiopathic nephrotic syndrome at a tertiary children's hospital

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Introduction:
Idiopathic nephrotic syndrome is a common glomerular disease in children, its prevalence being dependent on ethnicity. It is classified as steroid-sensitive or steroid-resistant, based on an initial course of corticosteroids.

Aim:
To examine retrospectively, the use of rituximab under standard clinic conditions in a census sample of children diagnosed with idiopathic nephrotic syndrome and prescribed rituximab at a tertiary children's hospital in Western Australia.

Method:
Data were collected retrospectively from a census sample of hospital patient records between May 2013 and May 2023. Data regarding periods for relapse following each dose, dosing schedules, adverse effects of rituximab treatments and adherence to rituximab monitoring requirements were collected and evaluated.

Results:
The 28 patients enrolled, received 111 doses, usually of 375 or 750 mg/m2 dosages and median (Q1 : Q3) relapse free periods (days) were: 132.5 (15 : 209) for the first dose, 164.5 (61 : 203) for repeated doses however, the last relapse free period was 203.5 (163 : 306) days. There were 23/28 (82.1%) that achieved more than six months remission following an initial or subsequent dose of rituximab. More than half, 16/28 (57.1 %) experienced infusion related events, 10/28 (35.7%) experienced neutropenia and 11/28 (39.3 %) persistent hypogammaglobulinaemia. Tests used to monitor patients before and after rituximab dosing were all recorded when hospitalised, but ranged from 60 to 100% completion when done as outpatients. No serious adverse effects occurred despite many children receiving repeated courses and the wide age range and disease severity of included participants.

Discussion:
This analysis has supported the efficacy of rituximab by inducing more than six month relapse periods in the majority of patients. Further research is required to establish the long-term outcomes of children who received rituximab compared to other steroid-sparing agents.

P112

Interprofessional collaboration with pharmacists in community mental healthcare: a systematic review

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Introduction:
Interprofessional collaboration (IPC) has been shown to optimise patient outcomes within mental healthcare systems. Pharmacists are increasingly being integrated into interdisciplinary healthcare teams globally given their accessibility in primary care. As majority of mental health conditions are managed within the community, it is crucial to explore how IPC involving pharmacists can change patient outcomes within community settings, given that this area is not widely explored.

Aim:
This systematic review aimed to identify, describe, and evaluate IPC interventions involving pharmacists and other healthcare professionals in supporting individuals living with mental illness, and to report on all associated outcomes with the IPC intervention (such as patient reported and clinical outcomes).

Methods:
Studies were eligible if they described an IPC intervention involving pharmacists, reported an outcome as a result of the IPC intervention, and were published in English. Eligible studies were screened with appropriate data extracted for synthesis.

Results:
Thirty-six of the 39 included studies reported improvement in patient outcomes when IPC interventions that included pharmacists were involved, with 15 of those studies reporting on statistically significant improvements in mental health outcomes such as modified Beck Depression Inventory scores. The main mental health conditions included in the studies were depression (n=11), opioid use disorder (n=9), and post-traumatic stress disorder (n=3). Three studies showed no significant differences between intervention and control groups or before/after IPC interventions.

Discussion:
It is evident that pharmacists can play a pivotal role in IPC teams to deliver care to consumers living with mental illness within the community. Future studies should focus on branching out to other severe mental health conditions due to continued fragmented care and allowing for a more holistic approach in improving patient outcomes. In addition, while improvements in patient's clinical outcomes are evident, further consideration into financial analysis is needed for broader implementation.

P113

Bibliometric analysis of knowledge brokers to close evidence-to-practice gaps in healthcare: a role for pharmacists?

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Introduction:
There is an emerging interest in using knowledge brokers to implement clinical practice guidelines. Knowledge brokers are intermediaries who help move knowledge from those who create it (e.g. researchers) to those who use it (e.g. healthcare professionals).

Aims:
The objective was to explore uptake of 'knowledge brokers' by characterising the trends and patterns of use of the term 'knowledge broker' in healthcare.

Methods:
Web of Science, Scopus, MEDLINE, Embase and CINAHL were searched for publications with the term 'knowledge broker' in the title or abstract. Publications which involved a healthcare setting or service, involved healthcare professionals or discussed a health topic were included. Bibliometric analysis was conducted using performance analysis and co-word analysis with network visualisation.

Results:
Overall, 299 publications were included. The term 'knowledge broker' has existed in healthcare since 1994. Almost three-quarters (n=219) of publications were published in the last decade. Only 10 (3%) publications were randomised controlled trials. Keyword analysis revealed emergence of the term in practice settings such as public health, residential aged care, paediatric care and primary care. Keywords in publications included 'knowledge translation' (96 occurrences), 'evidence' (77 occurrences), 'practice' (44 occurrences), 'research' (32 occurrences) and 'implementation' (24 occurrences).

Discussion:
Emergence of the term 'knowledge broker' across a range of practice settings is consistent with awareness of the need for evidence implementation strategies. Innovative workforce models may provide an opportunity for pharmacists to act as knowledge brokers to improve uptake of clinical practice guidelines. There is a need for randomised controlled trial evidence on their effectiveness as an implementation strategy and clear descriptions of knowledge broker-led activities most associated with success.

P114

How accessible are therapeutic opioids in Indonesia: Results from a qualitative study

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Introduction:
Despite its potential benefits for patients, therapeutic opioids continued to be massively under-prescribed in many countries in the Global South, including Indonesia. Few studies had examined factors influencing the low level of opioid-based treatment in the archipelago.

Aims:
To explore regulations, current practice of procurement and management of therapeutic opioids in Indonesia amongst healthcare professionals.

Methods:
Employing qualitative approach, we conducted 84 interviews e.g in healthcare professionals who prescribed, dispensed and delivered opioid-based treatment to patients in Jakarta, Surabaya, Makassar and Denpasar. We also interviewed participants from health professionals organisations and representatives of National Agency for Drug and Food Control. Interviews were conducted from July to December 2024. Data was analysed thematically based on emergent themes from interviews, including themes of procurement and distribution of opioid-based drug. Trainings on data collection and data analysis were provided to team members.

Results:
Lack of availability of opioids-based drugs were found in all study sites though there are regulations to support opioids availability in the country. Only certain pharmaceutical companies have licences from the National Agency for Drug and Food Control to import, produce and distribute Opioids in Indonesia. Pharmacists and staffs monitored stock accuracy in pharmacies on a daily basis. Monthly reports on opioids procurements and used in healthcare facilities is mandatory and the information is sent through application system generated by the Ministry of Health.

Discussion:
There are various factors influencing under prescription of therapeutic opioids in the study sites such as lack of availability as well as cumbersome procurement and reporting requirements that discourage opioid prescription. Strengthening advocacy about the benefits of therapeutic opioids and coordinated efforts to overcome barriers to opioid-based treatment are needed.

P115

Evaluating opioid analgesic prescribing at discharge across five regional public hospitals against national stewardship standards

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Introduction:
Opioid analgesics play a critical role in managing acute pain, particularly in hospital settings. However, inappropriate prescribing at discharge can contribute to opioid misuse, dependence, and harm. In response, the Australian Commission on Safety and Quality in Health Care released the Opioid Analgesic Stewardship in Acute Pain Clinical Care Standard (2022), which includes key indicators to guide safe opioid prescribing.

Aims:
To assess current opioid prescribing practices on discharge from regional public hospitals against the Clinical Care Standard, to facilitate benchmarking and targeted improvement strategies.

Methods:
A retrospective quality assurance audit was conducted across five regional public hospitals. Data were extracted from electronic medical records for patients discharged with opioid analgesics over a month period. The audit measured performance against five discharge-related indicators, focusing on real-time prescription monitoring, formulation type, and duration of supply for opioid analgesics provided to patients at separation from hospital or emergency departments.

Results:
A randomised sample of 250 patients was included in the audit (50 per site). Overall, 21.8% had a Real Time Prescription Monitoring check before discharge, with site rates ranging from 5% to 54.5%. No opioid-naïve surgical patients were discharged with an extended-release formulation. Twenty percent of discharge prescriptions exceeded usage in the previous 24 hours, ranging from 4% to 36% between sites. The audit found 23.1% of patients discharged from ED and 16.7% from inpatient wards exceeded the days of supply recommended in the Clinical Care Standard.

Discussion:
Findings indicate variable compliance across indicators and hospital sites. While formulation type compliance was strong, system-wide and site-specific gaps in opioid stewardship were evident at other discharge points. Site variation highlights opportunities for targeted interventions tailored to local workflows and prescribing cultures. Strengthening adherence to the Clinical Care Standard is essential to promote safer pain management and avoid opioid-related harms for regional patients.

P116

Effect of Renin-Angiotensin System Inhibition on Residual Kidney Function in Peritoneal Dialysis

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Introduction:
Renin-angiotensin system inhibitors (RASIs) are recommended to maintain residual kidney function (RKF) in peritoneal dialysis (PD) patients; however, studies have shown variable impact on RKF.

Aim:
This study aims to assess the effect of RASI on the decline in RKF among patients undergoing PD.

Methods:
This retrospective cohort study included patients receiving PD at a large metropolitan dialysis centre in Australia. Patients were stratified into two groups based on RASI use. RKF was assessed using residual Kt/V and urine volume, defined as the time of RASI initiation for patients on therapy, and the last recorded RKF measurement for patients who discontinued RASI during PD treatment. The primary outcome was the comparison of residual urine volume and residual Kt/V between the two groups.

Results:
231 out of 307 PD patients were included in the analysis after excluding patients who lacked comparative RKF data within the required timeframe. Approximately half (n = 111; 48.1%) were receiving RASI. Patients on RASI were younger than those not on therapy [65 years (IQR 56–74) vs. 72 years (IQR 61–77); p = 0.014]. No significant differences were observed between groups in the decline of residual urine volume (288 mL [IQR 106–802] in RASI users vs. 403 mL [IQR 124–813] in non-users; p = 0.392) or residual Kt/V (0.310 [IQR 0.080–0.730] in RASI users vs. 0.420 [IQR 0.113–0.760] in non-users; p = 0.295). Hospitalisation rates and PD-related infections were also similar between groups.

Discussion:
RASI therapy was not associated with preservation of RKF in patients undergoing PD in this cohort. While previous studies suggested potential renoprotective effects of RASI, our findings align with the recent evidence supporting mixed efficacy in this population. Larger prospective trials are needed to clarify the role of RASI in improving long-term outcomes in PD.

P117

Adverse drug withdrawal reactions following gabapentinoid deprescribing: A systematic review

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Introduction:
Gabapentinoid use is increasing globally; however, not all use is considered appropriate. Lack of evidence and guidance on adverse drug withdrawal reactions (ADWRs) may hinder the implementation of deprescribing in clinical practice.

Aim:
To synthesise evidence on the characteristics, severity, onset, duration, and incidence of ADWRs associated with gabapentinoids.

Methods:
Five databases - MEDLINE, Embase, PsycInfo, Cochrane Library, and Scopus - were searched to 24 February 2025. The review was conducted in accordance with PRISMA guidelines. Reviewers conducted double-screening, data extraction, and quality assessment. A narrative synthesis was performed.

Results:
Of 5,358 records identified, 54 studies met inclusion criteria: 9 randomised controlled trials, 3 uncontrolled pre-post studies, 1 cross sectional study, 1 pharmacovigilance study, 34 case reports, and 6 case series. Behavioural symptoms were the most frequently reported category of ADWRs, particularly agitation, insomnia, and restlessness. Neuropsychiatric/cognitive, autonomic/physical, neurological/sensory, and gastrointestinal symptoms were also reported. Most reactions were mild to moderate, although severe outcomes such as status epilepticus, suicide attempts, and ICU admissions were identified in 4 patients. The onset and duration of ADWRs varied considerably, ranging from immediate occurrence and resolution following deprescribing, to delayed onset (2 months post-deprescribing) and prolonged duration (>6 months). Nine RCTs reported the incidence of gabapentinoid ADWRs ranging from 0-47%. Twenty-eight studies involved abrupt discontinuation, 23 gradual tapering, 2 studies both, and 1 study did not specify.

Discussion:
There was variability in the presentation and incidence of gabapentinoid ADWRs. Much of the available evidence was derived from case reports and series, limiting the generalisability of findings. Further high-quality research is needed to examine the impact of gabapentinoid type, dose, treatment duration, and deprescribing strategies, to inform tapering guidelines and management approaches that reduce withdrawal-related harms.

P118

Systematic review of digital health interventions for medication adherence among older people

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Introduction:
Medication nonadherence is prevalent among older people, and timely and targeted interventions are a major healthcare priority. Digital health interventions (DHIs) offer promising solutions to support medication adherence.

Aims:
To review evidence on the effect of DHIs on medication adherence among older people.

Methods:
Articles were searched from inception to May 2025 in PubMed, Embase, CINAHL, Scopus and Web of Science. Studies were included if they met the following criteria: older people aged ≥65 years; applying any type of DHI(s); compared the intervention with comparator group or before and after the study; medication adherence as an outcome; randomised and non-randomised study designs. Risk of bias was evaluated using the Cochrane risk of bias tools.

Result:
A total of 36 articles were included, including 22 randomised control trials, four quasi experimental design, and three pre-post study designs. Interventions were mostly telephone calls (n=10), mobile applications (n=5), text message (n=4), electronic reminder devices (n=2) and web-based applications (n=2). Additionally, three studies combined two or more DHIs, and seven integrated DHIs with non-digital ones. Of articles that reported effects of size estimates (26/36), half (n=13) showed that the intervention significantly improved medication adherence compared to the control or baseline. Four additional studies favoured the intervention without quantifying effect size. Mobile applications (3/5), robot (1/1), telemonitoring (1/1) and combined DHIs (2/3) showed effectiveness, with reminding or prompting, education and information, monitoring or mixed functionalities being successful strategies. However, results were mixed for telephone-based interventions.

Discussion:
Despite heterogeneity of DHIs and medication adherence measures, this systematic review highlights the potential of DHIs in improving medication adherence through different strategies to older people.

P119

Discharge interventions and their cultural adaptations for First Nations peoples: a systematic review

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Introduction:
Inadequate discharge planning is a key safety issue that increases the risk of patient harm when transitioning from hospital to the community. For First Nations peoples, the risk of negative outcomes at these transitions may be inflated due to a lack of culturally safe healthcare. Evidence-based, culturally safe transition of care frameworks have yet to be established for First Nations peoples.

Aim:
Identify the existing discharge interventions implemented for First Nations peoples and summarise their cultural safety adaptations.

Methods:
A systematic search of databases such as Medline, Embase and Scopus was conducted following the PRISMA guidelines. Studies were included if they were primary research that included First Nations peoples in any country, had an intervention implemented in relation to discharge from hospital, and evaluated patient outcomes after discharge in a quantitative manner.

Results:
A total of 3,320 titles and abstracts against the selection criteria; eight of these studies were included in this review. Five of the intervention components were also considered cultural adaptations: facilitation of connection to community services, inclusion of a First Nations health worker, initiation of staff cultural training, holistic frameworks and culturally sensitive education resources. Two interventions weren't directly cultural adaptations: health and risk screening, and multidisciplinary discharge planning. Two additional cultural safety components identified were the use of cultural imagery, native language and First Nations authorship. Positive outcomes were reported for the rate of adverse events post-discharge, connection to primary care providers, and satisfaction of patients.

Discussion:
This review supports the implementation of discharge interventions that are culturally adapted to inform safe communication and address cultural and social determinants to health that affect First Nations patients' outcomes after discharge. Further controlled primary studies are required to inform evidence-based discharge interventions for First Nations peoples.

P120

Collaborative Prescribing: an intervention-control trial of a team-based pharmacy model, including partnered physician-pharmacist prescribing in general medicine

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Background:
Shifting pharmacy from a reactive to proactive model of care, via team-based care and/or partnered prescribing, has demonstrated a reduction in medication errors, length of stay and hospital costs, particularly when targeting general medical patients at admission to hospital.

Aim:
To evaluate the impact of a pharmacist-physician partnered prescribing model across the general medical patient's entire hospitalisation.

Methods:
The pharmacist-physician partnered prescribing model, Collaborative Optimisation and Ordering of Medications (COOM), involved one pharmacist working collaboratively with one general medical team, at key prescribing moments across the patient's inpatient hospitalisation. COOM was compared to usual care in a prospective, multisite, unblinded, intervention-control trial, in two metropolitan hospitals with an electronic medicine system. Pharmacists and physicians completed informed consent and a waiver of consent was obtained to access patient data. Patients were recruited to COOM or usual care based on their admission to a participating medical team during the 3-month trial. Data was collected on prescribing errors, clinical significance of errors, deprescribing, and implementation metrics informed by the RE-AIM framework.

Results:
In Jul-Oct 2023, 820 patients received care from a trial medical team. COOM was associated with a reduction in the proportion of patients with at least one prescribing error: by 21% at 24 hours from admission, by 40% at discharge, and by 19% for high or extreme risk errors at discharge. COOM had a 13% increase in the proportion of patients with medications ceased during admission. Surveys from doctors, pharmacists and nurses indicated they were satisfied with COOM and would like it translated into everyday practice.

Discussion:
This trial builds on the expanding evidence for transitioning to more proactive pharmacy models of care and the expansion of pharmacist-physician partnered prescribing across the entire continuum of patients' hospital care. Findings from this study will also support translation of research into practice.

P121

From shortage to substitution: Assessing the effectiveness of Serious Scarcity Substitution Instruments in Australia

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Introduction
Medicine shortages are an ongoing challenge to healthcare delivery. Since 2021, the Therapeutic Goods Administration (TGA) has enabled pharmacists to substitute scarce medicines using Serious Scarcity Substitution Instruments (SSSIs). Despite their widespread implementation, the real-world effectiveness of SSSIs in maintaining access to medicines has not been evaluated.

Aims
This study aimed to assess whether SSSIs are effective in mitigating the impact of medicine shortages in Australia.

Methods
A retrospective cohort study was conducted using Pharmaceutical Benefits Scheme (PBS) date of supply data for medicines with an SSSI issued and at least 11 months of post-implementation follow-up. The primary outcome was the percentage change in defined daily dose per 1,000 population per day (DDD/1000/day) in the 11 months after SSSI implementation compared with the two years prior. A reduction of less than 20% in total medicine use at the product level was considered indicative of successful mitigation.

Results
Among 12 medicines with SSSIs, 8 (amoxicillin, cefalexin, estradiol, fluoxetine, insulin degludec with insulin aspart, isosorbide mononitrate, vigabatrin, and warfarin) had reductions of less than 20%, indicating successful substitution. SSSIs were less effective when substitute products were also scarce. For example, dispensings of cefaclor and its substitutes dropped by 68%, while abatacept and its substitutes dropped by 22%.

Discussion
SSSIs appear to be an effective regulatory tool to mitigate medicine shortages and maintain patient access to treatment. However, their effectiveness is reduced when permitted substitutes are also in shortage. Future scarcity responses should incorporate strategies to ensure substitute availability to maximise the impact of this regulatory mechanism.

P122

Exploring medication-related decision making for people with dementia: A systematic review of discrete choice experiments

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Introduction:
Dementia is a progressive neurodegenerative condition that impairs memory, cognition, and decision-making capacity. Understanding treatment preferences can help tailor medication decisions to what matters most to people living with dementia (PLwD) and their caregivers. Discrete choice experiments (DCEs) are a methodology used to elicit and quantify individual preferences.

Aims:
This systematic review aimed to synthesise DCEs that assess medication-related decision making for PLwD.

Methods:
Five databases (MEDLINE, Embase, PsycInfo, CINAHL Complete, and Scopus) were searched to 12 May 2025 for studies using DCE or best-worst scaling (a form of DCE) to elicit medication preferences from PLwD, caregivers, clinicians or the public. Pairs of reviewers screened, extracted, synthesised data and appraised the quality of included studies.

Results:
A total of 2,209 records were identified through database searches. Following title and abstract and full text screening, five studies were included. Only one study involved DCEs administered directly to PLwD, whereas the remaining four studies involved members of the general population, caregivers, or healthcare professionals. PLwD preferred reduced pill burden and simpler dosing. The general population and caregivers were willing to trade-off significant adverse effects, such as stroke, for the preservation of cognitive function and had a preference for quicker clinical benefits, whereas clinicians weighed multifaceted benefits vs risk considerations. All five studies included attributes capturing dementia-related clinical progression and associated clinical risks. Only one study included cost as an attribute.

Discussion:
Findings reveal divergent medication-related preferences among people living with dementia (PLwD), caregivers, public and clinicians, underscoring potential complexities in shared decision-making. Future DCEs should prioritise inclusion of PLwD, consider standardised best-practice DCE design, and include attributes such as cost that better reflect real-world trade-offs.

P123

Artificial intelligence-enabled digital interventions for medication Adherence in kidney and related conditions: An umbrella review

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Background.
Chronic kidney disease (CKD) is a major global health challenge, often driven by comorbidities such as diabetes, obesity, and hypertension. Effective management requires lifestyle modification, pharmacological therapy, and dose adjustments as kidney function declines. With CKD projected to become the fifth leading cause of death by 2050, this review examines AI-enabled digital interventions aimed at improving medication and lifestyle adherence.

Methods:
A comprehensive search across 6 databases yielded 1966 records. After screening and eligibility assessment, 15 reviews were included. Studies were excluded for reasons such as wrong outcomes, study design, or intervention type.

Results. Searches across six databases identified 1,966 records; 15 reviews met inclusion criteria after screening. Included reviews reported diverse AI-driven strategies, such as pharmacist-led mobile apps, AI systems detecting adherence gaps, automated reminders, and digital therapeutics supporting behavioural and pharmacological adherence. Most reviews indicated improved adherence, though lack of baseline data limited effect size estimation. Ethical concerns and limited AI literacy among patients and providers were common barriers.

Conclusion. AI-enabled digital interventions appear promising for improving adherence in CKD and related conditions. Future research should address ethical issues, enhance stakeholder engagement, and establish robust comparative outcomes. Pharmacist-led, AI-integrated models may offer scalable solutions for chronic disease management.

P124

Beliefs about osteoporosis medicines and influence on adherence among patients living with osteoporosis, polypharmacy and taking fall-risk drugs

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Introduction:
The Safer Medicines To reduce Falls and refracture for Osteoporosis (#STOP) evaluates the impact of Home Medicines Review on reducing exposure to fall-risk increasing drugs (FRIDs) and supporting adherence to osteoporosis medicines.

Aim:
To investigate beliefs about osteoporosis medicines and whether that influences medication adherence.

Methods:
Community-dwelling participants living with osteoporosis aged ≥ 50 years, taking ≥ five medicines including FRID were recruited. Participants completed Beliefs about Medicines Questionnaire (BMQ) and Medication Adherence Reporting scale (MARS-5) regarding osteoporosis medicines. Descriptive statistics, univariate associations, and multivariate regression analyses were performed.

Results:
A total of 284 participants (75.5 % female) were included. Higher necessity beliefs were univariately associated with a documented diagnosis of osteoporosis/osteopenia ($p= 0.028$) and a higher number of fractures since the age of 50, along with indicators of overall morbidity including number of comorbid conditions ($p =0.004$) and higher number of medicines consumed ($p < 0.001$). In multivariate regression with bootstrapping, necessity beliefs were predicted by the number of medicines consumed ($\beta = 0.151$, 95% CI, 0.045 - 0.262) and the number of fractures since age 50 ($\beta = 0.142$, 95% CI, 0.001–0.239). Higher specific concerns were univariately associated with lower socioeconomic status ($p =0.009$) and a higher number of medicines consumed ($p =0.036$). In multivariate regression, specific concerns was predicted by socioeconomic status ($\beta=-0.001$, 95% CI, -0.002 to 0.000) only. No significant associations were found between BMQ subscales and MARS-5 score.

Discussion:
The findings suggest that patients who are aware of their condition through documented diagnosis and fracture are more likely to believe that anti-osteoporotic medicine is necessary to prevent future fractures. Patients taking higher number of medicines are more likely to hold higher necessity and concern beliefs. The lack of association between beliefs and self-reported adherence highlights the need for objective measures of adherence.

P125

Scoping review of tools and methods used to measure and simplify complex medication regimens in older adults

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Introduction:
Older adults are a clinically vulnerable group with a high prevalence of multimorbidity and polypharmacy. Medication regimen complexity (MRC) often accompanies polypharmacy and has been associated with hospitalisation, adverse drug events and treatment burden. Various tools and measures have been developed to measure MRC or guide medication simplification for older adults.

Aims:
To identify and describe tools to measure MRC and methods used to simplify medication regimens in older adults.

Methods:
Scoping review with a systematic search in three databases conducted from inception to 2nd April 2025. Inclusion criteria: original studies describing the development and/or validation of tools to measure MRC and/or methods of medication regimen simplification. Two authors independently screened abstracts, full texts and extracted data. References of retrieved articles were scanned to identify relevant papers. Study characteristics and psychometric measures (e.g., validity) were extracted.

Results:
Of 2053 studies screened, 48 were included for analysis (measures of complexity (n=19)) and methods of simplification (n=29)). Preliminary results identified 18 distinct tools as measures of complexity in older adults. Core measures of complexity were consistent across MRC tools (e.g. medication count), however more nuanced features were underrepresented (e.g. “splitting or crushing tablet/capsules”). Only 12 (67%) reported psychometric testing. Of the eighteen MRC tools identified, 6 (33%) were cross-cultural adaptations of the Medication Regimen Complexity Index. Twenty-two methods of simplification were identified and grouped into eleven categories. Only one simplification tool, the Medication Regimen Simplification Guide for Residential Aged CarE (MRSGRACE) had undergone psychometric evaluation. Most simplification methods involved pharmacist-led interventions (n=12), multidisciplinary collaboration (n=6) and the use of combination therapies (n=3).

Discussion:
This review identified multiple tools and methods to measure or simplify MRC. Future research could evaluate whether the use of MRC tools as an intervention could impact clinical outcomes. Future tools could also incorporate a more person-centred focus.

P126

Impact of HIV Pre-exposure prophylaxis shortages in Australia

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The PBS is a government-funded program that subsidizes the cost of the prescription medicines to ensure affordable access for all Australians. Antiretroviral therapy (ART) as pre-exposure prophylaxis (PrEP) and HIV treatment are both PBS-listed and can be prescribed by specialists, and sexual health clinics.

The PBS plays a critical role in Australia's public health strategy, contributing to high PrEP and treatment uptake and low rates of HIV transmission. Tenofovir with emtricitabine has been PBS subsidized for PrEP since 1st April 2018, and there has been strong uptake amongst men who have sex with men who may be at risk of HIV infection.

Approximately 27,000 Australians at risk of HIV infection were receiving PrEP in 2023, used either continuously or on demand. Tenofovir disoproxil (one of the medicines in PrEP) is available in three different salt forms on the PBS: succinate, maleate and fumarate. The salt form of tenofovir disoproxil changes the solubility, stability and bioavailability of the formulation. Alternative salt forms have been developed by pharmaceutical companies to optimise tenofovir disoproxil absorption and stability of their specific formulation. The different salt forms are not considered interchangeable on the PBS.

In 2023-2024, Australia faced significant shortages of tenofovir with emtricitabine (used as both prevention and treatment of HIV), potentially affecting access to therapy. During the time of the shortages, Australia's national medicines regulator, TGA approved an overseas registered product to facilitate continued access to PrEP. Under this arrangement, referred to as Section 19A (S19A) supply, tenofovir disoproxil fumarate with emtricitabine 300mg/200mg tablets could be imported and supplied in Australia from October 2024.

P127

Trends in use of direct-acting antivirals for treatment of Hepatitis C viral infection in Australia 2016 to 2024

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Hepatitis C virus (HCV) of the Flavivirus family, is an infectious blood-borne virus that targets the liver. HCV can be transmitted by sharing injecting equipment, unsterile equipment for medical procedures, tattooing, piercing, and sharing personal hygiene devices such as toothbrushes.

Signs and symptoms of HCV include fatigue, body aches and pain, fever, mood changes, feeling sick in the stomach or less hungry, rashes, diabetes, and jaundice. If HCV remains in the liver for more than six months, it becomes chronic Hepatitis C. Chronic Hepatitis C develops in 75-85% of cases and, in 2023, more than 68,890 people in Australia had chronic hepatitis C however they were often asymptomatic.

Without treatment, HCV can cause progressive liver fibrosis contributing to liver failure, cirrhosis, and hepatocellular carcinoma. Early treatment is important as it promotes better response to antiviral therapy and, if a person has cirrhosis, early treatment can help prevent decompensation, lessen risk of liver cancer and improve long-term survival and quality of life. The goal of HCV treatment with DAAs is to achieve sustained virological response such that HCV is unable to be detected in the blood 12 weeks after completing a course of treatment.

DAAs were first subsidised on Australia's national medicine formulary, the Pharmaceutical Benefits Scheme (PBS) in March 2016. The PBS-listing of DAAs coincided with Australia adopting the World Health Organisation's (WHO) target of eliminating HCV by 2030. In the first year of DAA availability alone, 43,360 of the 230,000 Australians living with HCV (19%) HCV initiated DAA treatment. Between 2016 and the end of 2020, 88,790 people received treatment for HCV. The initial DAAs listed on the PBS in 2016 were oral products; however, patients were required to have specific HCV genotypes to be eligible for PBS subsidised DAAs
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P128

Scoping Review of Large Language Models in Adverse Drug Events Extraction: The Case of Transformer-based Language Models

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Introduction:
Extracting adverse drug events (ADEs) from unstructured clinical and public text data can enhance pharmacovigilance and improve medication safety but remains a challenging task. Transformer-based Large Language Models (LLMs) have shown promise for automatic ADE extraction due to their natural language understanding capabilities. However, a comprehensive synthesis of this research landscape remains limited despite increasing interest from the research community.

Aims:
This scoping review examined the current state of research regarding the application of transformer-based language models in ADE extraction, encompassing existing challenges and limitations relevant to stakeholders in pharmacovigilance and medical LLM research.

Methods:
The review was conducted following the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR). A comprehensive literature search was conducted across seven electronic databases, including two databases specifically for conference papers and preprints, covering the period from January 1, 2020, to April 11, 2025.

Results:
Thirty-nine studies met the inclusion criteria. Over half (20/39, 51%) focused on refining BERT (Bidirectional Encoder Representations from Transformers) family encoders, followed by decoder-based models (15/39, 38%) for ADE extraction. Only 23% utilized domain-specific models. Full fine-tuning with encoder-based models was the dominant approach (24/39, 61.5%). Encoder-based models were optimal for precise entity recognition in clinical electronic health records, while decoder and encoder-decoder models were advantageous for public health surveillance involving social media and patient reports. Dataset Bias and Domain-Specific Overfitting, model limitations, computational constraints, and generalizability issues were identified as key barriers to LLM-based ADE extraction.

Discussion:
While LLMs demonstrate promise for ADE extraction, challenges persist regarding annotated clinical data availability, computational demands, and privacy concerns. Future research should focus on developing parameter-efficient modelling approaches, creating comprehensive domain-specific datasets, and employing specialized biomedical models to enhance accuracy.

P129

Views, barriers and facilitators of primary care physicians regarding advance care planning implementation

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Introduction:
Advance care planning (ACP) is neither legislated nor widely discussed among community-dwelling adults. Primary care physicians (PCPs) are ideally positioned to implement ACP but often refrain from initiating conversations for fear of destroying hope and due to lack of experience. Although older adults may not have heard of the term "advance care planning", they are receptive to its concept. There is a lack of studies exploring barriers and facilitators of ACP implementation among PCPs in developing countries.

Aims:
To explore the views, barriers, and facilitators of ACP implementation among PCPs.

Methods:
Focus group discussions and in-depth interviews were conducted among PCPs. Convenience sampling was used to recruit participants with diverse backgrounds until data saturation was achieved. This study was guided by the Implementation Outcome Model. Written informed consent was obtained. All interviews were audio recorded, transcribed verbatim, and analysed using thematic analysis.

Results:
Thirteen and two PCPs participated in the focus group discussions and in-depth interviews (IDIs); respectively. Data saturation was achieved at the third focus group. Two further IDIs were conducted to ensure that there were no new emerging themes. Median age of participants was 33 years. PCPs from major ethnicities and religions were included. Four themes emerged that concurred with the implementation outcomes model: acceptance towards ACP, appropriateness of ACP, feasibility of implementing ACP in clinical practice, and uptake of ACP. PCPs perceived patients' knowledge regarding ACP as low. They cited lack of guidelines for ACP implementation in clinical practice. During typical consultations, PCPs viewed ACP as lower priority compared to managing clinical conditions. However, they believed there was a role for them regarding ACP and wanted more training to increase competency.

Discussion:
Factors influencing ACP implementation depend on acceptance and willingness of PCPs. Efforts should be made to strengthen its relevance, delivery, and overall adoption.

P130

Advancing personalised prescribing through clinical integration of dihydropyrimidine dehydrogenase (DPYD) genotype testing services in a tertiary hospital

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Introduction:
Dihydropyrimidine dehydrogenase (DPYD) genotype screening for targeted variants prior to fluoropyrimidine treatment represents a critical advancement in personalised chemotherapy. Despite availability of pre-emptive genetic testing to identify individuals with dihydropyrimidine dehydrogenase (DPD) enzyme deficiency, clinical implementation remains limited within Australia.

Aims:
To evaluate integration of a pre-emptive DPYD genotyping service in real-world clinical practice, including utility of DPYD genotype-based fluoropyrimidine dosing strategies and impact on short-term patient clinical outcomes.

Methods:
Targeted DPYD genotype testing was implemented in a tertiary hospital, from which service and short-term patient outcomes were examined. Data collected included administered fluoropyrimidine doses, treatment-related toxicity, patient and disease characteristics. Toxicity was assessed using the Common Terminology Criteria for Adverse Events, Version 5.0. Clinical dosing of fluoropyrimidines was evaluated against recommendations from the Clinical Pharmacogenetics Implementation Consortium (CPIC) guideline.

Results:
Between 1 June 2022 and 31 December 2023, a total of 225 patients were screened, of whom 20 (8.89%) patients were DPYD variant carriers. Of the 20 patients, 19 were heterozygous carriers and received fluoropyrimidine chemotherapy; one patient was a homozygous c.1236G>A/HapB3 carrier and received alternate treatment. Initial (Cycle 1) dose reductions were reported in 17/19 variant carriers; however, significant variation in dose intensities was observed. Most variant carriers did not experience Grade ≥3 toxicity. No Grade 5 toxicity was reported.

Discussion:
The clinical integration of DPYD genotype-based dosing to personalise fluoropyrimidine chemotherapy was successful. However, given the heterogeneity in dosing requirements, additional strategies such as expanded DPYD genotyping and/or quantification of fluoropyrimidine exposure may be required to comprehensively inform personalised dosing for fluoropyrimidines.

P131

Paediatric poisoning from extemporaneously compounded medicines in community pharmacies

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Introduction:
Extemporaneously compounded medicines are widely used in paediatric patients. However, the associated extent and nature of adverse events from these products remained unclear.

Aims:
To summarise the characteristics of adverse events reported from the use of compounded medicines in children and determine the types of adverse events, medications most frequently involved, and reasons for medication errors.

Methods:
A search was performed in Medline via Ovid, CINAHL, Embase, Scopus and the ISMP Canada Safety Bulletins to identify studies that described adverse drug events associated with community pharmacy compounded medicines. There were no restrictions based on country or publication date. Two authors independently screened titles, abstracts, and full texts of studies of the studies found and extracted data with a standardised extraction table. Information extracted included study characteristics, details regarding the compounded medicine and clinical characteristics.

Results:
We identified 38 cases across 25 studies. There were 31 cases of compounding errors, 5 cases of administration errors, 1 case of dispensing error and 1 case with unspecified errors. The most common compounding error types were incorrect concentration in the formulation, substitution or addition of an active ingredient that was not prescribed. The most commonly reported medicines were clonidine (n = 7) and flecainide (n = 5). The median age of children involved was 2 years (IQR 0.9 – 5.5 years). Two deaths were reported, following exposures to baclofen and tacrolimus.

Discussion:
This review highlights the importance of thoroughly verifying active ingredients and their concentrations when compounding paediatric formulations in community pharmacies.

P132

Prevalence of mental illness and psychotropic medications in South Australian prisons

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Prison healthcare faces major challenges in improving the health of People In Custody (PIC) due to mental illness and its treatment. This study aimed to estimate the prevalence of mental illness and the prescription of psychotropic drugs in South Australian Prisons. 250 medical notes of people who had been in custody at one of South Australia's prisons in the previous 12 months were surveyed for their diagnoses and medications. 61 % of PIC (95 % CI: 55 – 67 %) were diagnosed with at least one mental illness at discharge.

The prevalence of depressive disorders, anxiety disorders and schizophrenia spectrum or other psychotic disorder was 36 % (95 % CI: 30 – 42 %), 33 % (95 % CI: 28 – 39 %) and 17 % (95 % CI: 13 – 22 %) respectively. 44 % (95 % CI: 38 – 50 %) of PIC were prescribed at least one psychotropic medication at discharge. 32 % (95 % CI: 27 – 38 %) were prescribed regular antidepressants. Of the antidepressants, mirtazapine was the most prescribed medication. 18 % (95 % CI: 13 – 23 %) were prescribed regular antipsychotics. Of the antipsychotics prescribed, olanzapine was the most prescribed medication. During the PICs time in custody, weight increased, but blood glucose levels and diastolic blood pressure tended to decrease.

The prevalence of mental illness in prisons is significantly greater in prison populations than in the community and hence there is more widespread prescribing of psychotropic medications. Of concern is the sedating and metabolic consequences of some of the most prescribed medications such as olanzapine and mirtazapine in this population.

P133

Barriers to the prescription of opioid-based drugs among health professionals in Makassar, Indonesia: A qualitative study

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Introduction:
Opioid-based drugs continue to be significantly under-prescribed in many countries in the Global South, including Indonesia.

Aims:
The study aims to explore barriers to therapeutic opioid among health professionals in Makassar, a city in eastern Indonesia.

Methods:
Employing qualitative approach, we conducted 18 interviews with various healthcare professionals who are involved in opioid-based treatment to patients in Makassar and with representatives of health professionals' organisations. Interviews were conducted from July to December 2024. Data was analysed thematically based on emergent themes from interviews. Training on data collection and data analysis was provided to team members.

Results:
There is a lack of availability of opioids-based drugs though there are regulations to support opioids availability in the country. There are variations related to drugs availability in which larger hospitals generally have higher drugs supply and availability. Only certain specialities are allowed and more frequently prescribe certain types of opioid-based drugs such as anaesthesiologists for pain management and oncologists for cancer patients. This study also found that anaesthesiologists usually prescribed pethidine and morphine injections before surgery, meanwhile MST, fentanyl and codeine were more commonly prescribed by oncologists for cancer patients. Opioid based drugs continued to be under-prescribed since most physicians employ multimodal pain management and opioid-based drugs perceived as the last resort. Moreover, some reported hesitance to prescribe opioid-based drugs is due to lack of familiarity, lack of training, and fear of unexpected adverse drugs reactions.

Discussion:
There are various barriers influencing underutilisation of opioid-based drugs e.g. lack of availability, lack of capacity of health professionals to manage therapeutic opioids and views that opioid-based drugs as the last resort. Improving opioid-based drugs availability, strengthening capacity of health professionals and enhancing advocacy about the benefits of therapeutic opioids as well as coordinated efforts to overcome barriers to opioid-based treatment are needed.

P134

Polypharmacy prevalence in community-dwelling older adults: A scoping review across low- and middle-income Indo-Pacific countries, 2019-2025

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Introduction:
Polypharmacy is associated with various adverse health outcomes and is particularly prevalent among older adults. Despite Asia having the fastest-growing ageing population, data on polypharmacy in the Indo-Pacific region remain limited.

Aims:
To investigate the point prevalence of polypharmacy in community-dwelling older adults across low- and middle-income countries (LMICs) in the Indo-Pacific region, using studies published from 2019 to 2025.

Methods:
A scoping review was conducted using MEDLINE, PubMed, Scopus, and CINAHL for studies published between January 2019 and March 2025. Eligible studies were published in English and met the following criteria: (1) clear quantitative definition of polypharmacy; (2) reported or extractable prevalence data; (3) conducted in community or primary care settings; and (4) participants aged ≥60. Quality assessment was also performed using the JBI Checklist for Prevalence Studies.

Results:
Nineteen studies were included from four of 33 LMICs: India (n=6), Malaysia (n=6), Vietnam (n=4), and Thailand (n=3). Identified studies spanning 2019 to 2025, with most published prior to 2022. No studies were identified from other low-income countries. Reported prevalence ranged from 4.1% to 65%, with median rates highest in Malaysia (43.6%), followed by Thailand (40.4%), India (35.2%), and Vietnam (14.1%). Studies applied varying definitions of polypharmacy, with ≥5 medications being the most used threshold.

Discussion:
It is challenging to establish current polypharmacy rates due to limited post-2022 data. Inconsistent definitions of polypharmacy likely contribute to substantial variability in reported prevalence and complicate direct comparisons across studies. Nevertheless, findings indicate a high overall prevalence, particularly in Malaysia, with nearly half of older adults in the community having polypharmacy. Polypharmacy prevalence appears to correlate with national economic development. Given the rapidly aging population in the Indo-Pacific region, where efforts have been largely focused on improving medication access, it may now be important to prioritise strategies to prevent a polypharmacy pandemic.

P135

The influence of beliefs and health literacy on medication use among older Koreans living in Australia

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Introduction:
Koreans represent a small but growing ethnic community in Australia. However, little is known about how beliefs and health literacy affect the medication use of older Korean adults living in Australia. This study explored the associations between beliefs, health literacy, and medication use behaviours in this population.

Aims:
This study aims to investigate the associations between beliefs, health literacy, and medication use among older Korean adults living in Australia.

Methods:
Older Korean adults living in metropolitan Melbourne were recruited via bilingual outreach. Validated tools used included the SEAMS, BMQ, rPATD, and HLQ. Pearson correlation analyses were conducted to assess the associations between variables, including polypharmacy, and potentially inappropriate medications (PIMs).

Key findings:
This observational study included 30 older Korean adults (mean age=70 ± 3.3 years). SEAMS scores were low (M=20.5, SD=6.5), indicating limited self-efficacy. Higher self-efficacy for medication adherence (SEAMS) was strongly associated with better health literacy, particularly feeling understood and supported by healthcare providers ($r=0.638$, $p<0.001$) and understanding health information ($r=0.630$, $p<0.001$). BMQ overuse correlated negatively with SEAMS ($r=–0.553$, $p=0.002$), and positively with polypharmacy ($r=0.420$, $p=0.026$), while harm beliefs were linked to PIM use ($r = 0.479$, $p=0.010$). Polypharmacy was linked with both greater concern ($r = 0.433$, $p=0.022$) and stronger perceived necessity ($r=0.622$, $p<0.001$) for medications. Across HLQ scales, higher literacy was consistently linked to greater self-efficacy for medication adherence and lower polypharmacy and PIM use, with appraisal of health information ($r=–0.679$, $p<0.001$) and active engagement with healthcare providers ($r = –0.519$, $p = 0.006$) showing the strongest negative associations with medication burden.

Conclusions:
Medication beliefs and health literacy showed a significant relationship with medication use (adherence, polypharmacy, and PIM). Culturally tailored strategies are needed to enhance medication safety and support among older Korean adults in Australia.

P136

Medical Opioid Consumption in Indonesia: Examination of Contributing Factors

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This study investigated the factors influencing medical opioid consumption in Indonesia, specifically focusing on regulatory frameworks, healthcare provider perceptions, and systemic barriers. Using a mixed-methods approach, the research involved a secondary analysis of opioid consumption data and a survey of various stakeholders.

The findings indicate that Indonesia's low opioid consumption is driven by a combination of stringent regulations, systemic inefficiencies, and a shortage of specialized doctors. Despite recognizing the clinical value of opioids, healthcare professionals often underprescribe them due to concerns about misuse. The issue is exacerbated by a state-controlled market monopoly and recurring nationwide stockouts, which severely harm patients by disrupting their treatment.

To improve pain management in Indonesia, this study recommends harmonizing regulatory frameworks, enhancing provider education, and addressing the monopolized market to ensure consistent access to these essential medications without increasing dependency risks.

P137

Indonesian community pharmacies' self-care facilitation for international travellers: A needs assessment

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Introduction:
Community pharmacies are often international travellers' first stop for self-care. Assessing the needs of community pharmacies in a non-English speaking tourist destination like Indonesia is essential to help improve quality service provisions for international travellers who have culturally and linguistically diverse backgrounds.

Aims:
This study aims to assess the needs supporting the readiness of Indonesian community pharmacies to facilitate self-care for international travellers.

Methods:
This study uses a qualitative needs assessment with a gap analysis. Two-wave online individual interviews were conducted in May-June 2023 and March-June 2025. Purposively approached participants were community pharmacy staff (pharmacists and technicians) and stakeholders, including academics, professional organisation representatives, policymakers, travel health practitioners and tourism operators. Three verbatim transcripts were initially open-coded by two researchers independently, followed by a code clustering consensus and an axial coding. Coded texts were used to identify the current and desired performance before gap analysis. The gaps equate the needs.

Results:
The study included 15 community pharmacy staff (10 females) and 11 stakeholders (4 females) from nine Indonesian cities. The preliminary results showed 23 gaps. Some of them included commitment of pharmacists to stand by, improvement of language and communication skills, expansion of existing or creation of new self-care promotion programs targeting travellers, network establishment with tourism operators, identification of the supply chain's bottleneck, and formalisation of travel health pharmacy service.

Discussion:
Despite the absence of formal recognition, self-care facilitation has been a regular service of community pharmacies in popular tourist destinations, with more support needed for those in non-popular destinations. Support from multiple stakeholders, including business management, professional organisations, academia, and multisectoral government agencies, is required to address the gaps and improve community pharmacy readiness. Further studies are needed to prioritise the gaps and determine the causal factors.

P138

Integrated Surveillance of Lisdexamfetamine Use: Insights from Dispensing and Wastewater Data

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Introduction
Lisdexamfetamine is a long-acting stimulant used for the treatment of Attention-Deficit Hyperactivity Disorder (ADHD). Since late 2023, Australia has experienced sustained shortages of this medicine, raising concerns about treatment continuity, potential misuse, and impacts on patient wellbeing.

Aims
This study aimed to assess the population-level impact of lisdexamfetamine shortages using integrated data from prescription dispensing and wastewater-based epidemiology (WBE).

Methods
Monthly Pharmaceutical Benefits Scheme (PBS) dispensing data for lisdexamfetamine and dexamfetamine from February 2022 to December 2024 were analysed and converted to defined daily doses (DDD) per 1,000 population in South Australia (SA) and Western Australia (WA). In parallel, bimonthly wastewater samples were collected from major metropolitan sites in both states. Amfetamine concentrations were quantified using liquid chromatography–mass spectrometry, and consumption estimates were population-normalised. Wastewater trends were then compared with dispensing trends to assess the impact of medicine shortages.

Results
Both SA and WA showed increases in stimulant dispensing over the study period, with DDD/1,000/day rising from ~8 to 18 in WA and from 1.5 to 6 in SA. In SA, reductions in wastewater-detected amfetamine occurred during shortage periods, despite stable or increasing dispensing rates. In contrast, WA demonstrated overall higher stimulant consumption with less fluctuation in wastewater trends.

Discussion
Integrating dispensing and wastewater data provides a nuanced understanding of medicine use during supply disruptions. The observed reductions in wastewater amfetamine in SA may reflect stockpiling, dose rationing, or reduced actual use, while differing patterns between SA and WA could be due to regional prescribing practices or differences in supply chain resilience. WBE offered real-time insight into stimulant consumption that may not be captured by dispensing data alone, highlighting the value of complementary surveillance systems for informing timely public health and policy responses to medicine shortages.

P139

Pharmacist Archetypes in Community Pharmacy Implementation: Insights from Q Methodology

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Introduction:
Professional services have long been part of community pharmacy practice in Australia, yet their implementation remains variable. Understanding the motivations of implementation champions may support successful and sustainable implementation.

Aims:
To characterise the types of community pharmacists which enable the successful and sustainable implementation of professional services.

Methods:
Q methodology was used to explore subjectivity of award-winning Australian pharmacists (innovators) regarding their perceived importance of service implementation elements. A Q set of 63 statements was developed from interviews with high-performing pharmacists (early adopters) and literature, mapped to CFIR domains. Award-winning pharmacists completed an online Q sort, ranking statements on a forced importance-choice grid (-6 to +6) and providing qualitative justifications. Data were analysed using PQMethod software and thematic analysis.

Results:
Findings from 24 pharmacists show that there are four pharmacist phenotypes identified: 'The Capacity-conscious strategist', 'The vision-driven reformer', 'The purpose-driven practitioner', and 'The culture-driven collaborator'. The analysis is also suggesting that implementation success may be influenced more by internal and personal drivers than by external or procedural factors.

Discussion:
This study demonstrates the feasibility of applying Q methodology to implementation science in pharmacy. Understanding pharmacist-champion profiles offers an opportunity to move beyond one-size-fits-all approaches and develop tailored strategies that improve fidelity, quality, and outcomes of professional services.

P140

Navigating ethical dilemmas experienced by healthcare professionals during vaccination of children and adolescents: a scoping review

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Introduction:
Vaccination saves millions of lives annually, yet ethical dilemmas in vaccinating children and adolescents remain challenging, especially as more healthcare professionals (HCPs) beyond traditional vaccinators, including pharmacists, become involved.

Aims:
This scoping review aimed to explore ethical dilemmas experienced by HCPs during vaccination of children and adolescents, contributing factors, decision-making strategies, and the role of biomedical ethics in guiding HCPs' decisions.

Methods:
The review followed the PRISMA-ScR checklist and employed the Population, Process, and Context (PPC) framework. The review applied Arksey and O'Malley's methodology. A comprehensive search was conducted across six major databases and Google Scholar from July–October 2024 using terms related to ethics, vaccination, HCPs, and children/adolescents.

Results:
Eighty-six studies published between 1995 and 2024 were analysed. Commonly described ethical dilemmas included balancing adolescent autonomy versus decision-making capacity, parental autonomy with children's best interests, individual rights versus public health goals, and HCP duties versus personal vaccination beliefs and skills in dealing with dilemmas. Contributing factors were themed into child/adolescent-related (e.g., decision-making capacity), parental/family-related (e.g., hesitancy, cultural and religious objections, safety concerns), HCP-related (e.g., attitudes, skills), and system-related (e.g., mandates, jurisdictional variations). Decision-making strategies included communication, education, interprofessional collaboration, digital support, and policy advocacy. Decisions were consistently guided by the ethical principles of autonomy, beneficence, non-maleficence, and justice.

Discussion:
Ethical complexities in child and adolescent vaccination require that all HCPs across all disciplines are equipped to respond. Ethical decisions should consider child maturity and best interest, family context, cultural values, and systemic constraints to ensure equitable, respectful care.

P141

The impact of virtual antimicrobial stewardship rounds on antimicrobial appropriateness and usage at a rural NSW hospital

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Introduction:
Antimicrobial Stewardship (AMS) refers to a coordinated strategy across health settings in response to growing antimicrobial resistance. Many rural hospitals lack the resources to implement effective AMS systems

Aims:
To evaluate the impact of a virtual AMS rounds (VAMSR) intervention on antimicrobial appropriateness and usage at a rural NSW hospital.

Methods:
A pre-post quasi-experimental design study with a focus on quantitative data was undertaken between November 2024 to May 2025 at a 52-bed rural hospital. At weekly VAMSR via 'Microsoft Teams' reviewed inpatients at the hospital prescribed antimicrobials at the time of the round. VAMSR data was collected in REDCap using a purpose-built auditing tool and baseline data was obtained from national AMS surveys. The Consolidated Framework for Implementation Research (CFIR) was retrospectively applied to explore contextual determinants.

Results:
A total of 128 reviews captured 190 antimicrobial prescriptions. Appropriateness increased from 52% during rounds to 69% at 48-hours post-round. Reductions in the use of commonly prescribed antimicrobials were observed over the 6-month study period. Use of CFIR identified key facilitators such as stable locum engagement and multidisciplinary input, alongside barriers including workload burden and limited resources.

Discussion:
VAMSR are a feasible and effective strategy to improve antimicrobial prescribing in rural hospitals. Use of video calls enables the infectious disease expertise of Infectious disease physicians and antimicrobial stewardship pharmacists to be available at a rural hospital on a regular basis. Implementation of VAMSR at other rural hospitals could improve AMS and patient outcomes across Australia.

P142

Public perceptions of community pharmacists' roles in infant nutrition, feeding support and medication advice

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Introduction:
Breastfeeding offers significant health benefits; exclusive breastfeeding is recommended for the first six months, continuing for two or more years[1]. Several factors can adversely impact the establishment of breastfeeding, and may require formula or mixed feeding[1]. Community pharmacies are accessible and pharmacist support/advice can influence decisions to breast- or formula-feed, and use medicines safely during lactation[2]. While prior research has largely focused on pharmacists' own perspectives[2 3], limited literature exists on public perceptions of pharmacists' roles in infant nutrition, feeding support, and medication advice.

Aim:
To explore public perceptions of the role of community pharmacists in providing infant nutrition, feeding support, and medication advice.

Methods:
Adults aged 18-50 years, with a child born within the past five years, were invited to complete a paper-based survey at 12 sites (September-November 2024) across Victoria, South Australia and Western Australia. Sites included metropolitan pharmacies (n=8), regional pharmacies (n=2), and early learning centres (n=2). Descriptive statistics were used to analyse survey responses. Ethical approval was obtained.

Results:
Of 180 participants (81% female; mean age=33±5 years) who completed the survey, 131(73%) breastfed, 108(60%) bottle-fed (breastmilk), and 79(44%) used formula. Most common purchases included formula (n=110;61%), bottles (n=94;52%), and infant/breast-related over-the-counter products (n=94;52%). Over half (n=100;56%) sought pharmacist advice on medication safety during lactation (n=100;56%), and most treatments were for sore (n=59;33%) and cracked (n=46;26%) nipples. Pharmacists were considered most knowledgeable about medication safety, and least about breastfeeding positioning/attachment. Only 61(34%) participants accessed support services from pharmacists. The most recognised role for pharmacists was infant-related over-the-counter and prescription medication advice. Ten participants (6%) indicated pharmacists had no role in infant nutrition.

Discussion:
Community pharmacists are trusted for medication advice during lactation, however, public awareness of their broader potential to support infant feeding and nutrition remains limited.
[1]World Health Organization(2024) [2]Leung et al.(2018) [3]Prosperi-Porta et al.(2019)

P143

Artificial intelligence in medication reviews: Evidence synthesis and pilot case applications

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Background.
Artificial intelligence (AI) has become increasingly integrated into healthcare, particularly in supporting clinical decision-making. In medication review services, AI provides opportunities to enhance quality and efficiency. However, evidence on its practical application in this context remains limited, creating uncertainty about its role in streamlining workflows and improving outcomes.

Objectives.
To synthesize current evidence on AI integration in medication review, pilot the use of AI models to assess their potential in improving review quality and efficiency, and identify opportunities and limitations for implementing AI in pharmacist-led medication review services.

Methodology.
A two-phase approach was applied. Phase I involved a literature review using Embase, PubMed, and Scopus to identify studies on AI applications in medication review. Phase II was a pilot study using two case vignettes in the form of Home Medicines Review (HMR) to compare outputs from two AI systems (ChatGPT and Microsoft Copilot). Each system generated letters to referring general practitioners, which were analysed for accuracy, comprehensiveness, and ethical considerations.

Results.
Phase I: From 1,093 articles screened, nine met inclusion criteria, highlighting AI's strengths in data processing, clinical decision support, and personalised care, alongside limitations such as lack of transparency, ethical concerns, and the need for human oversight. In Phase II, both AI systems identified major medication-related issues but lacked specificity regarding dose adjustments, tapering strategies, and non-pharmacological interventions. ChatGPT produced more comprehensive, patient-centred letters, while Copilot was concise and clinically focused. Neither system incorporated patient cultural or social context.

Conclusion.
AI-based tools show promise in enhancing medication review processes and streamlining services. Their integration into medication reviews like HMR could improve prioritisation of problems and help generate broader recommendations. However, current limitations such as lack of contextual understanding and the need for human oversight underscore that AI should complement, not replace, pharmacist-led reviews.

P144

Exploring the attitudes of health professionals towards mental illness in the South Pacific Region – A systematic review

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Introduction:
Mental health conditions are some of the most prevalent non-communicable disorders and contribute substantially to the burden of disease in the South Pacific Region (SPR). Healthcare professionals, especially general practitioners (GPs), nurses and pharmacists, who are often the first point of contact within the healthcare system, are integral to the management of these conditions. Their attitudes towards people living with mental illness can influence help-seeking and overall health outcomes.

Aim:
This systematic review aimed to explore the attitudes of GPs, nurses and pharmacists towards mental illness in the SPR and compare perspectives between professions and countries.

Methods:
A systematic search of four electronic databases; Medline, Embase, CINAHL and PsycINFO was conducted. Primary publications exploring the attitudes of GPs, nurses and/or pharmacists within the SPR were eligible for inclusion.

Results:
A total of 3258 unique records were retrieved, of those 20 studies were included. These comprised cross-sectional (n=19) and pre- and post-intervention (n=1) studies. Studies were conducted in Australia (n=17), New Zealand (n=2) and Fiji (n=1) and covered the attitudes of GPs (n=8), nurses (n=8) and pharmacists (n=3), with one exploring the perspectives of both GPs and nurses. Psychotic disorders were associated with greater stigma than affective disorders across all three professions. Nurses demonstrated a more positive outlook regarding consumer outcomes compared to GPs and pharmacists.

Discussion:
Attitudes towards people living with mental illness are influenced by a multitude of factors including cultural and geographical differences, healthcare resource availability and mental health training. A significant majority of existing research is conducted in Australia therefore, further research exploring the perspectives of healthcare professionals in smaller island nations of the South Pacific Region is required to address this gap.

P145

Impact of packaging aids on medication errors in outpatient settings: a systematic scoping review

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Introduction:
Medication errors pose a significant threat to public health, especially in outpatient settings, where close monitoring is often not feasible. Packaging aids, which organise doses by date and/or time, are widely used to improve adherence. However, evidence regarding their impact on medication errors remains limited in the literature.

Aims:
To assess the effect of packaging aids on medication errors, compared to original packaging, in outpatient care.

Methods:
We searched the Cochrane Central Register of Controlled Trials, Medline, CINAHL, Embase, and Scopus from inception to 17 April 2025. We also searched the reference lists from relevant articles. We selected studies that met the following criteria: (1) conducted in outpatient settings, (2) measured medication errors, (3) involved a packaging aid, such as an automated medication dispensing system, monitored dosage system, or daily dose reminder, for medications in solid oral dosage form, and (4) contained an English title and abstract. Full texts not published in English were translated using Google Translate.

Results:
Four studies were identified from 2206 titles/abstracts and 45 full text articles. All were non-randomized, observational studies, with quality rated as moderate to good using the Newcastle-Ottawa Scale. Three studies were conducted in long-term residential care facilities, whereas one was undertaken in a youth camp. Outcomes included medication administration errors and discrepancies between general practitioners and home care records. The use of packaging aids resulted in a statistically significant reduction in risks of medication errors, relative risk = 0.42 (95% CI 0.25 to 0.71). Notable heterogeneity was observed among these studies I2 = 72.8%.

Discussion:
Packaging aids may provide a simple and convenient approach to improving medication safety in the outpatient settings. Further methodologically robust trials are warranted to evaluate the impact of different types of packaging aids and their respective fillers on various categories of medication errors.

P146

Understanding the implementation of sick day medication guidance by health care professionals: a quantitative evaluation

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Introduction:
Using certain medications including during acute illness can increase the risk of acute kidney injury in people with chronic kidney disease. These medications include sulfonylureas, ACE inhibitors, diuretics, metformin, ARBs, NSAIDs and SGLT2 inhibitors (SADMANS). Guidelines recommend providing patients with sick day medication guidance (SDMG), to withhold SADMANS medications during such illnesses, but implementation is poor (<15%). No studies have been conducted in Australia to evaluate the implementation of SDMG.

Aims:
This study sought to evaluate healthcare professionals' (HCPs) SDMG practices including contents, frequency, delivery modes, and barriers and facilitators to practice.

Methods:
HCPs were purposively sampled from July 2024 to August 2025 and surveyed via REDCap. Descriptive statistics were generated using Excel and qualitative data underwent conventional content analysis.

Results:
Overall, 113 surveys were collected, 24 were incomplete and 89 were included for analysis. Participants included medical practitioners (n=23, 25.8%), nurses (n=29, 32.6%) and pharmacists (n=37, 41.6%), who specialised in general practice (n=28, 43.1%), nephrology (n=13, 20%) and other. Despite 93.1% (n=81) of participants believing that SDMG is important, only 58.4% (n=66) reported providing SDMG. On average, provision was “often” for all SADMANS medications, with priority given to select, high-risk patients (n=47, 72.3%). SDMG was often in the form of verbal counselling (n=52, 80.0%), with reinforcement using a sick day action plan (n=40, 61.5%). Challenges with implementation included HCPs being time poor, difficulties adjusting dose administration aids, and concerns about patient health literacy and capacity to adhere to SDMG. Participants believed that guidelines (n= 57, 66.3%), a decision support tool (n=54,62.8%), further training (n=66, n=76.7%) and written resources (n=60, 69.8%) could potentially support better practice.

Discussion:
HCPs recognise the importance of SDMG and are willing to provide it but face significant barriers. Further research is needed to address these challenges before SDMG can be embedded into standard practice.

P147

Antibiotic overexposure at surgical discharge in eastern Indonesia: a missed stewardship opportunity

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Introduction:
Excessive antibiotic prescribing at hospital discharge is an overlooked driver of antimicrobial resistance and undermines global stewardship targets. In Indonesia, the Ministry of Health's surgical antibiotic prophylaxis guideline covers in-hospital prophylaxis but there is limited national or locally adapted guidance for post-discharge antibiotic therapy.

Aims:
To investigate post-surgical discharge antibiotic prescribing in two hospitals in Papua, Eastern Indonesia, for appropriateness with respect to indication, dose and duration of therapy.

Methods:
A retrospective audit of 318 adult surgical discharges (June–December 2023) from two government hospitals analysed prescriptions by agent, WHO (World Health Organisation) AWaRe classification, duration, and diagnosis. Antibiotic exposure was expressed as defined daily doses (DDD) and DDD/100 discharges. χ^2/Fisher's exact tests compared AWaRe choice and duration between hospitals. In the absence of diagnosis-specific guidelines, stewardship-oriented proxy measures (spectrum class and duration thresholds) were applied

Results:
Patients' mean age was 38.2 ± 13.7 years, 60.7% were male, with similar demographic profiles across hospitals. Antibiotics were prescribed at discharge to 96.9% of patients (336 prescriptions). Watch class agents accounted for 85.1% of prescriptions, with cefixime contributing 79.4% (1,383.5 DDDs; 435.1 DDD/100D). Access class use was low and dominated by metronidazole and cefadroxil. Nearly all courses (98.2%) lasted ≥ 5 days. The most frequent diagnoses was benign neoplasms (13.5%). No significant differences in AWaRe profile or duration were observed between hospitals. Total antibiotic exposure was high (1,771.1 DDDs; 556.3 DDD/100D).

Discussion:
Post-surgical discharge prescribing in Papua is near universal, prolonged, and dominated by cefixime, reflecting entrenched province-wide norms in the absence of national or locally adapted guidance. Proxy measures suggest probable overuse in prophylaxis of likely surgeries. This first baseline for Eastern Indonesia highlights a missed stewardship opportunity and the urgent need for context-appropriate interventions to narrow the spectrum and shorten the duration, consistent with national and WHO policy objectives

P148

How did we do it? Transforming Pharmacy-based Sexual Health Services in Canada

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Introduction:
There is an increasing rate of sexually transmitted infections, including HIV, in populations worldwide. Community pharmacies and other pharmacy-based services may offer an effective alternative to traditional sexual health care providers for prescribing, management, and follow up for treatment and prevention of sexually transmitted infections.

Aims:
This study aims to evaluate the success of numerous pharmacy-based sexual health care initiatives in Nova Scotia, Canada that have resulted in scope of practice changes that have transformed the access and nature of sexual health in Canada.

Methods:
This was a reflective evaluation study of four sexual health care initiatives (HIV-PrEP prescribing, community pharmacy based swabbing and prescribing for chlamydia and gonorrhoea, point of care testing for HIV, hepatitis C, and syphilis, and a hospital pharmacy consult service for prevention and management of sexually transmitted infections) conducted in Nova Scotia, Canada. Investigators met to reflect on the success and challenges of these interventions to determine a list of facilitators that resulted in policy and practice changes in Nova Scotia.

Results:
Key considerations identified through the reflective evaluation process included 1. Outer Setting Factors, 2. Team Composition, 3. Community Engagement 4. Clinical Landscape, and 5. Pharmacists' Education.

Discussion:
This study summarizes the main factors that led to the successful policy changes to advance pharmacists' scope to provide comprehensive sexual health care in Nova Scotia. Findings are relevant to settings and jurisdictions beyond Nova Scotia that may improve access to health care for patients requiring sexual health care, including prevention and treatment of sexually transmitted infections.

P149

Development of online medication support tools for older people: a systematic review

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Aims.
To systematically review and describe existing online medication support tools for older people, their development and how they have been evaluated.

Methods.
Five electronic databases (MEDLINE, EMBASE, CINAHL, Scopus and Web of Science) were searched from inception to October 2024 for studies describing the development and/or evaluation of online medication support tools for older people aged ≥65 years, or their informal caregivers. The mixed-methods appraisal tool was used for quality assessment. Two authors completed the screening, data extraction and quality assessments independently and subsequently discussed any conflicts. Extracted data was analysed descriptively in line with PRISMA guidelines.

Results.
A total of 1,621 studies were identified, and 29 studies met the inclusion criteria. Over 80% (n=21) of the tools were mobile health apps or websites. The most common development approach involved user-centred design methodologies (comprising user needs assessments, focus groups, interviews, and user experience workshops). Usability testing using questionnaires and surveys (n=13 tools) were the most common evaluation techniques followed by think aloud protocol (n=9 tools), interviews and focus groups (n=9 tools). Findings across 22 studies suggest that user satisfaction of the developed online tools was high. The remaining seven studies did not measure usability of the final prototype or explicitly report on usability.

Discussion.
This review summarises online medication support tools for older people and carers and the approaches used to develop and evaluate them. Findings suggest that iterative refinement driven by user feedback may be more influential than any one approach for developing high usability tools. A responsiveness to user feedback and employing development approaches that incorporate iterative prototyping, is essential to ensuring these tools are both effective and satisfactory to their users.

P150

Metabolic Monitoring for Adults Living with a Serious Mental Illness on a Second-Generation Antipsychotic Agent: A Scoping Review

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Introduction:
Despite global consensus and treatment guidelines, metabolic monitoring for people living with severe mental illness and using antipsychotics remains suboptimal. It is important to understand current metabolic monitoring patterns in routine clinical practice to improve the management and care of severe mental illness.

Aim:
Summarise and map existing metabolic monitoring practices, highlight current gaps in practice and provide directions for future research initiatives.

Methods:
Database search of: Medline, Embase, CINAHL, the Cochrane Library, PsycInfo and Scopus (English only). The target group was adults (aged ≥ 18) diagnosed with severe mental illness (including bipolar disorder, major depressive disorder and psychotic disorders) and taking second-generation antipsychotics. The review utilised published studies' descriptions of existing baseline monitoring rates and procedures (that is, without the influence of study interventions) as proxy measures.

Results:
In total, 44 studies from 14 countries were retrieved. Most hospital-based studies did not report on metabolic monitoring practices. Notably, the roles and responsibilities of healthcare professionals in metabolic monitoring for severe mental illness were infrequently described, and parameters such as waist circumference and body mass index were generally infrequently measured. Nurses were often involved in screening and/or physical assessments, while pharmacists had limited involvement in patient metabolic monitoring.

Discussion:
At an organisational level, policymakers could facilitate frequent metabolic monitoring through implementation of mandatory clinical guidelines and policies. At a practice level, clinicians should recognise that patients may not receive regular metabolic monitoring as suggested by existing guidelines. Consideration for the need and potential value of metabolic monitoring should be considered during patient interactions, and if necessary, reviews should be initiated. Further, the role of the pharmacist in metabolic monitoring should also be further explored. Moreover, there is a need for ongoing research, particularly in the community setting, to promote increased accessibility to metabolic monitoring for severe mental illness.

P151

Opinions of clinicians on pharmacist-physician collaborative prescribing in digital hospitals: A qualitative study using the Theoretical Domains Framework

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Introduction:
Research into pharmacist-physician collaborative prescribing has demonstrated positive impacts, despite this, many hospitals are yet to translate this research into practice. Implementing new practices requires changes in behaviour, which can be facilitated by understanding the influence of determinants of behaviour, via the Theoretical Domains Framework.

Aims:
This study aimed to determine clinician (doctor and pharmacist) perspectives on pharmacist-physician collaborative prescribing and the barriers, and facilitators for implementation in the internal medicine units of hospitals with an electronic medicine management system (EMM).

Methods:
After written informed consent was obtained, semi-structured interviews were conducted, by one of two investigators, with doctors and pharmacists with experience working in internal medicine, from two Australian hospitals operating with an EMM. Interviews were recorded, transcribed verbatim, and qualitatively analysed inductively to identify themes, which were mapped deductively to the Theoretical Domains Framework (TDF). Each transcript was analysed independently by two investigators, refinement and reduction occurred until a final list of codes was obtained and agreed by investigators.

Results:
A total of 27 interviews were conducted (11 doctors, 16 pharmacists) to reach data saturation and distribution of clinician experience. Interviews lasted an average of 22.46 minutes. Twelve of the fourteen TDF domains were identified, with the most frequently reported domains being 1) environmental context, 2) social influences, 3) beliefs about consequences, and 4) beliefs about capabilities. The most reported perceived motivators were pharmacists already have the skills/knowledge required for prescribing, and the positive patient safety and health care efficiency outcomes. The most reported perceived barriers were the EMM and existing pharmacy and physician workloads, availability, priorities and workflows.

Discussion:
Overall, pharmacists and doctors identified the desire for pharmacist-physician collaborative prescribing in the internal medicine units of hospitals with an EMM and identified key targets for successful implementation.

P152

Consumers' experiences and perspectives on reporting adverse drug reactions using digital tools: a qualitative study

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Introduction:
Spontaneous adverse drug reactions (ADRs) are underreported. Digital reporting systems are increasingly used to address this issue; however, limited knowledge exists about the barriers and facilitators influencing their use by consumers.

Aims:
To explore facilitators and barriers influencing consumers' use of digital tools for ADR reporting.

Methods:
An exploratory qualitative descriptive study using semi-structured in-depth interviews was conducted among Australian adults who self-reported having experienced an ADR. Interviews were conducted face-to-face or via Zoom, audio-recorded, transcribed verbatim, and analysed inductively using reflexive thematic analysis. NVivo 14 software was used to assist with data coding and themes development. Themes were mapped onto domains of the Combined Technology Acceptance Model and Theory of Planned Behaviour (C-TAM-TPB) framework.

Results:
Fourteen participants were interviewed. Consumers expressed positive intentions to use online ADR reporting tools. Identified facilitators included user-friendly and accessible tools that are simple to complete, the use of images to aid comprehension, integration with existing patient health records, the ability to submit one report online that is shared with both healthcare professionals and regulators, and a tool designed specifically for consumers using layperson language. Identified barriers included lack of awareness that consumers could report ADRs directly to the regulator online, registration or login requirements, lengthy and complex reporting forms, excessive text and small font sizes, the use of technical medical terminology, compulsory questions, and the absence of feedback or follow-up after submitting a report.

Discussion:
Consumers were willing to use online ADR reporting tools but were largely unaware of their existence. Enhancing usability through user-friendly design, and reporting forms specifically designed for consumers may increase engagement. Addressing barriers such as lack of awareness, registration requirements, medical jargon, and lack of feedback is essential to improve usability and strengthen pharmacovigilance systems.

P153

Uptake and user characteristics of novel migraine therapy: A population-based study in Australia

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Introduction:
Monoclonal antibody calcitonin gene-related peptide (CGRP) antagonists are novel migraine preventive treatments. Although clinical trials demonstrate efficacy, their full safety profile remains uncertain. In Australia, CGRP antagonists are subsidised but restricted to patients who have trialled at least three prior preventive medicines.

Aims:
To quantify uptake of CGRP antagonists, describe characteristics of new users, and examine overall treatment patterns of migraine preventive medicines among Australians.

Methods:
National dispensing claims for a random 10% sample of Australians were used. Patients ≥18 years dispensed at least one CGRP antagonist of interest (2018–2024) were included. Incidence and prevalence rates of use were estimated over time. Patient age and gender and cardiovascular medicines dispensed at CGRP antagonist initiation were described. Overall migraine treatment patterns were determined.

Results:
Incidence of CGRP antagonists increased by 138% following market introduction. Prevalence of use increased by 238% until late 2023 when shortages of galcanezumab occurred. Fremanezumab autoinjector had a higher uptake than the syringe formulation. Nearly 50% of females were dispensed galcanezumab or fremanezumab, with the most common age groups ranging between 20 and 49 years. Over 76% of galcanezumab initiators and 88% of fremanezumab initiators had been dispensed at least one cardiovascular medicine. 9% had CGRP antagonists as their first-line treatment.

Discussion:
Uptake of CGRP antagonists increased over time until medicine shortages occurred. Treatment patterns indicate switching potentially driven by preferences for fremanezumab autoinjector and medicine shortages, reflecting patient and prescriber willingness to switch, despite limited comparative evidence. Use is common in women of childbearing age and those with cardiovascular comorbidities, populations for whom safety evidence remains largely unknown. While most initiations aligned with prescribing restrictions, a notable minority received CGRP antagonists without prior preventative therapy. Future research should prioritise monitoring of safety issues in specific populations and investigate outcomes of switching between formulations.

P154

Sustainable practice model for a dementia support pharmacist in regional South Australia

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Introduction:
Dementia is the second leading cause of death in Australia and the leading cause of death for women. Dementia is also the leading cause of burden of disease in Australia. Medication management for people living with dementia can be very complex, not only due to cognitive decline. Polypharmacy related to co-morbidities, inability to recognise or articulate adverse effects of medications, reliance on others to assist with medications, and intentional or un-intentional non-adherence to medications, are some of the problems encountered.

Aims:
To develop a sustainable practice model for a dementia support pharmacist in regional South Australia aiming to enable people living with dementia to stay at home and in the community for longer.

Methods:
Initial focus was on building networks with key stakeholders and hosting information and education sessions. The focus then became providing a flexible service directly for and with patients by removing barriers from referral pathways, travel restrictions, number of times patients could seek support from the pharmacist, mode of access and identifying gaps in rural health care. Through comprehensive medication management, personalised support and collaborative care, the pharmacist works with the person living with dementia, their families and/or carers and other health professionals to enhance quality of life, reduce hospitalisations & medication-related harm and support end of life care.

Results:
In 150 direct client interactions, collaboration has occurred with other health professionals in 2/3 of cases. Over 20% of clients have benefited from medication optimisation through medication simplification and over 63% have had deprescribing recommended.

Discussion:
Health professional staff acknowledge the pharmacist as a valued part of the primary health care team and they, their clients and their clients' carers/families report increased medication knowledge confidence and satisfaction with the service

P155

Investigating the differences in how CALD students versus non-CALD students perform in oral clinical assessments

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Introduction.
Effective oral communication is a vital skill for pharmacy students, allowing them to convey recommendations clearly and empathetically to both patients and other professions in the workplace. Students from Culturally and Linguistically Diverse (CALD) backgrounds may require additional support to develop communication skills that align with workplace expectations.

Aims.
To examine differences in oral clinical communication between CALD and non-CALD students by analysing a series of Objective Structured Clinical Examination (OSCE) videos.

Methods.
A sequential explanatory mixed methods study guided by Professional Communication in Intercultural Contexts (PCIC) model to guide the analysis. PCIC look at the emotional, logical and moral dimensions of professional communication and considers how students develop the ability to build a therapeutic relationship (emotional), display clinical reasoning (logical) and demonstrate professionalism (moral). Quantitative data analysis was conducted using first year OSCE results and Academic Language Skills Analysis (ALSA) scores. These scores then informed the sample of OSCE videos for qualitative data analysis. OSCE videos of students interacting with a simulated patient were analysed by Conversational analysis through ELAN.7 using Jeffersonian transcription conventions.

Results.
Overall, 36 videos samples were chosen (18 non-CALD vs 18 CALD) and were matched based on same examiner and case. Statistical analysis revealed a higher communication score for non-CALD students compared to CALD students. Moreover, average ASLA scores for non-CALD students were also higher than for CALD students. Video analysis revealed differences in the way students deliver advice in particular, advice format, fitting of prior advice to prior talk, epistemics, patient agency vs direct advice, dealing with sensitivity, dispreference, conditionals, accounting for advice.

Discussion.
According to the findings, students' CALD status can impact on how students perform in clinical oral assessments and this study provides some insights into how we could tailor interventions to support CALD student to ensure they are workforce ready.

P156

Attitudes and experiences of undergraduate pharmacy students toward research after completion of research courses

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Introduction:
Traditional approaches for research methods courses in health science disciplines are primarily focused on quantitative analysis techniques. However, pharmacy practice research requires skills in both quantitative and qualitative methodologies to ensure the depth of patient experience is captured. Moreover, previous study has shown that pharmacy students understand the value of research but lack confidence to undertake professional practice research activities (1, 2).

Aims:
This study aimed to explore student attitudes about undertaking research, as well as student experience with the developed qualitative data analysis module.

Methods:
Final year undergraduate pharmacy students at RMIT University were invited to participate in this study. The survey included three key sections: demographics, attitudes to research and experiences of qualitative data analysis module.

Results:
In total 23 students responded to the survey (25% response rate) after completing the research methods course. All students agreed that research is important for their profession. However, only 69% agreed that research training is necessary in the undergraduate pharmacy curriculum. In addition, only 43% agreed that research training should be incorporated into clinical placements. Only 57% of the students felt confident in their ability to design a research project at the conclusion of this course. The majority of the participants enjoyed the qualitative research module.

Discussion:
The relatively low confidence of this cohort in undertaking research projects is comparable to the levels reported by Kritikos et al (2). Future studies should consider factors that contribute to developing student confidence and interest in undertaking research activities.

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P157

3D-Printed Drug Delivery Systems for Site-Specific and Precise Cancer Therapy

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Introduction:
Cancer continues to be a significant global health issue, frequently associated with unfavorable outcomes and high rates of recurrence following surgical intervention. Although surgery remains one of the most common treatments for cancer, residual tumor cells at the surgical margins frequently cause relapse. Adjuvant chemotherapy targets these cells but faces limitations like systemic toxicity, uneven drug distribution, and resistance. This has led to increased interest in localized drug delivery systems that release medication directly at the surgical site, minimizing side effects. Among these, 3D-printed drug delivery platforms offer precise, customizable implants for controlled, sustained drug release, enhancing treatment efficacy and safety.

Aims:
Exploring localized drug delivery for enhanced precision and reduced toxicity by evaluate 3D-printed systems for site-specific therapy. Moreover, assessing 3D printing's role in customizable, controlled-release platforms.

Methods:
Biodegradable, anticancer drug-loaded systems were fabricated using 3D printing. Physicochemical properties were characterized via DSC, XRD, FTIR, TGA, and SEM. Stability under various storage conditions was assessed. Drug content uniformity was evaluated, and varying infill densities were tested to control drug release profiles through structural design.

Results:
Biodegradable 3D-printed bilayer films loaded with 5-fluorouracil (5-FU) and cisplatin (Cis) were developed for localized chemotherapy. Film design enabled distinct release profiles where 5-FU released over 24 hours, Cis over 12–23 days. A 3D-printed drug-loaded stent for 5-FU delivery showed sustained release over 110 days, with confirmed permeability through esophageal tissue, supporting long-term localized therapy.

Discussion:
Post-surgical cancer recurrence remains a challenge due to residual cells. Localized chemotherapy targets these with less systemic toxicity. Our biodegradable, customizable 3D-printed system offers precise drug delivery, enabling personalized treatment to improve post-surgical outcomes and reduce recurrence risk.

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