

CHARM 2026: 3-Minute Pitch Abstract Summaries

TITLE: Strengthening Preventive Maternity Care: Integrating Physiotherapy into Antenatal Pathways to Reduce Pelvic Floor Injury

AUTHORS: Taylor Wallace, Canberra Health Services & University of Canberra

ABSTRACT

Background and Significance: Perineal trauma affects most birthing women and contributes to long term pelvic floor dysfunction, continence issues, and increased demand on maternity and postnatal services. As health systems face rising workforce pressure, preventive, interdisciplinary models of care are essential to improve outcomes and sustainability. Pelvic health physiotherapists bring specialised expertise in perineal protection strategies and may enhance antenatal pathways by improving education, early risk identification, and targeted preventive strategies.

Aims: To evaluate the effectiveness of physiotherapist led and physiotherapist taught antenatal perineal massage compared with standard antenatal education among pregnant women at increased risk of perineal trauma.

Methods: A three-arm randomised control trial will recruit pregnant participants identified as high risk for pelvic floor trauma using an assessment tool currently undergoing validation. Participants will be randomised to: Standard Antenatal Education, Physiotherapy Taught or Physiotherapy Led. The primary composite outcome includes instrumental birth, prolonged second stage, and obstetric anal sphincter injury. Secondary outcomes include episiotomy rates, postpartum continence outcomes, maternal satisfaction and feasibility of embedding physiotherapy within antenatal pathways.

Results: Anticipated findings include reductions in instrumental birth, prolonged second stage, and obstetric anal sphincter injury among intervention groups. Improvements in secondary outcomes are also expected. Feasibility metrics will inform scalability within local services.

Conclusions: This study will generate evidence to inform preventive, multidisciplinary maternity care and clarify the role of allied health in improving quality and safety.

Impact: Findings may improve birth outcomes, reduce long term pelvic floor dysfunction, and support sustainable service redesign by embedding physiotherapy within antenatal care.

TITLE: Difficulties Regulating Positive Emotions Associated with Alcohol and Other Drug Use

AUTHORS: Kayla Herbert, University of Canberra; Amanda George, University of Canberra

ABSTRACT

Introduction: Difficulties regulating emotions are associated with alcohol and other drug (AOD) use. Specifically, prior research supports the relationship of negative emotion dysregulation with AOD use. However, limited studies have investigated the association between AOD use and positive emotion dysregulation. Of the limited literature, the focus has been on samples that have experienced a traumatic event. However, young people, including those living in the Australian Capital Territory, are vulnerable to emotion dysregulation and AOD use. Synthesising the literature will inform future research efforts for broader populations.

Aim: A systematic review and meta-analysis were conducted to examine the relationship of positive emotion regulation with AOD use.

Methods: A comprehensive search of Medline, PsycINFO, Scopus, and Web of Science databases resulted in 8,078 articles. After review and consideration of the inclusion criteria, 12 samples were included in the meta-analysis.

Results: Results identified a small positive relationship of positive emotion regulation abilities with alcohol consumption, and a medium positive relationship with alcohol misuse and drug misuse. No differences were found across gender or life circumstances (e.g., traumatic event experiences).

Conclusions: The effect size for positive emotion dysregulation with alcohol and other drug use is similar to that previously reported for negative emotion dysregulation. Our findings emphasise the role of positive emotion dysregulation when considering interventions and treatment options for AOD use.

Impact: Positive emotions are often overlooked in clinical settings. Understanding an individual's positive emotion regulation abilities may be important when holistically approaching AOD use treatment.

TITLE: Consumer Engagement in Chronic Conditions Research: An Integrated Framework Informed by Recognition Theory

AUTHORS: Mingming Zhou, Australian National University; Anne Parkinson, Australian National University; Leanne Watts, Australian National University; Julie Veitch; Hanna Suominen, Australian National University; Jane Desborough, Australian National University

ABSTRACT

Background: Consumer engagement ensures that health research reflects lived experiences and generates outcomes relevant to those most affected. However, frameworks guiding engagement in research about chronic conditions remain limited and often lack theoretical grounding.

Objective: To develop an integrated, evidence-based framework to support consumer engagement in research about chronic conditions.

Methods: We integrated findings from (1) a scoping review synthesising evidence-based resources supporting consumer engagement in research about chronic conditions (Resource Framework) and (2) a co-designed framework for recognising consumers' contributions to research within the Australian context (Recognition Framework). Our integration deployed the relational, structural, and symbolic domains of Honneth's recognition theory as an analytical lens and used joint displays to develop a comprehensive framework.

Results: The framework demonstrates how relational, structural and symbolic dimensions of recognition collectively support ethical and sustainable consumer engagement. Relational recognition (e.g., mutual learning, ongoing communication) strengthens interpersonal trust and shared decision-making; structural recognition (e.g., governance policies, remuneration, reimbursement) embeds engagement within institutional systems; and symbolic recognition (e.g., authorship, formal acknowledgement) legitimises consumers' expertise within research cultures. Together, these elements provide a comprehensive foundation for supporting meaningful engagement across research practices.

Conclusion: This integrated recognition theory-informed framework offers an evidence-based tool to inform the design and implementation of consumer engagement in research about chronic conditions. By positioning recognition for consumers' contribution as an ethical, structural, and symbolic principle, it offers a transferable framework to strengthen participatory practice and advance equity in research. While developed for chronic conditions research, the framework is likely transferable with contextual tailoring to other settings.

TITLE: Relocating Contaminated Communities to Mitigate Health Risks

AUTHORS: Rosina Johnson, Australian National University; Jane Desborough, Australian National University; Ginny Sargent, MND Australia; Caitlin Pilbeam, University of Tasmania

ABSTRACT

Introduction: Residential areas where people live, work and play are increasingly exposed to hazardous levels of anthropogenic contaminants. Hazardous contamination poses increased health risks for citizens living in exposure pathways. Evacuation, temporary and permanent relocation are mitigation strategies known to mitigate these health risks when other types of remediation are not feasible; however, it is a policy option of last resort. There is a paucity of consolidated knowledge about contamination risk-based relocations and their impact on relocatees.

Aims: We sought to consolidate knowledge about challenges of relocating citizens exposed to hazardous thresholds of contaminants in places where they live day-today.

Methods: We conducted a systematic rapid scoping review of peer-reviewed literature to understand the 'big picture' of this nascent area of research.

Results: Of 1,590 articles, 59 studies met the inclusion criteria. Causal mechanisms for relocation included industrial polluter activities, toxic waste, nuclear disasters, hazardous public infrastructure, and contaminated household products. Psychological distress was a prevalent theme in the literature. Psychosocial impacts included increases in long term health anxiety, post-traumatic stress disorder, alcohol and drug dependence and suicide. One of the studies found pregnant women relocating during hazardous contamination disasters experienced greater risks of adverse birth outcomes, largely due to disruptions in maternity services and substandard housing post-disaster.

Conclusion: The intense focus on removing people from places of contamination risk rather than on resettlement may contribute to increased risks of adverse health outcomes and long-term psychosocial harm among relocatees.

Impact: This research builds the evidence-base for policy makers involved in contamination risk-based relocations.

TITLE: Atypical Presentation of Social Anxiety and why this is Relevant to Problematic Alcohol Use

AUTHORS: Anton Fichtenmaier, University of Canberra; Amanda George, University of Canberra

ABSTRACT

Introduction: Social anxiety disorder is highly prevalent and highly comorbid with alcohol use disorders, approaching 50% (Grant et al., 2005). However, research has also identified an unexpected relationship where those higher in social anxiety drink less, but experience more alcohol-related problems (Schry & White, 2013). Recent research suggests that an approach-motivated subtype of socially anxious impulsive individuals (SAI profile) may help account for this disparity.

Aims: This research aimed to, for the first time, identify the presence of this atypical SAI profile among a community sample of young Australians and explore patterns of alcohol use between different social anxiety profiles.

Methods: A latent profile analysis was performed on a sample of 422 young Australians aged 18-29 to delineate pre-specified classes of social anxiety and impulsivity, followed by a series of one-way ANOVAs to assess differences in drinking behaviours across profiles.

Results: Results confirmed the presence of a SAI, prototypic avoidant social anxiety, and low social anxiety and impulsivity profile among young Australians. There were no differences between profiles in alcohol consumption metrics. However, those in the SAI profile reported greater problematic drinking and significantly more negative consequences related to their drinking.

Conclusions: These findings validated the presence of a SAI profile among young Australians and highlighted a proclivity to concerningly problematic drinking patterns.

Impact: These findings contribute to a growing body of research that implicate treatment protocol revisions for those who may present with this atypical profile. This is pertinent for ACT health practitioners as reports indicate greatly increasing rates of anxiety disorders within the ACT (ACT Health, 2024).

TITLE: CHS Obesity Program Outcomes

AUTHORS: Richard Singer, Canberra Health Services; Edwin Beenen, Canberra Health Services

ABSTRACT

Introduction: Obesity causes substantial morbidity and mortality. Effective programs to treat patients with obesity are vital to public health. There is evidence to support intensive lifestyle interventions for weight loss, which are usually defined as approximately fortnightly clinical interactions over 6 months. Bariatric surgical interventions also have significant evidence of benefit.

Methods: Retrospective review of patients with an initial appointment at a public weight management clinic between November 2022 and January 2026.

Results: 788 patients with mean BMI of 49.5 ± 9.2 kg/m² at entry were identified from the Bariatric Medicine (DBM) program and 89 from the Renal Weight Management Program (RWM). The initial appointments were prior to 16 August 2025 in 657 DBM patients and 66 RWM. 31% of patients left the DBM program and 26% left the RWM program within 180 days of their initial appointment. The 1 year (± 90 days) median weight change was -2.2% (IQR -20.8% to +1.5%) in DBM and -6.3% (IQR -9.6% to -1.6%) in RWM. Sleeve gastrectomy was performed in 38 patients a median 716 days after entry to the DBM program.

Conclusion: Loss to follow-up was substantial within the first 6 months in both programs. Reducing resources devoted to patients unlikely to remain in the programs for at least 6 months is likely to substantially improve program efficiency. Addressing modest 1-year weight outcomes, particularly in the DBM program would improve the effectiveness of the program.

TITLE: Consumer And Caregivers’ Perspectives and Expectations of Admission to a New Child and Adolescent Mental Health Unit in Canberra

AUTHORS: James Li, Canberra Health Services; Caitlyn Starbuck, Canberra Health Services

ABSTRACT

Background: The Canberra Hospital opened a Child and Adolescent Mental Health Unit (CAU) in 2023 and it is important to evaluate the experiences of young people and their carers during an admission to this new unit. Understanding the experiences of young people and their carers during an admission can provide valuable insights for service improvement.

Objective: This study aims to assess the satisfaction levels of young people and their carers who have been admitted to the CAU, identifying key areas for improvement in the service provided.

Participants: The study will involve young people who have had an admission to the CAU, along with their carers. Participants will be invited to join the study at the end of an admission.

Methods: A survey will be administered to both young people and their carers, focusing on their experiences and satisfaction regarding the admission process, care received, and overall outcomes. The survey will include quantitative questions rated on a Likert scale as well as open-ended questions for qualitative feedback.

Outcome Measures: Satisfaction levels will be assessed through various domains, including communication with staff, involvement in care decisions, and general satisfaction with the admission.

Proposed Analysis: Quantitative data will be analysed using SPSS to identify trends and correlations in satisfaction levels. Free text responses will undergo thematic analysis to extract common themes and suggestions for improvement. The findings will inform areas for improvement aimed at enhancing the quality of care in the unit and addressing the needs of young patients and their families.

TITLE: Implementation of Health Information Technology: Case Studies from Canberra Health Services

AUTHORS: Chelsea Liu, Australian National University; Rosemary Wyber, Australian National University; Uday Yadav, Australian National University; Rohan Essex, Australian National University; Paul Dugdale, Australian National University

ABSTRACT

Background: Health information technology (HIT) has advanced rapidly, yet digital transformation remains challenging. Implementation outcomes are uneven and context dependent, leading to variable impacts across settings and limiting the feasibility of universal standardisation.

Aims: To examine three contrasting HIT implementations at Canberra Health Services (CHS) to identify perceived benefits and limitations, cross-cutting challenges, drivers of outcome variation, and implications for how HIT success is conceptualised and evaluated.

Methods: We conducted a multiple qualitative case study of WhatsApp use among junior doctors, MedChart for inpatient medication management, and My Health Record in outpatient care at CHS. Data were generated through semi-structured interviews and analysed using thematic analysis across and within cases.

Results: Across cases, data quality and security concerns persisted, but key integration barrier was reliance on traditional communication and practices, creating hybrid workflows that were embedded in routine work. Despite generally positive user attitudes, outcomes varied with levels of user engagement, closely linked to technical effectiveness and workflow fit. This highlights HIT's sociotechnical interdependence and the often-underestimated role of technical design in shaping engagement and behavioural change. Overall, neither investment nor adoption alone predicted better outcomes, indicating a non-linear relationship between these metrics and realised benefits.

Conclusion: HIT benefits are non-linear and shaped by interactions between technology, existing practices, and organisational context. Evaluation should move beyond uptake or investment alone to assess workflow integration, interoperability, and context-appropriate impact.

Impact: Future HIT design, implementation, and evaluation should move beyond simple measures of uptake, or technological sophistication, investment, and instead focus on how technologies interact with existing practices and organisational contexts.

TITLE: Trajectories of Generalised Anxiety Disorder Symptoms among Australian Men: Insights from The Ten to Men Study

AUTHORS: Wegayehu Sheferaw, University of Canberra; Itismita Mohanty, University of Canberra; Zelalem Mengesha, University of Canberra; Tesfaye Gebremedhin, University of Canberra; Theophile Niyonsenga, University of Canberra

ABSTRACT

Background: Anxiety disorders are prevalent among Australian men and contribute heavily to the burden of disease; however, they have been overlooked in men’s mental health research. Longitudinal evidence on the trajectories of men’s anxiety and associated risk factors remains limited. This study investigated longitudinal changes in anxiety symptoms and their severity, explored associated factors, and their time-varying effects.

Methods: Data were obtained from three waves (2020-2025) of the Ten to Men cohort study, using 18,592 observations of men aged 18 years and older. Anxiety symptoms were measured using the generalised anxiety disorder (GAD-7) instrument. The two-part hurdle mixed effects models investigated factors associated with the presence and severity of anxiety symptoms and their time-varying effects.

Results: The prevalence of reporting at least one anxiety symptom remained stable over the study period (69.3 % to 69.4 %), while mean GAD-7 scores increased modestly (4.78 +/- 4.17 to 4.88 +/- 4.13). Younger age, financial hardship, being in a married or de facto relationship, harmful alcohol use, lower subjective well-being, lower perceived social support, sexual difficulties, exposure to adverse life events, and living with disability were associated with the changes in the likelihood and severity of anxiety symptoms. Additionally, men from non-CALD backgrounds, gamblers and drug users were more likely to report GAD symptoms. Drug use demonstrated a significant time-varying effect on symptom severity.

Conclusion: Both modifiable and non-modifiable factors are associated with changes over time in anxiety symptoms and their severity among Australian men.

Impact: This longitudinal study provides valuable insights for developing timely targeted and evidence-based interventions to address men’s anxiety.

TITLE: Lessons for the ACT Light Rail: A Quantitative Health Impact Assessment of Peri-Urban Rail Infrastructure

AUTHORS: Soumya Mazumdar

ABSTRACT

Introduction: As the ACT expands its light rail network to Woden and beyond, understanding the health dividends of such infrastructure is vital. In this context, a quantitative Health Impact Assessment (HIA) can help project the potential benefits of these expansions. In this research, we demonstrate how a hypothetical train line can bring health benefits to a population in South Western Sydney (SWS), using methods that are easily translatable to an ACT context.

Aims: To quantify the potential health benefits—specifically regarding Type 2 diabetes—of introducing a commuter railway to a high-growth, car-dependent peri-urban area in SWS, providing a translatable evidence base for ACT urban planning.

Method: A quantitative HIA was conducted using DYNAMO-HIA modeling tools. This micro-simulation compared two 11-year scenarios: a baseline and a rail intervention scenario. The model utilized population demographics, walking prevalence, and diabetes-related morbidity/mortality data to project changes in disease burden.

Results: The intervention projected an annual reduction in diabetes incidence and prevalence of 0.02%. Over the study period, this resulted in 222 Disability-Adjusted Life Years (DALYs) gained and a life expectancy increase of approximately one month. While incremental, these findings represent significant population-level health gains in a rapidly developing community.

Conclusions: The study demonstrates the efficacy of predictive HIA modeling for infrastructure. It highlights that integrating health outcomes into transport planning is essential for curbing lifestyle-related diseases in expanding urban corridors.

Impact: These findings are highly relevant to the ACT's "Movable Canberra" goals. By applying this SWS model to the ACT light rail expansion, policymakers can better justify infrastructure as a primary preventative health intervention.

TITLE: Holding on While Adapting: A Scoping Review of Food, Identity, and Dietary Acculturation in Indian Migrant Populations

AUTHORS: Swati Bachani Singh, University of Canberra; Sunil George, University of Canberra; Penney Upton, University of Canberra; Catherine R Knight-Agarwal, University of Canberra

ABSTRACT

Introduction: Migration reshapes dietary practices, particularly among Indian migrants for whom food remains central to identity. Evidence from Western countries suggests that post-migration dietary change may increase chronic disease risk.

Aims: To synthesise evidence on dietary acculturation among Indian migrants and examine factors influencing post-migration dietary behaviours and associated health risks.

Methods: Following Joanna Briggs Institute methodology, several databases were searched for English-language studies involving first-generation Indians of all ages who migrated to either Australia, Canada, New Zealand or the United Kingdom between the years 2000 and 2025. Studies addressing general dietary acculturation were included; those focused solely on dietary management of disease were excluded. Data were extracted and then analysed thematically.

Results: Twenty-five studies including qualitative and quantitative methods, found strong retention of traditional foods particularly for evening meals and religious occasions. Consistent bicultural eating patterns integrated western-style breakfasts and lunches combined with Indian dinners. Post-migration shifts included increased consumption of high-fat dairy, meat and sugary beverages in addition to both convenience and processed foods. These choices were driven by time scarcity, cost, work pressures, and children's preferences. Women were primary food gatekeepers, balancing cultural expectations and adaptation demands. Measurement inconsistencies and limited validated tools were common across studies.

Conclusion: Indian migrants demonstrate selective dietary acculturation contributing to chronic disease risk. Affordability, accessibility, and consumer engagement should be priority areas in the design of future public health interventions.

Impact: Findings support culturally responsive, family-centred interventions and improved acculturation measurements to enhance migrant health outcomes.

TITLE: Health System Barriers Influencing Breast Cancer Screening Utilisation among South-Asian Migrant Women in High-Income Countries

AUTHORS: Sharon Ponnampalam, Australian National University

ABSTRACT

Introduction: Breast cancer is one of the most commonly diagnosed cancers worldwide. Early detection through screening is key to improving outcomes. High-income countries (HICs) offer well-established, government-subsidised mammography programs that reduce mortality by detecting cancer at earlier stages. Despite residing in countries with accessible screening programs, participation rates in routine mammographic screening among women from South-Asian communities (India, Pakistan, Afghanistan, Bangladesh, Sri Lanka, Nepal, Maldives and Bhutan) remain low.

Aim: This systematic review aims to synthesise the health-system barriers that influence breast cancer screening participation rates for South-Asian migrant women in HICs.

Method: The methodology was conducted in accordance with the Joanna Briggs Institute Manual of Evidence Synthesis and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. Ten studies were included in this review, and barriers were categorised using the Availability, Accessibility, Acceptability, and Quality (AAAQ) Framework.

Results: Barriers were primarily within health-system structures, including provision of national language-only screening invitations, limited culturally tailored health information, inadequate navigation support, gender-discordant service delivery, and insufficient cultural competence among healthcare professionals. Availability was not identified as a barrier, as countries in the included studies provided prevention services; however, these services were not accessible, acceptable, or delivered in ways that met the cultural and linguistic requirements of South-Asian women.

Conclusion: The review's findings highlight the need for healthcare professionals and policymakers to understand the cultural values of South-Asian women prior to diagnosis and treatment.

Impact: The findings support the implementation of culturally responsive screening strategies to improve participation and reduce inequities in early breast cancer detection.

TITLE: Description of Events Reported to the Australian National Focal Point, 2014–2023

AUTHORS: Amish Talwar, Australian National University; Martyn Kirk, Australian National University

ABSTRACT

Introduction: The International Health Regulations (IHR) require World Health Organization (WHO) Member States to report significant public health events to WHO through designated National Focal Points (NFPs). However, there has been no extended description of events received or reported by an NFP.

Aim: To describe events reported to the Australian NFP from 2014 to 2023.

Methods: We collected information on events reported to the Australian NFP from 2014 to 2023 as recorded in the NFP's incident management system (IMS). Available information included NFP notification date, event category, associated hazard, event registration on the Australian National Notifiable Disease List (NNDL), original notifying body and which international NFPs and domestic bodies were notified.

Results: From 2014 to 2023, 967 events were reported to the Australian NFP, of which 16 events encompassing the COVID-19 pandemic and mpox epidemic, six events of unknown origin and eight non-notifications were excluded. Of the remaining 951, 340 (38.5%) were reported from within Australia, of which 173 (50.9%) resulted in overseas NFP notifications. The greatest number of events reported to the NFP was in 2020 (171, 18.0%) and the least in 2021 (19, 2.0%). The top three hazards reported from within Australia included tuberculosis (112, 32.9% of all tuberculosis events reported from within Australia), legionellosis (69, 20.3%) and measles (53, 15.6%).

Conclusion: While the Australian IMS provides important event information, it does not provide all the information necessary to evaluate the efficacy of the Australian event reporting system.

Impact: These findings underscore the need for NFPs to provide accurate and comprehensive event information according to their IHR obligations.

TITLE: The GenAI Paradox in Clinical Placements: An Observational Mixed Methods Study of Academics and Supervisors of Health Students

AUTHORS: Luise Hollmann, University of Canberra; Bernie Bissett, University of Canberra; D'Arcy Molan, University of Canberra; Tanya Lawlis, University of Canberra

ABSTRACT

Introduction: As Generative Artificial Intelligence (GenAI) becomes increasingly integrated into health care practice, allied health and nursing students should be prepared for this rapidly evolving technological landscape. Little is known about how well contemporary university health curriculum matches workplace realities for students on placements.

Aims/Question: To explore the alignment between university curriculum and supervisor expectations regarding student use of GenAI during clinical placements in the Canberra Region.

Methods: Two bespoke surveys were conducted in December 2025: academics (n=20) at the University of Canberra capturing responses from 12/14 (86%) of health disciplines; and placement supervisors (n=86, representing 1818 placements annually). Descriptive statistics and thematic analysis were used to identify trends in GenAI integration, expectations, experiences, and concerns.

Results: Most academics (75%) reported embedding GenAI content in curriculum, yet 92% do not teach profession-specific GenAI tools, despite expecting students to use them during placement. In contrast, only 13.6% of all supervisors reported students use GenAI on placement (government/public sites 7%). Uncertainty is widespread: 66% of supervisors were unsure about student preparedness to use GenAI. Willingness to allow student GenAI use is low (24%), even among supervisors who use GenAI. Concerns included deskilling, hallucinations, privacy risks, and lack of policy guidance. Only 47.5% of sites reported having a GenAI policy.

Conclusion: A significant contradiction exists: Universities anticipate meaningful student GenAI use on clinical placement but don't teach real-world applications; meanwhile most supervisors neither observe nor readily permit students to use GenAI.

Impact: Clarifying expectations, developing shared guidelines, and embedding profession-specific GenAI tools in university curricula may strengthen student readiness for placement environments.

TITLE: Does the Tempus System Improve Chest Pain Evaluation Treatment Times?

AUTHORS: James Wayte, Canberra Health Services; Thomas Georgeson, Canberra Health Services; Catherine Wood, Canberra Health Services; Marie Salib, Canberra Health Services; Marcela Nascimento, Canberra Health Services; Phillip Crispin, Canberra Health Services

ABSTRACT

Background: The Sarstedt Tempus600 system moves pathology samples from patient areas directly to the laboratory. It has been previously demonstrated that this system is associated with an improvement in result turnaround time (TAT). It was introduced to the Canberra Hospital Emergency Department in March 2025.

Within the emergency department a key step in the evaluation of possible ischaemic chest pain is the troponin test result. The troponin test result can be directly linked to decision making around disposition, and therefore emergency department length of stay (ED LOS).

Aim: To investigate the effect of the TEMPUS system introduction on TAT for troponin samples and the effect of the system on parameters that measure EDLOS for chest pain presentations.

Methods: A retrospective and prospective observational cohort study was conducted at The Canberra Hospital Emergency Department examining the relationship between troponin TAT and EDLOS for patients being evaluated for non ST elevation cardiac ischaemia. The study compared TAT and EDLOS parameters before and after the introduction of the Tempus system.

Results: The analysis (full results are due in April 2026) suggests that:

1. The TEMPUS system improves TAT for troponin samples on average by 10 minutes, with a reduction in variation of TAT time compared to other transport methods.
2. EDLOS for patients presenting with chest pain is highly varied, and likely driven by other factors. It has not improved following the introduction of the TEMPUS system.

Conclusion: EDLOS for chest pain patients is determined by a range of factors. The improved TAT consistently provided by the TEMPUS system has not improved EDLOS.

TITLE: Peripheral Administration of Vasoactive Medications in the Emergency Department

AUTHORS: Jason Liang, Australian National University; Fallon Grieve, Canberra Health Services; Liam Byrne, Canberra Health Services; Connor Lynch, Canberra Health Services; Grainne Hughes, Canberra Health Services; Che Marfleet, Canberra Health Services; Thomas Georgeson, Canberra Health Services

ABSTRACT

Background: Vasoactive medications increase blood pressure by stimulating vasoconstriction and increasing systemic vascular resistance. Their use in the emergency department (ED) is common and they play a key role in the management of haemodynamic instability observed in states of shock. Traditionally, vasoactive medications have been administered via central venous catheters (CVCs) due to concerns about extravasation and potential soft tissue necrosis. However, recent studies have suggested that peripheral administration is safe with a low rate of complications and an even lower rate of extravasation requiring any specific therapy

Aim: The study aimed to describe a) the patterns of use of vasoactive medications in the Canberra Hospital Emergency Department, including patient, illness and treatment characteristics b) the rate and nature of complications associated with vasoactive medications delivered via PIVCs with the emergency department (ED) of The Canberra Hospital.

Methods: This was a single-centre, descriptive, retrospective observational study of patients who were admitted to the ED from November 2022 to November 2025 and were administered peripheral vasoactive medications.

Results: The outcome measures examined were rates of extravasation rates across different patient groups, rate and concentration of infusions and patterns and severity of illness. The final data analysis is pending but will be available by early May 2026.

Impact: The study aims to be the basis of a new hospital wide protocol on the use of peripheral vasoactive medications, by identifying high and low risk groups, and identifying factors that predict that the patient is likely to be treated with vasoactive medications for a short duration.

TITLE: Rapid Rehydration for Children in the Emergency Department

AUTHORS: Alison Lally, Canberra Health Services; Matthew Whitehouse, Canberra Health Services; Svetlana Shriyan, Canberra Health Services; Harendra Cooray, Canberra Health Services; Thomas Georgeson, Canberra Health Services

ABSTRACT

Background: There is strong evidence supporting the use of rapid fluid resuscitation of infants and children with dehydration from vomiting, diarrhoea or gastroenteritis, particularly in regards to avoiding the need for hospital admission. This form of rehydration delivers fluid either by nasogastric tube (NG) or intravenous cannula (IV) more rapidly than can be achieved by traditional means. Until recently in CHS there was no pathway for rapid rehydration for children in the ACT. Consequently many of cases of dehydration resulted in prolonged emergency stays, need for admission under the paediatrics unit, and transfer from North Canberra Hospital (NCH) to Canberra Hospital (TCH) for admission. A protocol for rapid rehydration of paediatric patients at TCH and NCH was introduced in March 2025.

Aim: To evaluate the impact of the new protocol on hospital admissions, inter-hospital transfers and emergency department length of stay (EDLOS).

Methods: A retrospective cohort study examined patients at TCH and NCH who presented with the diagnoses of dehydration, gastroenteritis, vomiting or diarrhoea over selected months before and after the introduction of the new protocol.

Results: The key parameters measured were hospital admissions, EDLOS and inter-hospital transfers for both hospitals. A baseline sample was taken from September 2024. This was compared to cohorts in March 2025 (immediately after the protocol introduction) as well as September 2025 and March 2026 (late effect of protocol introduction). The data has not yet been completely analysed and results will be fully available in April 2026.

Conclusion: The data will inform emergency department leadership and clinicians about the success of the policy.

TITLE: Person Centered Maternity Care in Humanitarian and Fragile Settings

AUTHORS: Wubshet Negash, Australian National University

ABSTRACT

Background: Women who live in crisis settings are three times more likely to die than those who live in peaceful environments. Person-centered maternity care (PCMC) is a fundamental human right for every woman, yet it is often overlooked in conflict contexts.

Methods: A scoping review of quantitative and/or qualitative approach was conducted to assess person-centered maternity care in humanitarian settings. Research that assessed dimensions of PCMC such as autonomy, dignity, privacy, communication, confidentiality, and supportive care were included. Electronic database searches of PubMed, MEDLINE, EMBASE, PsycINFO, Scopus and generic web searches (Google Scholar) were used to search for available evidence. We used the Preferred Reporting Items for Systematic Review and Meta Analyses criteria for scoping review (PRISMA-ScR) statement. The data from the final selected articles was extracted into an Excel spreadsheet. Finally, we described the study characteristics and summarized the concept of person-centered care.

Results: A total of 889 articles were identified. After exclusion by title and abstract, 71 articles were eligible for full text review, and finally 16 articles were eligible for data extraction. Our finding revealed low respect and supportive care, poor communication and autonomy, and breach of privacy. Resource constraints, protracted insecurity, cultural and language barriers were attributed to poor person-centered sexual and reproductive health.

Conclusion and Recommendations: There are significantly more reports of negative experiences of maternity healthcare services than positive ones. Prioritizing culturally appropriate approach, simulation-based training for healthcare providers on person-centered care, community engagement, and the integration of PCMC domains into existing health services are essential to improve service delivery.

TITLE: A Trial to Upgrade the Bariatric Referral Triage Category for Patients on Clozapine

AUTHORS: Louise Brightman, Canberra Health Services

ABSTRACT

Introduction: Patients on clozapine therapy have increased rates of obesity, more severe co-morbidities, and a reduced life expectancy of up to 20 years. Given these risks, the Department of Bariatric Medicine (DBM) trialled upgrading the referral triage category for patients on clozapine to facilitate timely access to bariatric support.

Aims: To upgrade new referrals for patients on clozapine from triage Category 3 to 2, with the purpose of reducing wait times to access bariatric support from approximately three years to three months.

Methods: From April-September 2025, baseline data was collected on the number of Category 3 referrals for patients on clozapine. Comparison data was collated from September 2025-February 2026 to determine the number of upgraded referrals as per the new Category 2 criteria.

Results: From April-September 2025, all referrals for patients on clozapine (n=1, 100%) were triaged as Category 3, with an expected wait time of three years. From September 2025-February 2026, all referrals for patients on clozapine (n=6, 100%) were triaged as Category 2. This resulted in DBM appointments being offered within three months.

Conclusions and Impact: Upgrading the referral triage category for patients on clozapine resulted in earlier opportunity to access to bariatric support. Reduced DBM wait times may lead to health improvements and/or prevent further complications associated with waiting longer for a Category 3 appointment. The increased number of Category 2 referrals did not impact on wait times for non-clozapine Category 2 patients. In future, the DBM plans to assess attendance rates for patients on clozapine as part of the new Category 2 triage criteria.

TITLE: Stepping Up Pilot Program - Evaluating Impact on Clinical Outcomes and Career Progression among Early to Mid-Career Nurses and Midwives

AUTHORS: Karen O'Brien, Canberra Health Services; Tubi Oyston, Canberra Health Services; Renate Triffit, Canberra Health Services

ABSTRACT

Introduction: Nurses and midwives play a pivotal role in health care delivery. Retaining experienced staff is essential to ensure high quality care is provided. Canberra Health Services (CHS) workforce data identified high vacancy rates and growing numbers of nurses and midwives resigning 3-5 years post-graduation due to poor workplace culture and lack of professional support.

Aims/Question: Evaluate impact of 'Stepping Up Program' Pilot, a structured career development program for early to mid-career nurses and midwives. We measured leadership confidence and capability, quality improvement activities, participant/manager satisfaction and career outcomes and retention.

Methods: Evaluation included a mixed method approach. Participant surveys measured career progression, leadership confidence and translation of learning into practice. Quality improvement (QI) projects were commenced and linked with health service standards. Clinical managers provided feedback on participant progress and career progression tracking commenced.

Results: 100 participants completed the program in 2025. Confidence increased in leadership behaviours and quality project delivery. Managers reported participants performed above expectations and are now working at full scope of practice. Career progression data indicates over 40% participants successfully achieving level 2 positions.

Conclusions: This pilot program was highly successful with strong evidence of learning translation into practice, improving clinical leadership capability, positive health outcomes from QI projects and successful career progression.

Impact: The Stepping Up Program empowers nurses and midwives to be confident and effective clinical leaders, improving staff performance, health outcomes and supporting career advancement. 180 participants will complete the program in 2026. Retention data will be monitored over time.

TITLE: A Retrospective Single-Centre Scoping Study of Clonal Haematopoiesis

AUTHORS: Ry Cambourne, Canberra Health Services; Jun Yen Ng, Canberra Health Services; Maya Latimer, Canberra Health Services; Dipti Talaulikar, Canberra Health Services; Mark Polizzotto, Canberra Health Services

ABSTRACT

Introduction: Clonal Haematopoiesis (CH) refers to the clonal outgrowth of stem cells driven by acquired mutations without forming a haematological cancer. It is found in 10-30% of people over 70 years and is prevalent in people living with HIV and cancer survivors. It is increasingly identified on next-generation sequencing (NGS) utilised in daily clinical practice.

CH is associated with life-limiting complications, including haematological cancers, cardiovascular diseases (CVD), type 2 diabetes mellitus (T2DM), and chronic kidney diseases (CKD). Its treatment is not yet established and is being explored in clinical trials worldwide.

Aims: There is limited data on the Australian landscape of CH, including the prevalence and high-risk subcohorts most likely to benefit from treatment. This study addresses these knowledge gaps to inform clinical care and future research.

Methods: This retrospective cohort study reports the frequency and characteristics of CH among people who underwent somatic haematological NGS testing locally between 11/11/2022 and 11/11/2025 (n=821).

Results: CH was identified in 8.3% (n=68) of patients, with observations from the first cohort (n=19) as follows. The median age was 72 years, and 68% were males. The frequency of CVD and CKD was 38.9% and 33.3%, respectively. Additionally, 42% had high CV risk (AusCVD), and 73% had high T2DM risk (AUSDRISK). 42% each had a CH burden of $\geq 10\%$ and cytopenia, both risk factors for haematological cancer.

Conclusion: The observed prevalence of CH aligns with that reported in clinical cohorts. These findings directly inform clinical care and future research in CH, including risks for CVD and haematological cancer as key priorities.

TITLE: Enhancing Parkinsons Disease Care; A Systematic Review of Nurse-Led Interventions in Australia

AUTHORS: Minimol Kulakkottu Scaria, Canberra Health Services; Sajina Anna Thomas, Canberra Health Services; Nerissa Askelin, Canberra Hospital; Lori Korodaj, Canberra Health Services; Margaret Broom, Canberra Health Services

ABSTRACT

Introduction: Quality of life for people with Parkinson’s disease (PD) and their carers is significantly affected by progressive motor and non-motor symptoms Parkinson’s disease nurse specialists (PDNS) play a vital role in supporting patients to improve their healthcare outcome. A recent systematic review demonstrated the benefits of a nurse-led model internationally, yet there remained a gap in evidence on their significance in the Australian context.

Aims: To synthesise the evidence on the effectiveness of nurse-led interventions for people with PD and their carers in Australia.

Methods: A systematic review of literature that included Embase, Ovid Emcare, Medline, Cochrane, the Central Trial Register, CINAHL and Google Scholar was conducted in accordance with the PRISMA statement. Australian studies evaluating nurse-involved interventions for people with PD and their caregivers were included. Eligible studies were then assessed for risk of bias using the Joanna Briggs Institute (JBI) Risk of Bias tool.

Results: Despite screening 200 articles after initial search, only four pertained to the Australian context, demonstrating the pronounced scarcity of local evidence. PDNS-led services improved quality of life and care outcomes for people with PD and carers. Underpinning self-management, patient confidence, reduced healthcare burden, and generated cost benefits through shorter hospital stays and fewer readmissions. Improvements were also observed in patient and carer satisfaction, well-being and continuity of care.

Conclusion: Embedding PDNS within Australian healthcare settings has the capacity to greatly enhances the quality of life and care for people with PD and carers.

Impact: Our findings support the advocacy for sustainable PDNS roles and may inform policy and system level reforms.

TITLE: A Mixed Methods Systematic Review of Parental Acceptance of Respiratory Syncytial Virus (RSV) Immunisation for their Infants

AUTHORS: Emily Thinius, Australian National University; Nicola Irwin, Canberra Health Services; Mary Bushell, University of Canberra; Mary-Ellen Hooper, University of Canberra; Glenys Frank, University of Canberra; Deborah Davis, University of Canberra

ABSTRACT

Introduction: In Australia, Respiratory Syncytial Virus (RSV) bronchiolitis is a leading cause of hospitalisation in infants. Nirsevimab, a long-acting monoclonal antibody, has recently become widely available for passive immunisation of infants against RSV. Despite its demonstrated efficacy, local early data suggests suboptimal uptake amongst parents of high-risk infants.

Aim: To identify factors influencing parental acceptance of nirsevimab for infants, and to determine whether these factors differ among high-risk infant populations.

Methods: We conducted a mixed methods systematic review of primary qualitative and quantitative studies, following Joanna Briggs Institute methodology. Searches were undertaken in CINAHL, MEDLINE and Embase. Eligible studies reported attitudes, barriers and facilitators to immunisation with nirsevimab.

Results: Forty-one studies met inclusion criteria. Preliminary synthesis suggests higher acceptance among parents who accepted other newborn interventions, exhibited positive antenatal health behaviours, or had previous personal experience with RSV disease. Key drivers of acceptance included a desire to protect one's child, high perceived efficacy of nirsevimab, and recommendations from healthcare professionals. Parents were more likely to refuse nirsevimab if they declined maternal vaccinations, had limited knowledge of RSV, and were of low socioeconomic status. Reported reasons for refusal included safety concerns, potential side effects and hesitancy related to the perceived novelty of nirsevimab.

Conclusions: Parental acceptance of nirsevimab is shaped by sociodemographic factors, prior health behaviours, level of RSV knowledge, and guidance from healthcare providers. Addressing these factors is important to achieving broad and equitable uptake.

Impact: These findings highlight targets for future immunisation campaigns and provide healthcare professionals with insight into common parental concerns, informing future conversations about RSV immunisation.

TITLE: Attached to Machines.... But falling through the Cracks

AUTHORS: Julie Harisson, Canberra Health Services; Rashna Bajracharya, Canberra Health Services

ABSTRACT

Background: Dialysis patients under 65 years often face higher rates of unemployment, ineligibility for the National Disability Insurance Scheme (NDIS), and financial hardship. They frequently experience psychosocial issues such as limited access to in home support, reduced community participation, housing instability, and mental health challenges.

Julie Harisson, Ruth McIntyre, Rashna Bajracharya, Social work Student Kaylene Raynes

Aim: To identify barriers to renal patients' access to psychosocial community supports, enhance social workers' knowledge of these barriers to identify gaps, and better connect patients with appropriate resources and enhance holistic care.

Method: A mixed methods approach was implemented including qualitative and quantitative study with 42 haemodialysis patients across three dialysis centres in ACT and inpatient settings. A quantitative survey of renal health professionals (n=17) revealed strong representation from dialysis nurses (52.94%), followed by nephrologists and other health professionals.

Results: Patients experienced substantial impacts on daily functioning, including symptom burden, emotional distress, and reduced participation in work or leisure activities. Financial hardship was prevalent, with 62.5% of patients not accessing financial assistance despite difficulties in meeting basic needs. Access to psychosocial supports was limited; 66% of patients reported difficulty obtaining services, and 69% relied primarily on informal supports. Barriers to support included insufficient service information, limited awareness of community resources, eligibility restrictions (including NDIS), inadequate service availability, financial limitations, and cultural or language obstacles.

Conclusion: The findings indicate the need to map existing services and identify barriers and unmet needs, enhance pathways to psychosocial support for younger dialysis patients, improve referral processes, clarify service information and targeted resource allocation.

TITLE: Improving Access to Respiratory Rehabilitation for ICU Survivors: Working SMARTer all the Way Home

AUTHORS: Kye Grant, University of Canberra; Bernie Bissett, University of Canberra; Marc Nickels, West Moreton Health; Anne Leditschke, Mater Health; Tayne Ryall, University of Canberra; Dale Trevor

ABSTRACT

Introduction: Survivors of critical illness often experience ongoing shortness of breath linked to respiratory muscle weakness. Inspiratory muscle training (IMT) can help but use outside the ICU is inconsistent and true adherence is unclear. Smart, app integrated monitoring (POWERbreathe Smart Adaptor + ActiBreathe) may support objective tracking across inpatient, sub-acute and home settings. Understanding acceptability, feasibility, and barriers to smart monitored IMT is essential for implementation across ICU to rehabilitation pathways.

Aim: To explore patient reported acceptability, facilitators and barriers to smart monitored IMT after critical illness, and to assess feasibility and early quantitative effects compared with paper diary monitoring.

Methods: Mixed methods, convergent parallel studies nested within the intervention arm of the Phase III Inspire Beyond ICU RCT.

Qualitative: Semi structured interviews with patients and carers, purposively sampled including decliners. Topics include usability, motivation, environment, privacy, feedback and the transition home. Reflexive thematic analysis will be applied.

Quantitative: Acceptability measured via purpose designed questionnaires grounded in the Sekhon et al. framework. Feasibility metrics include adherence (planned vs completed sessions), inhalation timing parameters, and change in Maximum Inspiratory Pressure. Outcomes will be compared with paper diary users.

Integration: Joint displays and narrative weaving will combine qualitative and quantitative findings.

Results: Recruitment and analysis will occur during the Phase III RCT; early uptake, adherence patterns and emerging themes will be reported.

Conclusions: This program will identify key barriers and facilitators, quantify feasibility, and provide practice ready insights for smart monitored IMT after critical illness.

Impact: Findings will support implementation across ICU, sub-acute and community rehabilitation settings locally and internationally.

TITLE: It's Time to go to Quantum in Health System

AUTHORS: Rachel Li, Canberra Health Service; Hong Yin, RMIT University; Even Cole, Australian National University; Paul Smith, Australian National University

ABSTRACT

Background: Climate change poses significant risks to human health. Planetary Health emphasizes the interdependence of human health and the natural world. Rising temperatures increase bacterial infection because warmer weather promotes fast pathogen replication and spreading. The bacterial infections are a major crisis for health system. Novel mechanisms that do not rely on traditional antibiotic pathways are highly sought. Our program – The Quantum in Health System, hypothesises Carbon Quantum Dots (CQDs) have potential applications in controlling bacterial infection.

Aim: To design CQDs to address the urgent needs for antibacterial infection, one of the big, real-world problems in climate and health.

Materials and Methods: In collaboration with ANU School of Engineering and Computer Sciences and RMIT University, we created novel CQDs using pyrolysed food waste. Six samples were prepared using conventional hydrothermal methods and our new plasma-based method. We investigated the novel CQDs for their antibacterial activities and the biocompatibility using human cells.

Results: Results of Fourier-Transform Infrared Spectroscopy and Transmission Electron Microscopy images showed the functional groups attached to the CQDs derived from different precursors as we expected. Using Luciferase and Live/dead assays, 3 of 6 samples showed antibacterial effects. The CQDs exhibited good biocompatibility by evaluating the effects of CQDs with different surface charges on fibroblasts and osteoblasts.

Conclusion and Impact: We have created novel CQDs which demonstrated the antibacterial activities. We provide a novel direction, use of CQDs, for the controlling bacterial infection in health systems.

TITLE: Wellbeing in Healthcare: The WorkWell Project

AUTHORS: Megan Thorn, University of Canberra; Dimity Crisp, University of Canberra; Mel Mylek, University of Canberra

ABSTRACT

Introduction (Background and Significance): Workplace wellbeing is no longer optional in healthcare; it is a core safety and workforce priority. Rising burnout, workforce shortages, and increasing service pressures are reshaping how clinicians experience their work, with direct impacts on patient care, team culture, and organisational performance. Yet wellbeing efforts remain inconsistent and fragmented. At Canberra Health Services, we are taking a different approach. Welcome to the WorkWell Project; a commitment to building sustainable, system-level wellbeing.

Aims/Question: This pitch highlights why wellbeing must be treated as a core component of healthcare quality, and outlines how a structured, evidence-informed approach can strengthen staff experience, retention, and organisational resilience.

Methods: Drawing on emerging research, sector trends, and insights from staff across Canberra Health Services, this pitch synthesises what we know about effective wellbeing initiatives, the conditions that support them, and the organisational behaviours that enable sustainable change.

Results: Early insights suggest that wellbeing initiatives are most effective when they are team-led, supported by visible leadership, and embedded into everyday practice rather than added on as optional extras. Emerging themes indicate that communication, psychological safety, and access to meaningful resources are likely to influence whether wellbeing efforts strengthen team cohesion.

Conclusion: Wellbeing is not a standalone project; it is a behavioural shift. Strengthening it requires clarity, consistency, and organisational commitment to understanding staff experience and removing barriers to engagement.

Impact: Prioritising wellbeing creates safer, more sustainable healthcare environments. By investing in structures that support staff, organisations can improve retention, enhance patient outcomes, and build a workforce capable of meeting the demands of modern healthcare.

TITLE: Clinical Outcomes of Patients with Schizophrenia Spectrum and Other Psychotic Disorders Attending the Canberra Department of Bariatric Medicine

AUTHORS: Hannah Sudarsan, Australian National University & Canberra Health Services; Louise Brightman, Canberra Health Services; Ashvini Munindradasa, Canberra Health Services

ABSTRACT

Introduction: Patients with schizophrenia spectrum and other psychotic disorders have a high prevalence of obesity and metabolic syndrome.¹ Evidence suggests this may be due to the combination of weight-promoting medications, symptoms of the illness contributing to sub-optimal lifestyle, as well as genetic and environmental factors.²

The Canberra Health Service (CHS) Department of Bariatric Medicine (DBM) is a publicly-funded service that provides comprehensive obesity care to adults with class III obesity.

Aims: Whilst previous research has focused on schizophrenia, obesity and metabolic risks; less is known about outcomes for patients with schizophrenia spectrum and other psychotic disorders attending specialist obesity services like the DBM.

Methods: A retrospective observational study was performed on patients with schizophrenia spectrum and other psychotic disorders attending DBM from January 2023-June 2024. Baseline characteristics, duration of engagement, and weight-promoting psychotropic medication use were recorded; along with changes in anthropometrics and metabolic parameters.

Results: The use of weight-promoting psychotropic medications did not prevent clinically significant weight loss or weight stabilization (weight change range -53.6kg to +3.8kg). Longer duration of engagement (>24 months) showed beneficial reductions in metabolic parameters including HbA1c (mean -0.6%) and systolic blood pressure (mean -10 mmHg).

Conclusions and Impact: This study suggests that patients with schizophrenia spectrum and other psychotic disorders can achieve clinically significant weight loss or weight stabilization even when prescribed weight-promoting psychotropic medications. Metabolic improvements were greater with longer duration of engagement. This study will contribute to a larger DBM study comparing the engagement and clinical outcomes of patients with and without severe mental illness.

TITLE: Managing Menstruation in an Ambulance Health Service: Early Findings of Workforce Considerations

AUTHORS: Erin Mengler, ACT Emergency Service Agency; Lisa Hobbs, Australian Catholic University; Louise Reynolds, Australian Catholic University; Scott Devenish, Australian Catholic University

ABSTRACT

Introduction: Since 2019, the Australian paramedic workforce has undergone marked feminisation, with women now comprising more than half of staff in some jurisdictions. Menstruation can adversely affect women working in ambulance settings through pain, heavy bleeding, fear of leakage and limited access to appropriate sanitary facilities, yet there is little research on how best to support them in operational roles.

Aims/Question: To investigate the impact of menstruation on women* paramedics' capacity to undertake operational duties and to explore the acceptability and perceived usefulness of workplace menstruation support.

Methods: A jurisdictional ambulance service introduced menstruation support kits (tampons, sanitary pads and disposal bags) on all operational vehicles, stations, communications centres and headquarters. An anonymous online survey incorporating Likert-scale and free-text questions was distributed to operational staff to examine experiences of menstruation at work and use of the kits. Human research ethics approval was obtained

Results: This presentation will report early findings from the initial survey analysis, including patterns of kit uptake, perceived adequacy of supplies and reported changes in comfort, confidence and shift completion while menstruating.

Conclusions: Preliminary results will be presented that a simple, low cost workplace interventions can reduce menstruation-related disruption to paramedic duties and improve staff wellbeing and workplace safety.

Impact: By identifying practical strategies to support menstruating paramedics, this research has the potential to enhance healthcare worker wellbeing, reduce unplanned absences and contribute to more inclusive and sustainable ambulance service delivery.

*Note on language: women describes those who were assigned female at birth

TITLE: Physiotherapy Interventions in Intensive Care: A Systematic Review of Audits of Usual Practice

AUTHORS: Sophie Martin, University of Canberra; Bernie Bissett, University of Canberra; Tayne Ryall, University of Canberra; Ianthe Boden, Launceston Hospital; Anne Leditschke, Mater Hospital Brisbane

ABSTRACT

Introduction (Background and Significance): Physiotherapists are part of the intensive care unit (ICU) multidisciplinary team providing individualised respiratory and rehabilitation interventions. As an evolving, evidence-based profession, there is extensive research evaluating the safety and efficacy of different physiotherapy treatments in the ICU. However, there is limited understanding about pragmatic physiotherapy practice.

Aims/Question: The aim of this study was to systematically review all available evidence regarding current physiotherapy treatment delivery in intensive care units.

Methods: A systematic review was conducted aligning with the Preferred Reporting Items for Systematic reviews and Meta-Analyses guidelines. Medline (via Web of Science), CIANHL (via EBSCO) and Scopus were searched for publications between January 2008 and August 2025. Only studies conducting an audit of physiotherapy practice were included. There was no exclusion based on patient characteristics or geographic location. The Critical Skills Appraisal Program tool for cross sectional studies was used to assess risk of bias.

Results: Thirteen studies across eight countries met the eligibility criteria (n=2258). Eleven (85%) studies reported mobilisation as a treatment technique. Passive range of motion was reported by six (46%) studies. There was a restricted ability to determine heterogeneity of care between regions as nine (69%) studies utilised a single-centre study design.

Conclusion: The heterogeneity of the included studies suggests physiotherapy practice is inconsistent across healthcare institutions and may not be concordant with current evidence.

Impact: A comprehensive, multicentre audit of pragmatic physiotherapy practice in ICU environments is needed to assess treatment provision across sites and to analyse if current practice aligns with evidence and practice guidelines.

TITLE: Patellofemoral Kinematics of Native Vs. Kinematically Aligned Total Knee Replacement

AUTHORS: Olivia Scheide, Australian National University; Nicolo Malagutti, Australian National University; Catherine Galvin, Australian National University; Joseph Lynch, Canberra Health Services; Paul Smith, Canberra Health Services; Tom Ward, Canberra Health Services

ABSTRACT

Introduction: Kinematic alignment (KA) was studied in the tibiofemoral joint, but its effects on the patellofemoral joint are still unclear. Modern implants are designed to account for expected changes in patellofemoral kinematics (PFK).

Aim: This study aimed to compare the PFK of native knees, and knees post-total knee replacement (TKR) with two modern implants in KA knees.

Methods: A patellar tracker was attached to the anterior surface of the patella for eight cadaveric specimens and integrated into the Orthokey system (BLU-IGS, Italia). Native PFK were recorded through flexion-extension. Each knee underwent a KA-TKR with the GMK Sphere (Medacta International, Switzerland) trials and patellar resurfacing. PFK were recorded. The GMK Sphere trials was replaced with the GMK SpheriKA trial and PFK were recorded. Differences in kinematics were assessed using linear mixed effects models.

Results: Over the flexion-extension, the Sphere and SpheriKA implants tilted medially between 3.9° and 6.8°, and 2.7° and 5.6° than the native knee, respectively. The Sphere implant patella was medially shifted 2.4 to 5.0mm compared to native knees. The SpheriKA implant patella shift was similar at 0° of flexion and then shifted 3.6 mm more medially at 90° of flexion. Both implants were more posterior compared to the native knee, with the Sphere implant 0.9 to 3.9 mm and the SpheriKA implant 0.07 to 2.8mm more posterior than the native knee.

Conclusion: Differences in implant designs change PFK compared to the native knee.

Impact: Further work is needed to assess PFK in-vivo to better understand their effect on patient outcomes.

TITLE: Audit of Lower Limb Injury Management in the Emergency Department

AUTHORS: Sameer Shariff, Canberra Health Services; Jyoti Abraham, Canberra Health Services; Sana Gul, Canberra Health Services; Saleh Khwaja, Canberra Health Services; Hania Zahra, Canberra Health Services; Thomas Georgeson, Canberra Health Services

ABSTRACT

Background: Literature and guidelines suggest best practices in managing patients with trauma-related below-knee joint pain in emergency departments (EDs). These guidelines emphasise early assessment of patients in the waiting room to ensure timely pain relief and initiation of diagnostics—particularly for limb trauma. In the Canberra Hospital ED trauma related ankle injuries are managed by doctors, physiotherapists and advance nurse practitioners (ANPs).

Aim: To evaluate the timeliness and efficiency of patient flow in the Fast Track (FT) area at The Canberra Hospital (TCH) for patients presenting with trauma-related below-knee joint pain, examining differences in timely management for patients managed by different clinician types.

Methods: A retrospective observational study was performed examining all patients who either presented with ankle injury or were given an ED diagnosis of ankle injury. The study examined parameters of a) time of arrival to analgesic administration b) time of arrival until performance of x-rays c) overall length of stay. These parameters were compared between different patients managed by different clinician types (doctors, physiotherapists, ANPs).

Results: The complete data is not yet analysed and will be ready in April 2026. Initial analysis suggests that a) there is very little variation in time to analgesia between patients b) both the time from arrival to XR and overall length of stay for this cohort are significantly reduced (ANOVA testing applied) for patients managed by physiotherapists and ANPs.

Conclusion: There are significant differences in time parameters of management between the clinician groups, suggesting scope for a targeted intervention to improve patient experience.

TITLE: Community Resilience Centres for Improving Climate Adaptation to Bushfire Smoke and Heatwaves in Changing Urban Environments

AUTHORS: Syeda Fatima, University of Canberra; Louise Mckenzie, University of Technology; Abby Lopes, University of Technology; Nigel Goodman, University of Canberra; Amanda Wheeler, CSIRO; Timothy Chaston, University of Canberra; Sharon Campbell, University of Tasmania; Shamila Haddad, The University of Sydney; Nasser Bagheri, University of Canberra; Cameron Tonkinwise, University of Technology; Sotiris Vardoulakis, University of Canberra

ABSTRACT

Background: Existing public buildings may serve as community resilience centres for use during climate extremes, including heatwaves and bushfire smoke. These centres potentially provide cooler indoor temperatures, cleaner air, electrical power during blackouts, public health information, social support, and year-round preparedness.

Aim/Questions: This study aims to i) assess effectiveness of selected public buildings in Western Sydney and Canberra to reduce heat and smoke exposure, ii) evaluate the health benefits and costs of these centres, and iii) identify implementation challenges and scalability opportunities.

Methods: We used a community co-designed, interdisciplinary mixed-methods approach to identify, assess, and evaluate community resilience centres as place-based interventions for reducing exposure to heat and bushfire smoke. The methodology integrates: (1) community engagement and co-design; (2) environmental monitoring and comparative exposure assessment; (3) health impact and economic analyses; and (4) implementation evaluation.

Results: Eight community workshops were completed across the study sites: four in Western Sydney and four in Canberra. Engagement included multicultural communities, First Nations communities, younger and older people, carers, and workers. The concept was framed as trusted and familiar community spaces, not just emergency shelters. Participants highlighted accessibility, safety, accommodation and duration, which need to be considered in establishing effective community resilience centres. Engagement with nine public buildings is underway and building surveys have been prepared to assess their features, HVAC systems, and operational conditions relevant to resilience-centre suitability.

Conclusions/Impact: Findings suggest that carefully selected and designed community resilience centres can be a feasible, community-supported, and policy-relevant intervention to reduce vulnerability during heat and smoke events, while also supporting equitable local adaptation planning.

TITLE: Head CT Non Trauma Patients over 65 Years in the Emergency Department

AUTHORS: Bridie Swingler, Australian National University; Tharaka Bandara, Canberra Health Services; Nayantara Sara Kurian, Canberra Health Services; Nyoka Ruberu, Canberra Health Services; Kyaw Thu, Canberra Health Services; Jusonne Cruz, Canberra Health Services; Thomas Georgeson, Canberra Health Services

ABSTRACT

Background: Elderly patients constitute a significant proportion of presentations to the emergency department (ED). Dementia and delirium make patient cognitive assessment on presentation to hospital complex, and along with the presence of medications that predispose to bleeding are reasons for clinicians to be more concerned about intracranial pathology. Consequently a high volume of ED non contrast head CT scans are performed in this cohort annually.

Aim: To examine the characteristics of patients aged > 65 who have non contrast head CT in the absence of any history or signs of trauma, and to examine whether any particular features of history or clinical workup are associated with an increased risk of intracranial pathology.

Methods: The study was a retrospective cohort study of all patients > 65 who received a non contrast head CT in 2025 while in the Canberra Hospital Emergency Department. Data in regards to demographics, CT results and abnormal examination and other investigation findings were examined.

Results: The study is still completing data collection of over 300 patients and analysis will take place in April 2026.

We will examine:

- Demographic characteristics of the patient group
- Number and proportion of patients with abnormal acute CT results including those requiring interventions.
- Associations between i) abnormal acute CT results and ii) demographic patient factors
- Association between i) abnormal acute CT results and ii) notable abnormal results or examination features in the emergency department iii) patient confusion

Impact: The study intends to provide valuable information that may safely reduce CT head scans or a delay the time of scan.

TITLE: The Relationship between Income and Strategies to Manage Out-of-Pocket Costs and their Impacts among Australians Living with Chronic Conditions

AUTHORS: Tergel Namsrai, Australian National University; Elisabeth Hyunh, Australian National University; Hsei-Di Law, Australian National University; Danielle Butler, Australian National University; Rosemary Korda, Australian National University; Jane Desborough, Australian National University

ABSTRACT

Background: Out of pocket healthcare costs (OOPCs) pose challenges for individuals with chronic conditions, compromising their health and lives. Understanding strategies used to manage OOPCs and their impacts is important to inform equitable health policy.

Objective: To describe strategies used by Australians with chronic conditions to manage health related OOPCs and their impacts, and to quantify how these strategies and impacts vary by income.

Methods: Cross-sectional survey was conducted in Australia. Outcomes were: 1) cutbacks to healthcare and living expenses; 2) trade-offs; and 3) impacts. Proportions were calculated to describe outcomes. Associations between income and outcomes were estimated using Poisson regression and Wald test.

Results: Of 279 included participants, 82% reported cutting back on living expenses, 58% making trade offs in to pay for their health, and 77% reported impacts of these cutbacks and trade-offs, including increased pain and other symptoms, decreased quality of life and mental health impacts. Gaps in the affordability of specialist, allied health, and dental care were reported by people in all income groups, although overall, cutbacks (specialist care, medications, groceries and household bills), trade-offs (prioritising health over living expenses) and impacts were most pronounced in the lower-income groups.

Conclusions: The high proportion of living and healthcare cutbacks, trade offs, and impacts reported by people living with chronic conditions in Australia and the fact that they are most pronounced in lower income groups indicates that affordability challenges may be shaped by both income and broader financial pressures. Policies targeted at reducing OOPCs must be informed by research that gains deeper insight into the influences at play.

TITLE: Medical Student Experiences of Surgical Rotations and the Link with Surgery as a Vocation

AUTHORS: Phillip Whiley, Australian National University & Canberra Health Services

ABSTRACT

Objectives: This study assessed medical students' impressions of surgery during surgical rotations and how their experience influenced career choices. An additional objective was to propose practical workplace activities to improve learning and prepare students for clinical practice.

Methods: A two-stage investigation included an anonymous electronic survey of 104 penultimate and final-year medical students followed by focus group deliberation. Participants included students and employees from an Australian metropolitan teaching hospital. Focus group members were invited from hospitals and academic institutions across Australia.

Results: Less than half of respondents found their surgical rotation useful for preparing for exams (41%) or future intern roles (48%). Students were more satisfied and more likely to consider surgical careers when made to feel welcome and when expectations were clear. When students felt welcome, 108 expressed interest in surgical careers; conversely, 83 students who did not feel welcome were dissuaded from surgery. Focus group discussion identified positive learning scenarios and proposed novel approaches to enhance educational experiences.

Conclusions: To improve engagement and promote surgery as a career path, clinical rotations must enable students to actively participate as team members, independently consult patients, and seek targeted learning opportunities. A workflow program guided by survey and focus group outcomes is underway at an Australian metropolitan hospital, emphasizing immersive team involvement, live patient encounters, practical skill development, and clear expectations. This intervention promises to stimulate interest in surgery and better utilize student rotation time.

TITLE: “Let’s have a Yarn”: Understanding Maternal Pertussis Vaccination through First Nations Yarning Circles

AUTHORS: Mary-Ellen Hooper, University of Canberra; Mary Bushell, University of Canberra

ABSTRACT

Background: Maternal pertussis vaccination protects infants who are too young to be vaccinated. Despite national immunisation programs, uptake remains lower among First Nations women compared with non-Indigenous women in Australia. First Nations infants also experience higher rates of pertussis-related hospitalisation. Improving vaccination equity requires culturally appropriate, community-informed approaches. This project was conducted through a collaboration between the University of Canberra, Southern NSW Local Health District, and Aboriginal Maternal and Infant Health Service partners.

Aim: To explore the communication and information needs of expectant First Nations women regarding maternal pertussis vaccination to inform culturally appropriate health communication strategies.

Methods: This community-engaged qualitative study used yarning circles, a recognised Indigenous research methodology. Yarning sessions were facilitated by First Nations health workers with expectant First Nations women living in Southern NSW communities. Yarning circles were conducted across regional locations and analysed thematically to identify key influences on vaccine understanding, decision-making, and preferred communication approaches.

Results: Preliminary findings identify five key themes influencing maternal vaccination decision-making: inconsistent knowledge about pertussis vaccination; community-oriented views of protection for family and kin; mistrust linked to previous healthcare experiences; structural access barriers including service availability and cost; and preferences for culturally meaningful communication. Participants emphasised the importance of information delivered through trusted community members, visual and culturally relevant resources, and family-centred discussions.

Conclusion and Impact: Yarning circles provide a culturally safe approach to understanding maternal vaccination decision-making. Findings will inform the co-design of culturally appropriate vaccine communication resources and may support improvements in maternal vaccination engagement within regional communities connected to the ACT health system.

TITLE: The Impact of Ramping on the Paramedic Student Workplace Integrated Learning Experience

AUTHORS: Lance Gray, Australian Catholic University; Kylie Kendrick, Australian Catholic University; Adam Burston, Australian Catholic University; Christine Findlay, Australian Catholic University

ABSTRACT

Background: Ambulance ramping occurs when paramedics continue caring for patients while waiting for an emergency department bed. Ramping has intensified, leading to prolonged delays and reduced access to emergency healthcare. Although research has examined the causes and system impacts of ramping, no peer reviewed studies have explored how it affects student paramedics' workplace Integrated learning (WIL), or how students and mentors adapt to these constraints. This gap is important, as WIL is critical for skill development and exposure to patient presentations.

Aims: This study explored paramedic students' expectations and lived experiences of ramping, examines its impact on learning, documents on ramp interactions, and identifies emerging learning opportunities.

Methods: The study used qualitative methods, informed by the work of Braun and Clarke. Data was collected via semi-structured interviews and transcribed and analysed using holistic and focused coding. Participants were final year paramedicine students from ACU campuses in Queensland and Victoria.

Results (Preliminary): Preliminary results suggest students experienced reduced case exposure due to extended hospital wait times. Ramping was described as awkward, unproductive, and limiting for patient interaction. Mentors often used this time for informal breaks. Positive learning opportunities, included ad hoc clinical discussions, observing emergency department presentations, and case debriefing where privacy allowed.

Conclusions: While adaptations occur, they do not fully compensate for reduced hands on experience, highlighting ramping as a barrier to achieving learning outcomes and underscoring the need for improved support strategies.

Impact: Findings will inform curriculum development, guide instructor support, and help maintain student learning despite increasing ramping pressures.

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Interpreter

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