CHARM 2026: Oral Presentation Abstract Summaries

DATE: TUESDAY 16 JUNE 2026

TIME: 9:15 – 10:40

LOCATION: CANBERRA HOSPITAL AUDITORIUM

TITLE: "A Gateway of Possibilities": A Reminiscence Program Inspiring Undergraduate Healthcare Students to Work with People with Dementia

AUTHORS: Annaliese Blair, Australian National University; Katrina Anderson, Australian National University; Sunil Bhar, Swinburne University of Technology; Rebecca Collins, Australian National University; Catherine Bateman, Australian National University; Michael Bird, Australian National University; Ian Cameron, University of Sydney; Sue Kurrle, University of Sydney; Victoria Traynor, University of the Sunshine Coast; Michelle Chate, Warrigal Aged Care; Tracy Comans, National Ageing Research Institute; Elaine Todd, Australian National University;

ABSTRACT

Introduction: Inspiring healthcare students to consider working with older people and dementia is vital for future workforce requirements. The Know Me program trains healthcare students to reminisce with residential aged care home (RACH) residents with dementia, exposing students to working with this population early in their training and career trajectory.

Objective: Know Me aims to improve healthcare student attitudes towards people with dementia, improve person-centred communication skills, and foster an interest in future work with older people.

Methods: Healthcare students (n=43, mean age 27.22 years, SD= 12.09) completed 16 weekly training sessions and weekly reminiscence sessions with people with dementia in RACH. Repeated measures surveys of student dementia attitudes and skills at pre-, post-intervention and 6-month follow-up. Interviews were conducted at follow-up.

Results: A statistically significant increase in positive attitudes to dementia from pre-training to post-training (n=43, z=-4.989, p<.001).

All participants self-reported improved skills in active listening, counselling, communication and validation (87.8% very much/extremely improved). Some were more open to working with older people and dementia in the future. Many reported improved understanding of dementia and person-centred care and reduced stereotyping via emotional connection with residents. At follow up, some reported behaviour changes such as pursuing new courses on dementia or work/placements in aged care.

Conclusions: In line with Eagly & Chaiken's Tripartite Model of Attitudes, this highly structured introduction to working collaboratively with people with dementia resulted in improved person-centred care skills and changes in affective responses to people with dementia, cognitive stereotypes, and study and work behaviours of healthcare students.

TITLE: Mobilisation and Vasoactive Infusions: An Observational Study of Practice across Critical Care

AUTHORS: Vincenzo Marzano, Canberra Health Services; Gemma Everett, Canberra Health Services; Sumeet Rai, Canberra Health Services; Bernie Bissett, University of Canberra; Mary Nourse, Canberra Health Services; Grainne Hughes, Canberra Health Services; Karen Simpson, Canberra Health Services

ABSTRACT

Introduction: Intensive care (ICU) and acute coronary care unit (ACCU) patients often require vasoactive and inotropic infusions to support blood pressure. Despite this cohort having high representation in critical care admissions, there is limited research into the safety of mobilising patients on these infusions. Current clinical practice guidelines based on consensus statements due to lack of physiological data to guide practice, limit mobilisation rates in critical care and often exclude this cohort from studies exploring interventions to improve physical function.

Aim: To quantify current mobility rates, intensity and associated adverse events in critical care patients at Canberra Hospital on vasoactive and inotropic infusions.

Method: Prospective observational cohort study of all Canberra Hospital ICU/ACCU admissions requiring vasoactive/inotropic infusions (May and August 2025) excluding <16 years, on prescribed best rest or end of life care. Demographic data, including severity of illness were extracted from the ANZICS data base. For each vasopressor day, organ support, sequential organ failure assessment (SOFA) score, and intensity of mobility (ICU Mobility scale (IMS)) was collected with vasopressor/inotrope dose during and immediately post. Adverse events during mobilisation and 24 hours post were recorded.

Results: Data was collected for 219 patients and 418 vasopressor days. Mean age 62, ANZROD 0.22, and APACHE3 62. Mobilisation occurred 70% of vasopressor days at mean IMS 4 (1-10). with no adverse events during mobilisation. A patient developed an unstable rhythm 24 hours post.

Conclusion: Mobility during vasoactive and inotropic support is conducted safely and at higher rates than published clinical practice guidelines.

Impact: Published recommendations in clinical practice guidelines require updating.

TITLE: Results of the 2025 Access Block Point Prevalence Study

AUTHORS: Drew Richardson, Canberra Health Services

ABSTRACT

Background: With two ACEM-funded annual surveys of access block prevalence in Australia originally in 2004 then every year since 2007, this is the largest and longest study of its type. Previous reports showed 56% increase in presentations to ED but 90% increase in ED occupancy over 20 years.

Aim: To describe the 2025 surveys of ACEM-accredited EDs and compare with the previous 2 years.

Methods: Email and Telephone Survey of all Australian EDs accredited by ACEM analysed by descriptive statistics, subdivided by Jurisdiction and Role Delineation.

Results: Of 133 Australian and 20 New Zealand EDs, 112 (84%) and 17 (85%) respectively supplied useable data in June and 105 (78%) and 11 (55%) in September. In Australia, over 40% of patients care was being provided to patients who had finished emergency care and were waiting for a ward bed. In New Zealand it was over 20%. In 2023-2025 in Australia, there was no significant change in ED demand, but a 12% increase in number being treated (P=0.03) and a 32% increase in number waiting to be seen (P=0.005). The total number of 24 hour stays in ED was a new record of 304 in the last survey, with longest stay 94 hours. The best performing jurisdiction was the ACT.

Conclusions: Access Block and ED crowding have continued to worsen in Australia and New Zealand in the post-pandemic period. In some jurisdictions these represent a clear risk to patient safety.

Impact: This major study provides vital information on the state of Emergency Departments over time, critical for both advocacy and planning.

TITLE: After the Wound is Healed: Co-Designed Solutions for Post Discharge Support in Diabetes Related Foot Complications

AUTHORS: Angela Sonter, Canberra Hospital; Jennifer Sonter, Charles Sturt University; Bella St Clair, University of Canberra; Kate Storer, Canberra Hospital

ABSTRACT

Introduction: Almost half of people who have healed a diabetes related foot ulcer or amputation develop another complication within 1–2 years. Service availability, workforce constraints and geographic barriers make remission period care inconsistent. Telehealth offers flexible access but has not been used to support people in remission.

Aims: To partner with consumers to address gaps in remission period care for diabetes related foot complications through the co-design of an innovative telehealth program.

Methods: Structured interviews were conducted with people in remission from diabetes related foot complications and with clinicians involved in their care. Drawing on co-design principles, interview findings are informing the development of a telehealth program to support consumers following discharge.

Results: Consumers recently discharged from the Canberra Hospital High Risk Foot Service and podiatrists working in the Service participated in interviews. Discussions explored expectations, values and ideas for a telehealth model to assist people after discharge. Key themes included essential program components, appropriate timing, communication preferences, supportive resources and clinical considerations to ensure safe and effective virtual care.

Conclusion: People in remission remain at high risk of future foot complications yet experience inconsistent support. Consumers expressed a desire for clearer guidance and ongoing contact after discharge, while podiatrists recognised the value of flexible, non-traditional care pathways and supported enhanced assistance during remission.

Impact: This study provides new insights into the experiences and priorities of people living in remission from diabetes related foot complications and those who provide their care. These perspectives directly inform the co design of more person centred, accessible and effective virtual models of care.

TITLE: Identifying and Responding to Co-Occurring Substance Use Disorder and Mental Illness within MHJHADS: Project One

AUTHORS: Sarah Hall, Canberra Health Services; Lauren Hendry, Canberra Health Service

ABSTRACT

Alcohol and other drug (AOD) services are increasingly encountering clients with complex needs, including co-occurring mental health issues, trauma histories, and social disadvantage. In response, a pilot Co-Occurring Needs Program delivered by the Mental Health, Justice Health and Alcohol and Drug Service (MHJHADS) was initiated to address service fragmentation and improve outcomes for this vulnerable population.

This presentation outlines the design, implementation, and early outcomes of the Co-Occurring Needs Program, which was co-developed by MHJHADS, the ACT Health Directorate and the Canberra NGO sector. The program embedded processes within participating MHJHADS services to provide intensive, person-centred support for clients with complex needs.

Preliminary evaluation findings suggest the Co-Occurring Needs Program improved client engagement, reduced service duplication, and enhanced collaboration across service. Clients reported feeling more supported and empowered, while staff noted improved communication and shared care planning. The pilot also highlighted systemic barriers, including identification improvements, education and confidence gaps which will inform future service design.

This presentation will share insights from the pilot's development and delivery, including key enablers such as sector collaboration, flexible service models, and trauma-informed practice. It will also discuss implications for policy and practice, particularly the need for change management and cross-service workforce development to ensure integrated care for clients with complex needs.

The Co-Occurring Needs Program offers a promising model for addressing the intersection of AOD use and mental health in Canberra Health Services. By centring care around the client and bridging service gaps, it demonstrates how coordinated, compassionate support can improve outcomes for those often underserved by traditional systems.

TITLE: Physiotherapy in Potential Organ Donors: Retrospective Observational Clinical Audit

AUTHORS: Vince Marzano, Canberra Health Services; Sean Weng Chan, Canberra Health Service; Siobhan Jolly, Canberra Health Services

ABSTRACT

Introduction: Potential organ donors require intensive monitoring and organ support in the lead up to retrieval surgery, including maintaining lung function. Potential lung donors are required to demonstrate a partial pressure of oxygen (Pa02) of >300 mmHg on 100% oxygen. Currently, the role of chest physiotherapy to achieve this outcome is variable between institutions with no clear published guidelines. Physiotherapy intervention at Canberra Hospital for potential organ donors is guided by a protocol based on local practices.

Aim: To determine the compliance of physiotherapy practice with local protocols and determine the impact of chest physiotherapy on blood gas results for potential lung donors.

Method: Retrospective clinical audit of all patients considered for organ donation admitted to Canberra Hospital and North Canberra Hospital in 2023 and 2024. Daily chest radiograph and Pa02 was extracted from the digital health record. Daily physiotherapy assessment and intervention was compared to local protocol, and any change to Pa02 post chest physiotherapy was collected.

Results: 32 patient files where audited, with 6 patients proceeding to donate lungs. 94 physiotherapy reviews occurred, with intervention complying with local protocol 84% of reviews. 44 sessions of chest physiotherapy occurred, with a mean improvement in Pa02 of 92 mmHg.

Conclusion: Physiotherapy practice is compliant with local protocols for respiratory care in potential organ donors. There is trend for improved Pa02 post chest physiotherapy, however sample size in this audit was insufficient for robust statistical analysis.

Impact: Results of this clinical audit warrant more robust research processes to determine the benefits of physiotherapy to impacting lung viability for potential transplantation.

TITLE: What Patients and Caregivers Want: Perspectives on Communicating Diagnostic Uncertainty to Support Diagnostic Excellence in Emergency Care

AUTHORS: Laura Chien, Australian National University; Mary Dahm, Deakin University; Jennifer Morris; Ann Lawless, Australian National University; Carmel Crock, The Royal Victorian Eye and Ear Hospital; Sam Scanlan, Canberra Health Services

ABSTRACT

Background: Accurate diagnosis is challenging when patients present to emergency departments (ED) with symptoms such as headache, abdominal pain, dizziness or chest pain, which suggest multiple possible diagnoses. Clinicians may be reluctant to openly communicate uncertainty due to concerns about worrying, frustrating or overwhelming patients, and potential impacts on trust, confidence and satisfaction. However, ineffective communication about uncertainty can lead to misunderstandings, dissatisfaction and patient harm. Evidence on how communicating uncertainty impacts patients, and their preferences for such communication, remains limited, yet this knowledge is vital for patient-centred diagnostic communication in emergency care.

Aims: To understand patient and carer perspectives on communicating diagnostic uncertainty in emergency care.

Methods: This qualitative study conducted semi-structured interviews with patients (n=24) with non-specific symptoms and their caregivers (n=11) in two metropolitan EDs. Transcripts were analysed in NVivo using iterative thematic and content analysis.

Results: Patient and caregivers wanted open communication about uncertainty to understand and assess the diagnostic process and doctors' diagnostic thinking. Uncertainty communication needed to be action-oriented, providing clear next steps, and combined with patient-centred communication strategies (listening, information sharing). Openly communicating uncertainty supported patient agency, empowering decisions about seeking review or additional opinions, and enhanced perceptions of clinician competence, trustworthiness and honesty.

Conclusion: Patients and caregivers want explicit, action-oriented and patient-centred communication about uncertainty to understand, assess and engage in the diagnostic process. The findings challenge assumptions that communicating uncertainty undermines confidence and trust.

Impact: Open patient-centred communication of uncertainty and clear next steps, fosters a collaborative diagnostic process, supporting shared understanding and diagnostic safety central to diagnostic excellence in emergency care.

TITLE: Maintenance of Mobilisation Following Transition from ICU to General Ward; A Retrospective Cohort Study

AUTHORS: Lisa McDaid, Peninsula Health; Kiran Gudivada, Canberra Health Services; Sumeet Rai, Canberra Health Services

ABSTRACT

Introduction: Early mobilisation is known to reduce risk of ICU acquired weakness. However, limited evidence exists on the trajectory of maintaining mobility after ICU discharge and it's impact on mobility status at hospital discharge.

Aims: To evaluate the impact of a lag time (delay in regaining mobility levels achieved at ICU discharge and reaching similar levels on the ward) on mobility status at hospital discharge.

Study Design: Retrospective observational cohort study of Adult ICU survivors requiring more than 24 hours of invasive ventilation at Canberra Hospital ICU

Results: Of 127 ICU survivors 86 (68%) regained their ICU discharge level of mobility within 24 hours of being discharged to the general ward floor. 41(32%) patients had a lag time greater than 24 hours with 19(15%) patients taking more than 72 hours to regain their ICU discharge score once transferred to the ward. Overall,88 (69%) patients regained independent mobility at the time of hospital discharge. Longer lag time was strongly associated with lower discharge mobility

Conclusion: Almost a third of the ICU survivors experience a delay in achieving similar mobility levels on the ward after discharge from the ICU. Almost one-sixth experience extended delays, with roughly a third of patients not achieving independent mobility at the time of hospital discharge. Longer lag time to achieve ICU level mobility on the ward was associated with lower hospital discharge mobility.

Impact: Maintaining ICU discharge level of mobility on stepping down to the ward could be an important parameter in improving functional mobility and hence quality of life for ICU survivors."

DATE: TUESDAY 16 JUNE 2026

TIME: 11:00 – 12:35

LOCATION: CANBERRA HOSPITAL AUDITORIUM

TITLE: Vitamin B3 (Nicotinamide) Supplementation in Primary and Scleroderma-Related Raynaud Phenomenon

AUTHORS: Mogeshni Govender, Canberra Health Service; Natalie Tomson, Canberra Health Service; Johnny Fang, Canberra Health Service; Mohamed Bakry, Canberra Health Service; Raymond Liu, Australian National University; Kathleen Morrisroe, Canberra Health Service; Ross Penglase, University of Sydney; Kokum Dissanayake, Canberra Health Service; Ted Tsai, Canberra Health Service

ABSTRACT

Introduction: Current therapies for Raynaud Phenomenon (RP) have limited efficacy and tolerability. These agents are frequently poorly tolerated or contraindicated in scleroderma patients.

Aims: Explore if vitamin B3 supplementation is a safe and effective adjunctive therapy for RP in primary and scleroderma patients.

Methods:

Primary endpoints assessed:

1. B3 Adherence
2. B3-related adverse events
3. Changes in: a) RP frequency and severity (via the 'Raynaud Condition Score' [RCS] diary), b) RP-related quality-of-life (via the 'Short-Form Assessment of Systemic Sclerosis-Associated Raynaud's Phenomenon' [SF-ASRAP] questionnaire), c) nailfold videocapillaroscopy (NVC) patterns and parameters.

NVC incorporated artificial intelligence (AI).

We conducted a 6-week prospective longitudinal, within-participant cross-over intervention study with three-phases: A1 (baseline), B (vitamin B3 500mg twice daily orally), A2 (B3 washout), each phase 2-weeks long. Forty participants completed the study (22 primary RP; 18 scleroderma-related RP).

Results: B3 showed excellent adherence (98.7%) with few mild adverse events. NVC patterns improved in 45% post-supplementation ($p<0.001$; total cohort), with increased normal and reduced abnormal capillaries. RP-related quality-of-life and severity improvements were significant only in primary RP, persisting after washout.

Conclusion: B3 was well-tolerated, improved NVC patterns and parameters in both groups. Primary RP participants had significant improvements in patient-related outcome measures, not found in the scleroderma group. Scleroderma microvasculature may be more resistant to vasodilation, possibly due to structural remodelling. Improvements during the washout phase suggest B3 may induce functional microvascular effects beyond its pharmacological half-life.

Impact: First prospective human study to evaluate oral nicotinamide as an adjunctive therapy in both primary and scleroderma RP, addressing a major therapeutic gap, with objective NVC improvements.

TITLE: Understanding Alcohol-Related Emergency Department Presentations in the ACT Using Machine-Learning-Based Natural Language Processing

AUTHORS: George McNamara, Health and Community Services Directorate; Louise Freebairn, Health and Community Services Directorate; Elizabeth Chalker, Health and Community Services Directorate; Glenn Draper, Health and Community Services Directorate; Philip Hull, Health and Community Services Directorate; James Manely, Health and Community Services Directorate; Peter Joyce, Canberra Health Services

ABSTRACT

Introduction: Alcohol use contributed to 4.1% of the total Australian burden of disease in 2024. The harmful use of alcohol is a major contributor to death, disease, crime and violence, social problems and emergency service utilisation. Challenges in identifying these presentations in retrospective data limit the ability to monitor trends, allocate resources, and target interventions.

Aims: This study aimed to accurately identify alcohol-related ED presentations in the ACT based on triage notes. From this, we aimed to provide informative analysis to guide the development of clinical and policy interventions.

Methods: Machine-learning-based Natural Language Processing (NLP) programs were developed to interpret triage notes and classify presentations as alcohol related or not. Using these classifications, a dashboard was developed enabling temporal, demographic, and geographic analyses of these presentations across the ACT.

Results: The NLP programs automatically classified over 1 million ED presentations in under three hours, with an accuracy over 99%. Compared with conventional ICD-10-based identification, NLP detected more than triple the number of alcohol-related presentations (a 215% increase), demonstrating substantial underreporting when relying solely on administrative ED coding.

Conclusions: NLP offers a scalable and efficient approach for identifying alcohol-related ED presentations without adding administrative burden to clinicians. The resulting analyses highlighted when ED service utilisation occurred and the characteristics of people accessing services, providing insights to support policy, prevention strategies and clinical responses.

Impact: By guiding evidence-based interventions, this study can contribute to reducing alcohol related harms across the ACT. It also establishes a scalable NLP framework that can be applied to other public health priorities in a variety of settings.

TITLE: What Drives AI Diagnosis in Diabetic Retinopathy? Insights from Heatmap Analysis

AUTHORS: Timothy Murphy, University of Canberra; James Armitage, Deakin University

ABSTRACT

Introduction: Artificial intelligence (AI) is increasingly used in healthcare to support disease detection and expand clinical access. AI systems screening for features of for diabetic retinopathy (DR) (microaneurysms, haemorrhages, exudates, venous beading, intraretinal microvascular abnormalities and neovascularisation) are now implemented in Australia and internationally. While diagnostic performance is well documented, retinal regions and clinical features that most influence AI predictions remain unclear.

Aims: To identify retinal locations and DR features that most influence outputs in DR detection algorithms.

Methods: Twenty-seven AI models were developed to detect referable DR from macular centred photographs. Models were trained on 35,158 images spanning a range of severities. Each model analysed 757 annotated images, generating GradCAM heatmaps to identify influential regions. Heatmaps were aggregated to identify common patterns. Locations of specific features were compared with heatmaps using Sørensen-Dice coefficients to assess feature influence.

Results: Mean sensitivity was 65.7%, specificity 89.2% and F1-score 0.77. Heatmap patterns varied: 11 models (41%) predominantly highlighted the central and/or temporal macula, 10 (37%) highlighted broad retinal regions, three (11%) emphasised photo boundaries, and three (11%) showed no interpretable pattern. Heatmaps correlated most strongly with exudates (0.39), with weaker correlation for venous beading (0.11) and neovascularisation at the disc (0.11).

Conclusion: AI models differ in regions detected as abnormal and appear more influenced by exudates than venous beading and neovascularisation. Paradoxically, exudates do not influence human grading whilst venous beading and neovascularisation are highly predictive of blindness.

Impact: Annotations of retinal locations and features that most influence AI categorisations are vital for clinical contextualisation of AI outputs and improving clinician acceptance.

TITLE: KidneyVision - Medical Kidney Biopsy Pathomics Analysis Platform

AUTHORS: Daniel Christiadi, Canberra Health Service; Benjamin Mashford, Australian National University; Giles Walters, Canberra Health Service; Krishna Karpe, Canberra Health Service; Alice Kennard, Canberra Health Service; Richard Singer, Canberra Health Service; Girish Talaulikar, Canberra Health Service; Hana Kawatu, Canberra Health Service; Mitali Fadia, Canberra Health Service; Simon Jiang, Canberra Health Service

ABSTRACT

Background: Glomerulonephritis (GN) is a major cause of end-stage kidney disease (ESKD). Despite advancements in the identification of disease biomarkers, diagnosis and prognosis predominantly depend on the evaluation of kidney biopsies by nephropathologists. Conventional analysis, however, is both labor-intensive and prone to inter-observer variability.

Aims: To employ deep learning algorithms to extract morphometric data from kidney histopathology to improve speed and reproducibility while providing deeper insights into the underlying disease processes.

Methods: Kidney biopsy slides were digitised to generate whole-slide images at 40x magnification, with a resolution of 0.11 micrometers per pixel. A pipeline was created, integrating several optimised deep learning (DL) models to segment the pertinent structures, thus enabling the extraction of morphometric data across different magnification levels. This pipeline is compatible with both CZI and SVS formats.

Results: A total of 99 normal kidney biopsies and 335 GN slides, including IgA nephropathy, ANCA-associated vasculitis, minimal change disease, membranous nephropathy, focal segmental glomerulosclerosis, and class 3/4 lupus nephritis, were digitised. The DL models were trained using 120 normal and GN slides to accurately segment the cortex, kidney parenchyma, and glomerular substructures and were validated externally. KidneyVision extracted morphometric and spatial data, such as proximal tubular density, glomerular area, and podocyte density, which showed a strong correlation with clinicopathological data and offered a more detailed phenotype of GN diagnosis.

Conclusion: We created KidneyVision, an automated deep learning-based pathomics pipeline designed to analyse digitised GN kidney biopsy slides

Impact: The pipeline mines extensive morphometric and spatial information from kidney biopsy slides to aid diagnosis and investigate novel diagnostic and prognostic markers.

TITLE: Evaluating Clinical Use of Artificial Intelligence for Identifying and Outlining Brain Lesions on MRI for Stereotactic Radiosurgery

AUTHORS: Helen Truong, Canberra Health Services; Helen Gustafsson, Canberra Health Services; Jonathan Lee, Canberra Health Services; Rachel Poldy, Canberra Health Services; Kimberley Legge, Canberra Health Services; Brendon Wright, Canberra Health Services; Kylie Jung, Canberra Health Services; Farhan Syed, Canberra Health Services

ABSTRACT

Introduction: Accurate identification and outlining (contouring) of brain lesions on MRI are essential for effective stereotactic radiosurgery (SRS). These contours determine where radiation is delivered, and inaccuracies risk under-treating tumours or damaging healthy tissue. Manual contouring by Radiation Oncologists (ROs) varies between clinicians and is time-consuming. Siemens' AI Rad Companion (AIRC) is a commercial Artificial Intelligence (AI) tool for auto-contouring of lesions, and peer-reviewed validation of the accuracy and clinical acceptability of the contours generated by this tool is limited.

Aim: To evaluate the accuracy and clinical suitability of AIRC for auto-contouring of lesions on MRI.

Methods: Ten MRI datasets from patients treated with SRS (≥5 lesions each) between January 2024 - August 2025 by a single RO were retrospectively analysed. AIRC contours were assessed against manual contours using quantitative measures (lesion-detection sensitivity and false-positive rates), and qualitative review of clinical suitability by a second RO, blinded to contour origin.

Results: Manual contouring identified 108 lesions; AIRC identified 106. Mean sensitivity was 84%, with 11% false positives. Nearly 80% of AI contours required major amendments or were unsuitable for clinical use. For lesions identified by both methods, manual contours were preferred in 58% of cases, AIRC in 15%.

Conclusions: AIRC can assist with lesion detection, but the contours it generates require substantial manual correction before being suitable for SRS.

Impact: These findings highlight limitations of AIRC and support careful, evidence-based adoption. Identifying where AI performs poorly can guide safer integration into radiotherapy workflows and inform future development, ultimately aiming to improve contouring efficiency and consistency, treatment accuracy and patient outcomes.

TITLE: The Digital Therapeutic Nexus: Attachment, Alliance, and Harm in Human–AI Mental Health Interactions

AUTHORS: Oliver Higgins, University of Canberra; Frederik Gildberg; Rhonda Wilson, RMIT University

ABSTRACT

Background: AI companions are increasingly used for emotional support, disclosure, and coping. Individuals engage with these systems when human support is unavailable or difficult to access. Mental health nurses are beginning to encounter AI companion use during care provision. Evidence describing how people form relationships with AI, associated risks, and implications for nursing practice remains dispersed across psychology, health, and technology literature. This review synthesised evidence on relational dynamics, psychological mechanisms, user-motivations, and harms associated with AI companionship in MH contexts.

Methods: An integrative review synthesised multidisciplinary literature examining human–AI companion relationships and mental health support. Empirical and conceptual studies from psychology, health, and human–computer interaction were analysed using thematic synthesis to identify patterns in relational mechanisms, motivations, harms, and implications for clinical practice.

Results: Five themes emerged. First, relational bonds develop through recognised psychological mechanisms. AI companions may function as attachment figures that provide a perceived safe haven and secure base. Relationship strength is influenced by conversational alignment and perceived therapeutic alliance. Second, engagement is linked to loneliness, stigma, and barriers to care, with users valuing non-judgemental disclosure and constant availability. Third, harms include relational transgressions, coercive behaviours, misinformation, simulated violence, and unsafe responses to self-harm. Fourth, ethical tensions arise when AI companionship reduces loneliness while displacing human relationships or prioritising engagement over safety. Fifth, accountability frameworks describe AI systems as perpetrator, instigator, facilitator, or enabler in harmful interactions.

Conclusion: AI-companionship introduces clinically relevant relational processes and safety risks. MH nurses should assess AI relationship use during psychosocial evaluation and incorporate digital literacy and safety planning into care.

TITLE: Advancing Ophthalmic Diagnostics: Interpretable Multimodal Deep Learning for Early Age-Related Macular Degeneration

AUTHORS: Mst Mousumi Rizia, Australian National University; Joshua van Kleef, Australian National University; Bhim Rai, Australian National University; Ted Maddess, Australian National University; Hanna Suominen, Australian National University

ABSTRACT

Introduction: Age-related Macular Degeneration (AMD) is one of the leading causes of severe vision loss worldwide. Early clinical detection is challenged by the difficulty of relating visual function changes to corresponding structural retinal changes using high-dimensional data.

Aims/Question: To develop an interpretable diagnostic aid that combines ObjectiveFIELD® Analyzer (OFA®) and Macular Pigment Optical Density (MPOD) data to identify the most diagnostically informative macular regions in early-AMD.

Methods: We analysed 116 eyes spanning Age-Related Eye Disease Study (AREDS) stages 1 through 4 (52 AREDS-1; 50 AREDS-2/3; 14 AREDS-4) using two OFA outputs and seven MPOD metrics mapped to 20 retinal locations. To address high-dimensional data challenges, we compared various machine and deep learning algorithms. Clinical interpretability was validated via SHapley Additive exPlanations (SHAP) and an interdisciplinary focus group.

Results: Overcoming the difficult ""high-dimension, low-sample-size"" (n<<p) discrimination challenge, a hybrid Convolutional Neural Network-Transformer (CNN-Transformer) achieved a cross-validated Area Under the Receiver Operating Characteristic (AUC) of 69% and F1-score of 71%. This performance stems from the method's inherent preservation of spatial features. Crucially, SHAP analysis revealed the 16 parafoveal and perifoveal macular subregions as primary diagnostic drivers for early AMD detection, rather than the central subregions. Clinicians confirmed this spatial prioritisation logic mirrors expert reasoning.

Conclusion: Integrating deep learning with multimodal ocular signals successfully detects early pathological AMD signatures, proving peripheral macular regions hold superior diagnostic power.

Impact: By delivering transparent Artificial Intelligence (AI) insights, this clinician-friendly tool supports personalised clinical decision-making. It offers scalable early intervention strategies and reduces diagnostic bottlenecks, paving the way for future translation into ACT health system workflows.

TITLE: A Heterogeneous Knowledge Graph Approach for Multimorbidity Prediction using Synthetic Australian Health Data

AUTHORS: Khan Md Hasib, UNSW Canberra; Heba El-Fiqi, UNSW Canberra; Haribondhu Sarma, Australian National University; Ripon Kumar Chakrabortty, UNSW Canberra

ABSTRACT

Background: Multimorbidity, the co-existence of two or more chronic conditions in a single patient, affects over 50% of older adults and places an excessive burden on healthcare systems. In Australia, chronic diseases account for approximately 90% of all deaths, yet most predictive models treat conditions in isolation, failing to capture the complex interdependencies among co-occurring diseases, social determinants of health, and lifestyle factors.

Aims: This study aims to develop an integrated computational framework that combines knowledge graph construction with multi-label machine learning to systematically quantify, visualise, and predict multimorbidity patterns across demographic groups in an Australian population cohort.

Methods: A heterogeneous knowledge graph (90 nodes, 417 edges) integrated disease, symptom, and risk-factor entities, with community detection via greedy modularity optimisation. Multi-label classification used Random Forest, Gradient Boosting, and Logistic Regression validated through 5-fold cross-validation.

Results: Multimorbidity prevalence was 50.7% (mean 1.69 conditions/patient). Three disease communities were identified. Gradient Boosting achieved the best multi-label performance (F1-micro=0.374, ROC-AUC=0.695). Age and sleep emerged as dominant predictive features across all conditions. Stratified analysis revealed differential comorbidity patterns by age group, gender, Indigenous status, and geographic location.

Conclusions: The integrated knowledge graph and ML framework successfully captured non-trivial multimorbidity associations and demographic disparities that single-disease models overlook.

Impact: This framework provides a reusable, privacy-preserving methodology for Australian health services to identify high-risk comorbidity clusters, inform targeted intervention strategies, and reduce healthcare disparities among vulnerable populations, including Indigenous Australians and rural communities.

TITLE: Integrating Blood Based Biomarkers with AI Enhances Prostate Cancer Detection and Monitoring in a Preclinical Model

AUTHORS: Lamia Shams, Australian National University; Katharine Gosling, Australian National University; Farhan Syed, Canberra Health Services; Benjamin Quah, Australian National University; David Anak Simon Davis, Australian National University

ABSTRACT

Background: Serum PSA testing remains the most common trigger for prostate cancer work-up, yet fixed cut-offs miss clinically significant disease and can prompt avoidable biopsies. AI integration of multiple blood biomarkers — including PSA, full blood count (FBC), and plasma proteins — may offer a more accurate alternative to single-marker threshold approaches.

Aims: To assess whether an AI-driven framework integrating FBCs, plasma proteins, and PSA enhances prostate cancer detection and disease progression monitoring, and to characterise associated biomarker changes following radiotherapy.

Methods: FBC parameters, plasma proteins, and PSA were measured in mice with and without prostate tumours. Rather than applying fixed thresholds to individual biomarkers, machine learning models evaluated patterns across all measurements simultaneously, tested for cancer detection, progression monitoring, and separation of treatment-related from disease-driven biomarker changes after radiotherapy.

Results: AI models integrating multiple biomarkers markedly outperformed single-marker methods in identifying tumour-bearing mice and tracking progression. FBC parameters, plasma proteins, and PSA each contributed distinct, complementary signals that strengthened overall diagnostic performance. Notably, the models also separated radiotherapy-related shifts from cancer-driven changes, addressing a major challenge in treatment response monitoring.

Conclusions: AI-driven multi-biomarker integration improves prostate cancer detection and monitoring relative to PSA thresholds in a preclinical model. This pattern-based strategy shifts focus from single values to collective biomarker signals. Because the panel includes routine clinical tests, translation into scalable, cost-effective assays may be feasible.

Impact: These findings support development of AI-enabled, multi-biomarker blood tests to enhance diagnostic precision and reduce unnecessary prostate cancer interventions.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 9:00 – 10:25

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING MAIN CONFERENCE ROOM, SESSION 1

TITLE: Determinants of Depressive Symptoms among Australian Men: A Longitudinal Analysis using the Ten to Men Cohort 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: Common mental disorders (CMDs) in Australia are a leading cause of morbidity, disability and mortality. While men exhibit lower CMD prevalence rates than women, depressive disorders contribute to higher suicide rates in men. Cross-sectional studies on men's mental health provide limited insights into depressive symptoms and risk factors trajectories. This study explored changes in depressive symptoms and severity over time, identified time-invariant and time-varying associated factors, and their time-varying effects.

Methods: We analysed 34,587 observations from men aged 18 years and older, collected over 10-years period (2013-2022) in the Ten to Men cohort study. Depressive symptoms were assessed using the patient health questionnaire (PHQ-9) instrument. The two-part hurdle mixed-effects model explored factors associated with depressive symptoms and their severity overtime.

Results: The proportion of men reporting at least one depressive symptom decreased slightly (from 80% to 78%), while mean PHQ-9 scores marginally increased (from 5.40 +/- 4.69 to 5.57+/-4.85). For both the presence of symptom (at least one) and severity, covariates with significant time-varying effects included lower subjective well-being, sexual difficulty, and comorbidity, suggesting that their effects changed over time. However, the time-varying effect of drug use was significant only for the presence of depressive symptoms, while the time-varying effect of social support was significant only for severity.

Conclusion: The study shows that socio-demographic, lifestyle-behavioral, psychosocial, and health-related factors impact depressive symptoms and severity among Australian men, and their effects are not static but vary over time.

Impact: Addressing these risk factors over time through men-focused programs could help reduce the burden of depression and improve mental health outcomes.

TITLE: The Effect of Heatwaves on Mental Health–Related Emergency Department Visits in the Australian Capital Territory, Australia

AUTHORS: Beijing Cheng, Australian National University; Michael Tong, Australian National University; Nikhil Jha, Canberra Health Services; Hilary Bambrick, Australian National University

ABSTRACT

Introduction: High temperatures and extreme heat could adversely affect mental health. However, there is no such evidence exploring the short-term lagged effects of heatwaves on mental health in the Australian Capital Territory (ACT).

Aim: This study aimed to evaluate the short-term lagged effects of heatwaves on mental health-related emergency department (ED) visits in the ACT.

Methods: We obtained daily mental health-related ED visits in ACT from 2000 to 2021. Heatwaves were characterised using the Excess Heat Factor, an index incorporating key factors known to influence heat–health relationships. A time-stratified case-crossover design was employed, and associations between heatwave exposure and mental health outcomes were estimated using conditional quasi-Poisson regression.

Results: Heatwaves demonstrated positive short-term lag effects on mental health-related ED visits from lag 0 to lag 3 days, with the largest increase observed at lag 1 day (6.3%; 95% CI: 0.9–11.9%). The cumulative effect over lag 0–3 days was 18.3% increase in mental health ED visits (95% CI: -3.9–45.6%). Particularly, significant adverse mental health effects were identified due to daytime heat.

Conclusions: Heatwaves significantly increased mental health ED visits in ACT, with the greatest risk observed one day after exposure, and daytime heat warrants particular attention in ACT.

Impact: The delayed effect of heatwaves on mental health highlights the importance of early warning systems and timely interventions, particularly for the day following extreme heat events. Public health strategies should prioritise daytime heat and reduce heat exposure during peak daytime temperatures in ACT.

TITLE: Health Behaviours Associated with Self-Rated Health in Early Adolescence

AUTHORS: Dinethri Ramasundara, Health and Community Services Directorate; Pramod Adhikari, Health and Community Services Directorate; Warren Holroyd, Health and Community Services Directorate; Elizabeth Chalker, Health and Community Services Directorate

ABSTRACT

Introduction: Self-rated health (SRH), a personal assessment of overall health and wellbeing, is a strong predictor of future health outcomes. Although international studies have identified behavioural links with SRH in adolescents, evidence focused on early adolescence in Australia is limited. Understanding these relationships can support health promotion strategies for long term wellbeing.

Aims/Question: This study examined associations between health behaviours and excellent or very good SRH among Australian adolescents aged 12–13 years, by gender.

Methods: Data were sourced from the ACT Year 7 Health Survey. Students answered the question, "Overall, how would you rate your health over the last month?" with five response options: poor, fair, good, very good, and excellent. Descriptive and regression analyses explored associations between lifestyle behaviours and reporting excellent or very good SRH.

Results: Males (57.4%) were more likely than females (46.1%) to report excellent or very good SRH. Students reporting excellent or very good SRH also tended to engage in healthier behaviours, including adequate fruit and vegetable intake, daily breakfast consumption, regular family meals, and lower consumption of fast food and sugary drinks. They were more physically active, engaged in less recreational screen use and were more likely to meet Australian sleep guidelines. These patterns reflect associations only and do not indicate causation. Most associations were statistically significant ($p < 0.005$).

Conclusion: Excellent or very good SRH was positively associated with healthy behaviours across diet, physical activity, screentime and sleep.

Impact: These findings can be used to inform health promotion approaches to reinforce healthy behaviours during early adolescence to support long-term health.

TITLE: Current Approaches in Neurodiversity Affirming Care for Autistic Children in Health and Social Care: A Scoping Review

AUTHORS: Julia Sterman, Australian Catholic University; Zoe Wagland, University of Brighton; Natasha Spassiani, Azrieli Adult Neurodevelopmental Centre; Louise Scott-Cole; Janet Njelesani, New York University

ABSTRACT

Introduction: Neurodiversity-affirming care is increasingly being recognized as a valued approach for autistic people to improve well-being, autonomy, and mental health. However, clinicians require guidance on how to practice in a neurodiversity-affirming way.

Aims: The aim of this research was to collate and synthesise the current literature on neurodiversity-affirming approaches in education, health, and social care for autistic children.

Methods: We systematically searched 8 databases in July 2023, and hand searched three autism-focused journals with inclusion criteria that addressed the aim of the study. The analysis was guided by quantitative content analysis and was coded using a priori and inductive codes. The majority of the research team identify as neurodivergent (autistic and/or ADHD).

Results: The twenty-six included studies had a total of 1,151 participants. Clinicians should promote an environment of inclusion including the social, physical, and institutional environments. They should build on autistic children's interest and focus on their strengths, understand autism as a part of human variation, and promote autistic communication. Autistic voices should be privileged when considering how to support autistic people. More research is needed from the perspectives of marginalised populations including autistic people with intellectual disability, who use augmentative and alterative communication approaches, or who are from middle- or low-income countries.

Conclusion: To support well-being, participation, and self-acceptance of autistic children, clinicians should focus on leveraging autistic children's strengths and adapting environments to them rather than remediating neurotypical developmental skills.

Impact: Clinicians can critically reflect on the ways that their practice upholds neurodiversity-affirming approaches, make changes to their ways of working, and advocate for workplaces changes.

TITLE: Thriving Without Driving: An Intervention to Support Older Adults During Driving Retirement

AUTHORS: Thomas McGuckian, Australian Catholic University; Joanne Bennett, Australian Catholic University; Oscar Modesto, Australian Catholic University; Benjamin Weir, Australian Catholic University

ABSTRACT

Introduction: Driving retirement is a major life transition for older adults, associated with emotional, practical, and social challenges. Older adults often experience grief, frustration, and reduced mobility when adjusting to life without driving. The dual-process model of coping with bereavement focuses on loss oriented and restoration oriented stressors, offering a useful framework for understanding this transition.

Aim: To examine whether a workshop based intervention grounded in the dual-process model assists older adults in planning for and coping with driving retirement, in particular their emotional responses, planning for loss oriented stressors, and planning for restoration oriented daily activities.

Methods: Twenty five older adults completed surveys before, one week after, and six weeks after a three hour interactive workshop. Free text responses were analysed using content analysis to identify themes and track changes across timepoints.

Results: Participants initially expressed concerns about mobility limitations, uncertainty about transport options, and impacts on wellbeing. Feelings of grief reduced immediately after the workshop and increased slightly by six weeks, reflecting oscillation consistent with the dual-process model. Acceptance remained stable over time. Participants reported experimenting with practical strategies such as walking more, using public transport, and seeking support from others. Over time, participants reported shifts in perspective and greater comfort with planning for daily activities.

Conclusion: Workshops grounded in a grief informed framework appear effective in supporting older adults to navigate both emotional and practical aspects of driving retirement.

Impact: Structured, psychologically informed interventions can facilitate healthier adjustment to driving retirement. Offering such programs early may promote proactive planning, emotional processing, and adoption of new mobility behaviours.

TITLE: Running for Resilience: A Community-Led Physical Activity Initiative Promoting Mental Health in the ACT

AUTHORS: Joanna Wall Tweedie, University of Canberra; Annaleise Naylor, University of Canberra; Andrew Flood, University of Canberra; Ben Alexander, Running for Resilience

ABSTRACT

Introduction: Running for Resilience (R4R) is a series of regular physical activity events aimed to promote mental health and suicide prevention. R4R aims to connect people to the services they need, including via collaboration with Canberra Medicare Mental Health Centre. R4R has grown rapidly since its foundation and appears to have successfully established a physical activity community in the ACT.

Aims: This study represents the first empirical examination of the motives and perceived benefits of R4R participants. A further aim was to generate evidence to assist R4R refine, expand, and enhance their events.

Methods: Semi structured interviews (45-60 minutes) were conducted with participants (n = 25) recruited from the R4R running event, providing a rich understanding of the R4R context. Reflexive thematic analysis was used to generate themes from the interview transcripts.

Results: Key themes: (1) Many participants reported their initial engagement was motivated by physical activity objectives but their motivation shifted to predominantly pursuing regular social connections; (2) participants valued permission to share mental health struggles and seek support (psychological safety); (3) Participants identified as part of the R4R group and valued R4R's inherent purpose and meaning (social identity); (4) Participants gained understanding of mental health and resources available (mental health literacy).

Conclusion/Impact: The research provides valuable insights into community-led physical activity and mental health initiatives. The partnership between R4R and the University of Canberra highlights collaborative research. The presentation will promote consideration on how community-led initiatives can enhance clinical practice and contribute to more connected, preventive models of health care in the ACT.

TITLE: Young People, Mental Health and Trustworthy Care

AUTHORS: Louise Stone, Australian National University; Alicia Robertson, Australian National University; Erin Walsh, Australian National University; Jimilla Hogan, Australian National University

ABSTRACT

Introduction: Young people learn in social contexts, needing human connection with teachers and peers. They have to learn to consult health professionals independently, breaking away from family-based assessments and treatments. They also learn how to interact with healthcare systems, and integrate their understanding of mental illness with their developing identities.

Aims: To explore how ACT young people with mental health needs learn about their illness, navigate health systema and evaluate therapeutic relationships

Methods: We interviewed 15 young people with a mental health condition and their GPs over 12 months. The study was informed by a young person's reference group, who assisted with design and interpretation and a steering group of mental health experts.

We used thematic analysis and narrative research methodologies.

Results: Participants rapidly assessed the quality of the therapeutic relationship before they were able to engage in care. They valued the longitudinal care of their GPs. As they developed their competencies in mental health help-seeking, they seemed to use their GPs in a "circle of security", returning to seek support and care before trialling new therapeutic relationships.

Participants found "template-based care" unhelpful. Without authentic human connections, they felt unable to engage, effectively leading to wasted therapeutic resources.

Participants described learning through social engagement with peers. They tested their growing models of mental illness, finding "tribes" with similar experiences, but then developed a more nuanced and individual understanding as their skills and capacities increased.

None of the people in our study found didactic learning through pre-prepared material helpful.

Participants described "auditioning" for services, "rehearsing" with other young people to secure a "precious" spot in healthcare systems. Some described "dressing the part", to ensure they were taken "seriously".

These young people felt "desperate", doing "anything they could" to present as a worthy "candidate" for care. Most were unable to articulate what they hoped to gain, particularly as inpatients, but described needing to escape unsafe environments.

GPs were advocates "helping them rehearse" and smoothing access. Participants valued the authentic relationships they had with GPs.

Conclusion: Adolescents won't take learning risks if they feel unsafe. Similarly, they are unlikely to engage in therapy without forming a safe, authentic therapeutic relationship

Participants used anonymous helplines during crisis, but needed longitudinal, relationship-based care. They disengaged if they felt care was "manualised" meaning standardised, evidence-based, low intensity options may not be effective in some adolescents.

Young people describe a social constructivist model of learning. Adherence to a diagnostic label seemed to be an intermediate step towards a more nuanced understanding.

Those who lived with marginalisations stressed the importance of communities that gave them the language and frameworks to describe their own experience. Consistent with Vygotsky's theory of proximal development, they needed to ground their developing models of mental illness into their existing mental health frameworks.

Young people are increasingly able to detect the "rubrics" behind healthcare intake systems. If young people refine their strategies using lived experience informants, there are limits to the "truths" detected on tools clinicians believe are objective. Candidacy strategies privilege those with literacy, health literacy and digital literacy, reducing equitable care.

Impact: Young people learn best within interpersonally safe relationships. This is particularly relevant for trauma survivors, and those living with marginalisation. Relationship first, rather than technique first, systems of care may be necessary for this group.

Adolescents are not "little adults". There is a place for health professionals to work with teachers, developing models of mental health education that align with existing curriculum and age-appropriate pedagogies.

This study brings into question the objective validity of assessment tools and highlights the need for authentic, relationship-based assessment and engagement.

TITLE: Socially Fragmented Neighbourhoods and Psychological Distress - Findings from the HABITAT Cohort of Middle-Aged Australians

AUTHORS: Vincent Learnihan, University of Canberra; Nasser Bagheri, University of Canberra; Gavin Turrell, RMIT

ABSTRACT

Introduction: Addressing social determinants of affective disorders is increasingly recognised as a major priority in mental health.

Aims: This longitudinal study aimed to examine the effect of neighbourhood social fragmentation on psychological distress among mid-to-older aged (40–65 yrs) community dwelling men and women over time.

Methods: We analysed changes in psychological distress across four time points (2009–2016) using data from HABITAT, a population-representative longitudinal study of adults aged 40–65 in Brisbane, Australia. The analytic sample included 2902 men and 3950 women who completed the Kessler 6 scale. A novel longitudinal neighbourhood social fragmentation index was developed using Australian census data. Sex-specific mixed effects regression models were used to assess associations, adjusting for individual, household, and neighbourhood-level covariates.

Results: Men living in more socially fragmented neighbourhoods had higher mean scores of psychological distress (β = 0.66, 95% CI: 0.28 to 1.04). The effect of neighbourhood social fragmentation on psychological distress among men was stable over time. A trend of higher distress scores for women occurred as the level of neighbourhood social fragmentation increased, however this was not found statistically significant (β = 0.25, 95% CI: −0.11 to 0.60).

Conclusion: Our findings suggest differences between men and women in the relationship between neighbourhood social fragmentation and psychological distress; these differences may reflect gendered social experiences. Promoting community cohesion in more socially fragmented areas may help to reduce psychological distress, particularly among men.

Impact: In the context of ageing populations and rising mental health burden, neighbourhood social fragmentation may be a key factor in developing targeted mental health prevention strategies.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 9:00 – 10:25

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING SEMINAR ROOM 1, SESSION 2

TITLE: Does Form Dictate Function? Evaluating the Prognostic Value of Patellofemoral Morphology in Post-Operative Total Knee Replacement Recovery

AUTHORS: Dips Thaker, Australian National University

ABSTRACT

Background: Total knee replacement (TKR) alleviates pain and restores function in advanced osteoarthritis, yet up to 20% of patients experience persistent anterior knee pain post-operatively. Alterations in the patellofemoral joint (PFJ) morphology following prosthetic implantation may contribute, but their relationship with outcomes remains unclear.

Aim: To characterise change in pre- and post-operative PFJ morphology and examine its relationship with patient-reported outcomes

Methods: We conducted a secondary analysis of 23 participants from a randomised trial of alignment strategies in Canberra. Participants underwent pre- and post-operative computed tomography (CT) and completed six-month patient-reported outcome measures (PROMs), including the Kujala Score, Oxford Knee Score (OKS), and Forgotten Joint Score (FJS). Patella tilt (PT), bisect-offset ratio (BO), tibial tuberosity-trochlear groove (TT-TG) distance and patella width (PW) were then correlated with these PROMs.

Results: CT demonstrated correction of PT angle (9.8° to 3.9°) and reduction in TT-TG distance (12.1 to 5.7 mm), but an increase in BO (45.0% to 56.5%). Multivariable linear regression showed post-operative TT-TG distance was the most consistent predictor, correlating positively with OKS (beta = 1.64, p = 0.011) and Kujala scores (beta = 2.43, p = 0.033). Post-operative PW also predicted better Kujala outcomes (beta = 3.93, p = 0.027).

Conclusion: PFJ morphology undergoes systemic change after TKR, with post-operative TT-TG and PW emerging as key correlates of recovery. While valuable for describing mechanics, morphology was not the primary determinant of post-operative pain.

Impact: These findings suggest that tracking indices provide useful descriptive information but have limited standalone prognostic value. A broader biopsychosocial model should be considered when predicting TKR outcomes.

TITLE: Co-design of the Vision Assessment, Referral, Investigation and Support (VA-RIS) Pathway for Inpatients with Fracture due to Falls in an Australian Rehabilitation Hospital

AUTHORS: Kam Chun Ho, University of Canberra; Philip Gaughwin, University of Canberra Hospital; Mona Al Sulaiman, University of Canberra; Dayna Rixon, University of Canberra; Barb Bolton, Canberra Health Services; Vicki Evans, University of Canberra; Mark Feltham, University of Canberra; Tina Jong, University of Canberra; Chi-Hung Kuo, Canberra Health Services; Michelle Noronha, University of Canberra; Faran Sabeti, University of Canberra; Mei Ying Boon, University of Canberra

ABSTRACT

Introduction: Vision impairment is a recognised risk factor for falls and poorer rehabilitation outcomes among older adults. However, systematic vision assessment is rarely embedded within rehabilitation services. Unrecognised vision impairment may compromise safety, therapy participation and recovery following fracture due to falls.

Aim: To explore stakeholder perspectives on the need, barriers and priorities for implementing a structured inpatient Vision Assessment, Referral, Investigation and Support (VA-RIS) pathway for patients admitted for rehabilitation following fracture due to falls in an Australian Capital Territory (ACT) rehabilitation hospital.

Methods: A co-design study using the World Café method and a follow-up questionnaire was conducted. Patients, carers and multidisciplinary clinicians participated in facilitated discussions exploring lived experience, perceived value, barriers and enablers. Data were transcribed and analysed using inductive–deductive thematic analysis.

Results: Twenty-eight stakeholders participated in the workshop and 19 completed the follow-up questionnaire. While clinicians recognised the association between vision impairment and falls, most patients were initially unaware of this link but supported structured vision assessment once informed. Identified barriers included absence of structured referral pathways, limited access to equipment and workflow pressures. Enablers included integrating assessment into admission processes, bedside testing, clearer interdisciplinary communication and standardised referral and reporting systems.

Conclusion: Co-design demonstrated strong stakeholder support and identified practical priorities for embedding structured inpatient vision assessment within falls rehabilitation.

Impact: Findings informed development of the VA-RIS pathway, now supported by ACT Health funding. Implementation has the potential to improve rehabilitation outcomes, reduce recurrent falls and strengthen integration of vision care within the ACT health system.

TITLE: What Lies Beneath Neck Pain? A 3D MR Study of Suboccipital Muscles

AUTHORS: Jacinta Essam, Australian National University; Diana Perriman, Australian National University; Mark Pickering, University of Southern Queensland; Alexandra Webb, Australian National University

ABSTRACT

Introduction (Background and Significance): Reliable diagnostic markers for neck pain and headache remain lacking. Changes in the suboccipital muscles, assessed with magnetic resonance imaging (MRI) have been proposed as potential markers, yet their relevance is unclear.

Aims/Question: The aim of this study was to determine whether suboccipital muscle volume and fatty infiltration (FI) respond differently in traumatic (whiplash associated disorder [WAD]) or non-traumatic neck pain and headache compared to healthy controls.

Methods: The MRI scans of 70 participants (acute WAD n=16; chronic WAD n=18; chronic idiopathic neck pain [CINP] n=9; healthy controls n=27) were segmented to quantify muscle volume (mm3) and FI (% of volume). Mixed linear regression models assessed differences in muscle volume and FI between healthy controls and symptomatic groups.

Results: There were no significant between-group differences in age, BMI, or neck length, although symptomatic groups included a higher proportion of females. Acute WAD demonstrated greater FI% in the rectus capitis posterior major (RCPMaj) (mean difference 0.82%; SE 0.33%; P = 0.015). CINP had greater RCPMaj volume (mean difference 370 mm^3; SE 92 mm^3; P = 0.001) and greater obliquus capitis inferior (OCInf) volume (mean difference 1400 mm^3; SE 220 mm^3; P < 0.001).

Conclusion: Only the acute WAD group demonstrated differences in FI in RCPMaj, which is the suboccipital muscle whose line of action is most sagittal. Greater volume was observed in the CINP group only and in the two muscles with the greatest range of motion (RCPMaj, OCInf).

Impact: These findings support suboccipital muscle morphology as potential imaging markers in different neck pain presentations.

TITLE: The Use of Sonication in Prosthetic Joint Infection Diagnosis in the ACT

AUTHORS: Sarah Ellis, Canberra Health Services; Joe Lynch, Canberra Health Services; Alexander Burns, Canberra Health Services; Paul Smith, Canberra Health Services

ABSTRACT

Introduction: The diagnostic criteria for prosthetic joint infection (PJI) have evolved over time and no universally accepted definition currently exists. However, identification of a causative pathogen remains central to diagnosis and guides antibiotic and surgical management. Traditional culture techniques rely on synovial fluid or periprosthetic tissue, but their sensitivity may be limited in the presence of bacterial biofilms. Sonication disrupts biofilms adherent to prosthetic surfaces, releasing bacteria for culture and improving the sensitivity of microbiological diagnosis.

Aims: To determine the diagnostic utility of sonication in PJIs in our local population and the impact on treatment decisions.

Methods: This was a retrospective cohort study utilizing data from The Australian Capital Territory (ACT) PJI database. The effectiveness of sonication intra-operatively was assessed looking at the frequency of use, percentage of positive detection rate and concordance between sonication and standard microbiology testing.

Results: A total of 424 patients were identified with 260 included in the final analysis. Sonication samples were sent in 191 cases (73.5%). Among the cases in which sonication was performed, 145 (75.9%) yielded a positive result and 44 (23.0%) were negative. In the sonication-positive group, the organism identified differed from the corresponding tissue culture in 15 cases (10.3%), while results were concordant in 130 cases (89.7%).

Conclusion: Sonication demonstrated a high rate of pathogen detection and was largely concordant with standard tissue cultures, with discordant results identified in a small subset of cases.

Impact: Sonication may serve as a useful adjunct to conventional microbiological testing in PJI and may assist in guiding targeted antimicrobial and surgical management.

TITLE: Evaluation of Wrist/Hand CTs in Emergency: A 12-Month Review & Cost Analysis

AUTHORS: Kevin Weeks, Canberra Health Services; James Pearce, Canberra Health Services; Benito Virgona, Canberra Health Services; Joshua Griffin, Canberra Health Services; Elyse Horne, Canberra Health Services; Kate Saunder, Canberra Health Services; Shannon Crick, Canberra Health Services; Phillip Newman, University of Canberra

ABSTRACT

Introduction: Computed Tomography (CT) scans for musculoskeletal injuries are rapidly increasing globally. Inappropriate imaging poses a significant challenge for healthcare, contributing to higher costs, overdiagnosis and incidental findings that may lead to more unnecessary testing and treatment.

Aims/Question: The primary outcome was the proportion of low-value CTs. Secondary outcomes were categorising reasons for being low-value and the reasons the CT still went ahead, and the financial, radiation and time costs.

Methods: Retrospective Observational Cohort Study of all non-contrast wrist/hand CTs (data pooled from Digital Health Record) ordered at an Emergency Department (ED) over 12-months. Individual cases were analysed by the investigators and associated costs were calculated.

Results: 55% of CTs analysed were classified as low-value. The most common low-value categories were occult, distal pole or scaphoid waist fractures (39%), and cases where no radiographical nor clinical findings indicated the need for CT (31%). 49% of CTs went ahead because a specialist or senior doctor requested the order. The average financial cost was $355.35 per scan and report. The mean wait time per patient was 2 hours 32 minutes. Mean radiation doses were 0.010–0.041millisieverts.

Conclusion: This study demonstrates that low-value non-contrast wrist/hand CTs represent a significant financial and time cost to the ED in addition to radiation exposure for patients.

Impact: To our knowledge, there are currently no studies analysing the ordering of wrist/hand CTs in the ED. Our data may justify additional time, attention, and funding as well as providing valuable insight to inform future interventions aimed at reducing the number of low-value CT orders for the wrist/hand.

TITLE: Natural Compounds Isolated from Amazon Rainforest Plants as Potential Therapeutics for Arthrofibrosis Following Total Knee Replacement

AUTHORS: Sara Alzaanin, Australian National University; Paul Smith, Australian National University; Rachel Li, Australian National University

ABSTRACT

Background: Arthrofibrosis is a debilitating complication that develops in approximately 3–10% of patients following total knee replacement (TKR), resulting in restricted joint motion and functional impairment. Initial conservative treatments, such as physiotherapy, do not consistently alleviate symptoms, particularly in severe cases. When these approaches fail, surgical interventions to debride fibrotic tissue are often required; however, such procedures are costly, technically demanding, and associated with variable outcomes. This highlights the urgent need for safer, more effective, and affordable therapeutic alternatives.

Aim: To evaluate the anti-fibrotic potential of natural compounds isolated from Amazon rainforest plants for the treatment of arthrofibrosis.

Methods: Natural compounds were assessed using a validated in vitro fibrosis model (Scar-in-a-Jar assay). Reductions in key fibrotic markers—collagen and α-smooth muscle actin (α-SMA)—were quantified following treatment at varying concentrations. To elucidate potential mechanisms of action, a human fibrosis PCR array that tests the expression of fibrosis-related genes is performed.

Results: Initial findings indicate that the alkaloid Galanthine reduced collagen expression by 93% at 10µM and 71% at 1µM, and α-SMA by 90% at 10µM and 59% at 1µM relative to the vehicle control. Notably, these reductions exceeded those observed with the reference compound.

Conclusion: By addressing the unmet clinical need for arthrofibrosis, this research aims to improve the quality of life for thousands of patients and their families. At the same time, it seeks to reduce the broader socioeconomic burden on the healthcare system and society, particularly as the incidence of arthrofibrosis is expected to rise in parallel with increasing TKR rates in our ageing population.

TITLE: Between-Device Agreement of Point-of-Care Devices Used to Measure Respiratory Muscle Strength in Clinical Settings: A Laboratory Validity Study

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

ABSTRACT

Introduction: Accurate measurement of respiratory muscle strength (PImax) is important for guiding decisions related to weaning from mechanical ventilation and monitoring both disease progression and respiratory rehabilitation. However, validated point of care manometers are increasingly difficult to source, creating a need for accessible alternatives. Smart, app integrated devices may address this gap, but require rigorous pre-clinical validation before clinical use.

Aim: To quantify the agreement between the POWERbreathe Smart Adaptor (PBSA) and two established clinical reference manometers (POWERbreathe KH2 and MD Diagnostics RP Check), across a range of pressures relevant to clinical practice, in the laboratory setting.

Methods: A pre-clinical bench study was conducted using a custom pressure generation circuit delivering simultaneous negative pressures (3-190cmH_2O). Paired measurements were obtained for the PBSA-KH2 (n=110) and PBSA-RP Check (n=107). Agreement was assessed using Lin's Concordance Correlation Coefficient (CCC), Bland-Altman analysis, proportional bias and absolute error metrics. Analyses were performed on the full dataset and for the clinically relevant ≤60cmH_2O range.

Results: PBSA-KH2 agreement was 'almost perfect' across the full range (CCC=0.9996), with small positive bias (1.26cmH_2O) and narrow limits-of-agreement. PBSA-RP Check showed similarly high agreement (CCC=0.997), with slightly greater bias (3.39cmH_2O). Agreement remained 'almost perfect' for both comparisons in the ≤60cmH_2O range (CCC≥0.991), with trivial proportional bias and low error.

Conclusions: Under controlled laboratory conditions, the PBSA demonstrated high measurement validity relative to established manometers.

Impact: These findings provide foundational pre-clinical evidence supporting the PBSA as a practical PImax measurement device with potential for future translation into ACT, national and international ICU, rehabilitation and community respiratory care pathways.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 9:00 – 10:25

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING SEMINAR ROOM 2, SESSION 3

TITLE: Improving Outcomes for Bone Marrow Transplant Patients: Exploring the Impact of Platelets on Stem Cells

AUTHORS: Loretta Huckstepp, Canberra Health Services; Justin Xia, Australian National University; Bhoopalan Vijay, Australian National University; Johanna Kok, Canberra Health Services; Yee Lin Thong, Australian National University; Elizabeth Gardiner, Australian National University; Phil Choi, Canberra Health Services

ABSTRACT

Introduction: Autologous haemopoietic progenitor cell (HPC) transplantation is standard of care for some haematological malignancies, requiring a minimum dose of viable CD34+ cells to ensure successful engraftment. Collection and cryopreservation can compromise CD34+ cell integrity, and we observed that elevated platelet concentrations may further impair CD34+ cell viability and recovery, thereby reducing transplantable cell dose and complicating clinical management.

Aim: To determine the impact of high platelet concentrations on viable CD34+ (vCD34) cell recovery in autologous peripheral blood HPC harvests following processing and cryopreservation.

Method: Retrospective analysis of 448 HPC harvests collected between 2016–2024 assessed post thaw vCD34 recovery, with neutrophil engraftment evaluated in 137 transplanted patients. Prospective studies using flow cytometry examined fresh and post thaw HPC samples for platelet–cell interactions (CD34/ CD41). Markers of platelet activation were quantified using enzyme-linked immunosorbent assay.

Results: Platelet concentration showed a significant negative correlation with post thaw vCD34 recovery (P=0.0003). Harvests with platelet counts >1000 $\times 10^9$/L yielded significantly lower recovery than those ≤1000 $\times 10^9$/L (68.37±12.00% vs 79.19±14.15%; P<0.00001). Recipients transplanted with high platelet harvests (>1000 $\times 10^9$/L) experienced slower neutrophil engraftment by 0.67 days. Increased co-expression of CD34 and CD41 post-thaw demonstrated –CD34-platelet interactions during processing and cryopreservation. Platelet activation markers were significantly and progressively elevated during collection, processing, and cryopreservation.

Conclusion: High platelet concentrations adversely affect vCD34 during HPC processing and cryopreservation.

Impact: Reduced viable CD34+ recovery may lead to delayed engraftment, longer hospitalisation, increased risk of infections, repeat stem cell collections, or inability to proceed to transplant. Methods to reduce platelet concentration may improve patient outcomes.

TITLE: Anal Squamous Cell Carcinoma in the ACT: Real-World Treatment and Survival Outcomes

AUTHORS: Xiyu Chen, Australian National University; Amy Shorthouse, Canberra Health Service; Chia Low, Canberra Health Service

ABSTRACT

Introduction: Anal canal cancer (ACC) is a rare gastrointestinal malignancy, most commonly HPV associated squamous cell carcinoma (SCC). Definitive concurrent chemoradiotherapy is standard of care. However, Australian real-world data on management and outcomes remains limited.

Aim: To describe the demographics, tumour features, treatment patterns, and clinical outcomes of patients with anal SCC treated at Canberra Health Services (CHS) and compare to published literature and guideline recommendations.

Methods: This retrospective review included adults with histologically confirmed ACC treated at CHS between 01 Jan 2020 and 31 Dec 2024. Demographics, tumour characteristics, HPV status, treatment details, and outcomes data were extracted from digital health records. Statistical analysis including Kaplan-Meier survival analyses were performed.

Results: Fifty-six eligible patients with anal SCC were identified. 80% of patients were female and 79% were HPV-16 positive. 53 patients were offered definitive chemoradiotherapy and 92% of patients completed the prescribed treatment. At the time of analysis, 66% of patients who completed treatment remained free of disease. Estimated 5-year overall survival was 78% (94% in patients with localised disease and 74% in patients with locally advanced disease). Disease progression (10 distant, 3 local) mainly occurred within the first year and was more common in patients with locally advanced disease at presentation.

Conclusion: Management of patients with anal SCC at CHS was confirmed as consistent with published evidence-based guidelines. Outcomes of patients treated for anal SCC at CHS were congruent with published real-world data.

Impact: These findings highlight the importance of early diagnosis and contribute to real world outcome data for anal SCC locally and within Australia.

TITLE: Integrating Physical Activity into Chemotherapy Care

AUTHORS: Rebecca Cesnik, Health and Community Services; Brea Kunstler; Kellie Toohey, Southern Cross University; Nicole Freene, University of Canberra; Stuart Semple, University of Canberra

ABSTRACT

Introduction: Physical activity (PA) during chemotherapy confers many benefits including reduced side effects, decreased cancer recurrence and improved survival. Despite this, less than 12% of people undergoing chemotherapy in the ACT reach PA guidelines. Clinicians and consumers report a desire to engage in PA and PA discussions; however, this is not translated into practice. This study aimed to analyse the barriers to PA during chemotherapy and provide recommendations to integrate PA into clinical practice.

Methods: Ten carers, 40 cancer clinicians and 23 people undergoing chemotherapy in the ACT participated in the study. Barriers and facilitators to PA were extracted from ten focus group transcripts and 37 interviews, inductively analysed and mapped to the behaviour change wheel (BCW) to design interventions to facilitate increased PA across the socio-ecological layers of the health system.

Results: This study identified 54 barriers that cross all domains of capability, opportunity and motivation, theoretical domains framework and socio-ecological model; demonstrating the complexity of integrating PA into chemotherapy care. The study proposes two broad and connected interventions: organisational-led support to improve skills, knowledge and confidence of PA for clinicians; and embedding exercise specialists into the multidisciplinary team (MDT).

Conclusion: Integrating PA into chemotherapy care is complex, requiring a multi-level approach. Increasing access to exercise specialists and supporting the MDT to provide individual PA advice will address many barriers.

Impact: Increased PA in people undergoing chemotherapy improves side effects and cancer outcomes. These recommendations provide clear direction which may support people to improve their PA levels during chemotherapy.

TITLE: Biochemical Control Following Post Prostatectomy Salvage Radiotherapy (sRT) In PSMA PET Negative Prostate Cancer Patients

AUTHORS: Kundan Vemuganti, Canberra Health Services; Brandon Nguyen, Canberra Health Services; David Simon Davis, Australian National University; Ben Quah, Australian National University; Farhan Syed, Canberra Health Services

ABSTRACT

Introduction: Most clinical practice guidelines recommend PSMA PET imaging for staging in the setting of biochemical recurrence after radical prostatectomy. The current standard management for recurrence is early salvage radiotherapy (sRT) to the prostate bed, with or without elective pelvic nodal irradiation. However, negative PSMA PET findings may lead to differing views within multidisciplinary care regarding the indication for sRT, given that PSMA PET may not identify microscopic residual disease.

Aim: To evaluate outcomes following sRT in patients with biochemical recurrence and a negative PSMA PET scan.

Methods: We retrospectively analysed 81 patients with biochemical recurrence after radical prostatectomy and a negative PSMA PET scan who received sRT at the Canberra Hospital between 2016 and 2022. Median follow up was 3.7 years. Biochemical progression was defined as a PSA >0.4 ng/mL with a rising trend. Kaplan–Meier analysis estimated five-year freedom from PSA progression. Subgroup analyses assessed the impact of timing of sRT, pathological features (ISUP grade, seminal vesicle invasion, lymphovascular invasion, extraprostatic extension, perineural invasion), age, PSA kinetics, and use of androgen deprivation therapy.

Results: All patients received prostate bed radiotherapy, and 15 also received elective pelvic nodal irradiation. The five-year freedom from biochemical progression was 69.1%. Improved outcomes were observed when sRT was delivered more than 19 months after surgery, when seminal vesicle invasion was absent, and in patients aged 65 years or younger.

Conclusion: sRT provides effective biochemical control in patients with biochemical recurrence despite a negative PSMA PET scan.

Impact: These findings support continued use of prostate bed sRT and help guide risk stratified decision making in this patient population.

TITLE: Targeting Phagocytosis Pathways to Augment Anti-Tumour Immunity in Small Cell Lung Cancer

AUTHORS: Chelisa Cardinez, Australian National University; Charlotte Grose, Australian National University; Erin Brotherton, Australian National University; Mahsa Najafzadeh, Australian National University; Marian Burr, Australian National University

ABSTRACT

Small cell lung cancer (SCLC) is an aggressive malignancy with high metastatic potential and accounts for approximately 15% of lung cancers. As most patients are diagnosed at advanced stages and current treatments have limited efficacy, there is a critical need for new therapeutic strategies. Although immune checkpoint inhibitors targeting PD-1/PD-L1 have shown some promise, only about 10% of SCLC patients respond, highlighting the need to better understand tumour–immune interactions and develop more effective treatments.

CD47 is highly expressed in small cell lung cancer (SCLC) and promotes immune evasion by inhibiting macrophage-mediated phagocytosis through interaction with SIRPα. Although therapeutic targeting of CD47 has shown efficacy in preclinical models, clinical trials of CD47-directed immunotherapies have demonstrated limited benefit and significant toxicity, highlighting the need for alternative strategies to disrupt this pathway. The molecular regulation of CD47 expression and function in SCLC remains poorly understood.

To identify novel regulators of CD47, we conducted a genome-wide CRISPR knockout screen in SCLC cell lines. Preliminary analysis identified several candidate genes, including QPCTL and additional novel hits not previously linked to phagocytosis pathways. These results point to new mechanisms controlling CD47 expression and potential therapeutic targets. Further validation will be required to determine their functional roles in modulating anti-tumour immunity. This work provides an initial roadmap for identifying molecular pathways that could be exploited to overcome immune evasion in SCLC. Our preliminary results indicate that targeting newly identified regulators of CD47 may offer innovative strategies to improve immune-mediated clearance of SCLC and inform future therapeutic development.

TITLE: Staying on Target: What Pelvic Bone Variation Means for Prostate Treatment

AUTHORS: Julian Beraldo, Canberra Health Services; Jonathon Lee, Canberra Health Services; Brendon Wright, Canberra Health Services; Farhan Syed, Canberra Health Services

ABSTRACT

Introduction: Prostate position varies within the pelvis, and as radiation therapy becomes more conformal, understanding how anatomical variation affects dosimetry is essential to maintain safe, accurate treatment. Soft-tissue variation is well recognised, but the impact of pelvic bone displacement remains unclear.

Aim: To quantify the dosimetric impact of pelvic bone variation and compare it with soft-tissue variation.

Methods: A retrospective case series of 15 de-identified patients were analysed. Simulated shifts were applied to planning datasets, and changes to target volume dosimetry were assessed. These findings were then used to estimate dosimetric changes across 47 clinical cases with varied magnitudes and directions.

Results: Pelvic bone variation caused a maximum dose reduction of 0.70% (±0.32%) to the prostate primary clinical target volume (CTV), reducing to 0.44% (±0.19%) for the planning target volume (PTV), which incorporates added margins. Soft-tissue variation produced greater reductions of 0.91% (±0.31%) and 0.59% (±0.32%) for the CTV and PTV respectively.

In clinical application, bone-only impacts stayed within predicted values, whereas soft-tissue variation exceeded them in 4% of CTV (n=2) and 11% of PTV (n=5) cases. Bone variation caused the PTV to fall out of tolerance in 2% of cases (n=1) and the CTV in 13% (n=6), while soft-tissue variation caused 15% PTV (n=7) and 40% CTV (n=19) failures.

Conclusions: Pelvic bone variation has minimal dosimetric impact on prostate target volumes, whereas soft-tissue variation exerts a greater and less predictable effect.

Impact: These findings support confidence in current workflows and highlight soft-tissue variation, not bone displacement, as the primary driver of clinically meaningful dosimetric change, guiding future workflow refinement.

TITLE: Pattern of Care and Clinical Outcomes of Elderly Pancreatic Cancer Patients in the PURPLE Translational Registry

AUTHORS: Zahraa Hameed, Australian National University; Charles H.C. Pilgrim, Alfred Health, Monash University ; Mehrdad Nikfarjam, Austin Health; Caroline Lum, Border Medical Oncology; Fiona Day, Calvary Mater Newcastle; Rachel Wong, Eastern Health (Box Hill), Epworth Eastern Hospital, Monash University (Eastern Health Clinical School); Sumitra Ananda, Epworth Richmond Hospital; Christopher Lomma, Fiona Stanley Hospital; Susan Caird, Gold Coast University Hospital; Jeremy Shapiro, Cabrini Hospital; Krishna Rachakonda, Mildura Base Public Hospital; Marion Harris, Monash Health, Monash University

ABSTRACT

Introduction: Pancreatic cancer (PC) is a leading cause of cancer-related deaths and affects elderly Australians disproportionately.

Aim: This study aims to investigate treatment patterns and outcomes in elderly PC patients.

Methods: We conducted a retrospective study of elderly PC patients aged ≥ 70 years, diagnosed between 2010 and 2024 and enrolled in the PURPLE Translational Registry. This included patients who presented to Canberra Health Services in the aforementioned time period.

Results: 2232 patients were identified. 24.8% had resectable PC (RPC), 11.2% had borderline resectable PC (BRPC), 19.9% had locally advanced PC (LAPC) and 41.8% had metastatic PC (MPC) at diagnosis. Most common presenting symptoms included pain (41.4%), obstructive jaundice (34.6%) and weight loss ≥10% (27.6%). Rate of upfront resection was higher in the RPC disease group compared to BRPC patients. Gemcitabine +Nab-Paclitaxel was the most common neoadjuvant regimen while Gemcitabine + Capecitabine and Gemcitabine monotherapy were the most common adjuvant therapies. 36.6% of LAPC patients and 40.5% MPC patients received at least one line of palliative chemotherapy. Gemcitabine+Nab-Paclitaxel was the most common palliative chemotherapy regimen across all groups. Median overall survival was significantly higher in ≥70 RPC, BRPC, LAPC and MPC patients who received standard treatment compared to patients who received Best Supportive Care.

Conclusion: Over 60% of elderly PC patients in the PURPLE Translational Registry had LAPC or MPC with receipt of treatment correlating with improved survival.

Impact: This study will provide an insight into the treatment patterns and outcomes of elderly PC in Australian hospitals and where future research needs to be directed to better optimise patient care.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 11:05 – 12:20

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING MAIN CONFERENCE ROOM, SESSION 1

TITLE: From Relationship to Impact: Academic and Government Research Partnerships to Reduce and Eliminate Restrictive Practices in the Australian Capital Territory

AUTHORS: Jessica Russ-Smith, Australian Catholic University; Tracey Harkness, Health and Community Services Directorate; Amelia Wheeler, University of Canberra; Aniqa Farwa, Australian Catholic University

ABSTRACT

Introduction: Positive Behaviour Support Plans (PBSPs) are required wherever restrictive practices (seclusion, physical, environmental, mechanical or chemical restraints) are used by providers in the ACT. PBSPs must be registered with the Office of the Senior Practitioner (OSP). The ACT legislation compels the OSP to carry out research into the reduction and elimination of restrictive practices. This research partnership between the OSP (Health and Community Services Directorate) and academics from ACU and UC was co-designed to translate evidence serving the people and providers at the centre of this work.

Aims: To improve the health and human rights outcomes for people subjected to restrictive practices in the ACT through evidence generation and provider capacity-building; and to demonstrate how government and academic health partnerships, grounded in community needs, can drive rights-focused practice reform.

Methods: Eighty PBSPs ACT registered between 2020-2023 were redacted by the OSP and analysed using the Decolonising Critical Discourse Analysis (DCDA) Framework (Wheeler et al., 2025), developed iteratively and collaboratively through the partnership.

Results: Analysis identified deficit-focused language and minimally detailed reduction strategies, reflecting colonial and White normative constructions of disability and behaviour that the sector is actively working to dismantle.

Conclusion: This partnership demonstrates that when health research is driven by community and sector need, and built on genuine collaboration, it can generate rigorous knowledge and meaningful systemic change.

Impact: Findings have been translated back into the community and sector through provider training, community forums, peer-reviewed publications and OSP-distributed resources, building shared

capacity and ensuring ethical rights-focused, neurodivergent-affirming and disability justice-orientated practice across the ACT.

TITLE: What Influences Meaningful Mealtime Choice in Residential Aged Care?

AUTHORS: Dorsa Allahyar, University of Canberra

ABSTRACT

Introduction: Choice at mealtimes is central to dignity, autonomy, and person-centred care (PCC) in residential aged care (RAC). Despite policy emphasis on resident choice, evidence of how meaningful mealtime choice can be supported in practice remains limited. Therefore, understanding the contextual factors that influence residents' ability to make decisions is critical for improving care delivery.

Aim: To identify contextual influences impacting mealtime choice in RAC mealtimes to inform a realist review

Methods: This ongoing research represents the first phase of a realist review. Realist reviews examine what works for whom, in what contexts, and why by identifying context-mechanism-outcome (CMO) relationships. A preliminary review of the literature on food choice, PCC and household models of care was conducted. The CMO relationships were extracted and synthesised to identify contextual influences on mealtime choice, which informed the development of initial program theories. The scope and emerging program theories were refined through stakeholder consultations to prioritise key research questions.

Results: The analysis identified six interconnected levels influencing mealtime choices: society, sector, organisation, staff, family, and individual. Key contextual influences included ageist societal attitudes, historical risk management-focused policy and funding structures, family involvement in decision-making, and residents' impairments, preferences, and dietary needs. These interconnected factors influence whether residents are supported in expressing and implementing meaningful food preferences. Initial program theories and six research questions were developed to guide the subsequent phases of the review.

Conclusion: Mealtime choice in RAC is influenced by complex and interdependent contextual factors. Findings will inform policy and practice to support meaningful mealtime choice for over 200,000 Australians living in RAC.

TITLE: Barriers, Perceptions, and Pathways Forward: A Scoping Review of CALD Perception toward Participation in Australian Clinical Trials

AUTHORS: Thy Vuong, Canberra Health Services

ABSTRACT

Background: Clinical trials are essential for evaluating the safety and effectiveness of health interventions and underpin evidence-based healthcare (1). Equitable participation is both a scientific and ethical imperative, as underrepresentation of population groups can limit generalisability and perpetuate health inequities (2). In Australia, culturally and linguistically diverse (CALD) communities comprise a substantial proportion of the population yet remain underrepresented in clinical trials (3,4). Evidence on CALD perceptions and factors influencing participation is fragmented, and no recent scoping review has focused specifically on the Australian context.

Aims: This scoping review examined current evidence on attitudes, perceptions, and factors influencing clinical trial participation among CALD populations in Australia.

Methods: A scoping review was conducted following Joanna Briggs Institute guidance and reported according to PRISMA-ScR (5,6). Five databases were searched for primary studies published between 2006 and June 2025. Eligible studies explored attitudes, perceptions, barriers, or facilitators related to clinical trial participation among CALD adults in Australia. Two reviewers independently screened studies, extracted data, and synthesised findings narratively.

Results: Eight studies met inclusion criteria (7-14). Five themes were identified: willingness to participate exists but opportunities remain limited; language and health literacy barriers persist; participation decisions are shaped by cultural values, family involvement, and trust; system-level practices hinder equity monitoring; and feasible facilitators--such as interpreters, multilingual materials, and community partnerships--are inconsistently applied.

Conclusion: Underrepresentation of CALD populations in Australian clinical trials reflects structural and communication barriers rather than lack of willingness.

Impact: Findings highlight the need for culturally responsive recruitment, improved communication resources, and routine diversity reporting to support equitable participation in Australian clinical research.

TITLE: Mapping Mortality Risk Attributable to Wildfire Smoke Exposure across Global, Regional, and Country Levels: A Systematic Review and Meta-Analysis

AUTHORS: Chala Daba Yadate, Australian National University; Dr. Michael Tong, Australian National University

ABSTRACT

Introduction: Although evidence is growing on wildfire smoke-related mortality, limited studies have specifically assessed the impact of wildfire-related air pollutants (PM2.5, PM10 and O3) on all-cause and cause-specific mortality across diverse climate zones and regions.

Aims: This study aims to determine the associations between wildfire smoke exposure and cardiovascular, respiratory and cancer mortality across different climate zones and geographical regions.

Methods: We systematically searched peer-reviewed epidemiological studies in PubMed, Scopus and Web of Science databases from inception to December 16, 2025. Using a random-effects meta-analysis, we calculated pooled relative risks (RRs) for each 10 µg/m3 increase in wildfire-related air pollutants.

Results: A 10 µg/m3 increase in wildfire-related PM2.5 exposure was found to be associated with a 7.9% (RR=1.079; 95% CI: 1.063–1.096), 1.8% (RR=1.018; 95% CI:1.011–1.024), 11.8% (RR=1.118; 95% CI: 1.072–1.166) and 2.5% (RR=1.025; 95% CI: 0.996–1.054) increase in the risk of all-cause mortality, cardiovascular, respiratory and cancer mortality, respectively. Subgroup analyses by climate zone showed a higher risk of all-cause mortality linked to wildfire-related PM2.5 exposure in the Mediterranean climate zone (RR=1.030; 95% CI: 1.020–1.041) and the Oceanic climate zone (RR=1.004; 95% CI: 1.002–1.006).

Conclusion: Across diverse climate zones, regions and countries, exposure to wildfire-related air pollutants was associated with higher risks of all-cause, cardiovascular and respiratory mortality.

Impact: Wildfires, driven by climate, are increasing the public health problems across the world including in Australia. Future studies examining wildfire smoke exposure in relation to all-cause and cause-specific mortality should account local climatic conditions, age and sex to assess susceptibility at regional and country level and to inform targeted prevention measures.

TITLE: Advancing Practice for Autistic Children: Culturally and Neurodiversity Affirming Allied Health Care

AUTHORS: Julia Sterman, Australian Catholic University; Zoe Wagland; Natasha Spassiani, Azrieli Adult Neurodevelopmental Centre; Louise Scott-Cole; Janet Njelesani, New York University

ABSTRACT

Introduction: Disparities exist for autistic children and their families from racially and ethnically marginalised backgrounds in accessing allied health services, referral frequency, and timely autism diagnosis. However, to date, the shift towards neurodiversity affirming therapy has not sufficiently included this population. This lack of inclusion in research perpetuates inequalities, resulting in decreased community inclusion, and lacks alignment with the values of a multicultural city such as Canberra.

Aims: To collate and synthesise the research on the intersecting lived experiences of autistic children and families from racially and ethnically marginalised families living in the Global North to inform more culturally attuned allied health care.

Methods: Eight databases were systematically searched up to June 2025. Two reviewers independently screened titles and abstracts followed by a full text review and data extraction. Analysis was guided by Qualitative Content analysis and Disability Critical Race Theory.

Results: Fifty-six articles were eligible for inclusion. To address initial gaps in their knowledge related to autism, parents they sought information, learned how to support their child, reframed their own and others' perspectives, and advocated for their child and family's needs. Families encountered culturally and linguistically inaccessible services, and had differing experiences of community connection, often experiencing disability-based stigma and racism.

Conclusion: Autistic children and their families from culturally racially and ethnically marginalised backgrounds experienced intersecting disability-based stigma and racism.

Impact: Providers can provide support for racially and ethnically marginalised community members to understand autism from a neurodiversity affirming perspective, critically examine their own unconscious biases, and seek to address systemic levels of health service inaccessibility.

TITLE: The Impact of the Out-of-Pocket Costs of Health Care and Medicines for People Living with Chronic Conditions in Australia Viewed through the Lens of Maslow's Theory of Human Motivation

AUTHORS: Jane Desborough, Australian National University; Anne Parkinson, Australian National University; Danielle Butler, Australian National University; Kamania Butler; Hsei Di Law, Australian National University; Leanne Watts; Fiona Hodson, Chronic Pain Australia; Elisabeth Huynh, Australian National University; Samar Ibrahim; Jillian Kingsford Smith; Charles Maskell-Knight, Australian National University; Julie Veitch

ABSTRACT

Introduction: On diagnosis, people with chronic conditions receive a treatment plan that includes various consultations, medications and other items required to manage their health. While some are subsidised by the government, many also incur out-of-pocket costs (OOPC). Due to affordability, many people then begin calculating how they can pay the OOPCs and often determine which aspects of treatment they may deem as discretionary.

Aim: To understand how these decisions have the potential to adversely impact people with chronic conditions' health and other critical aspects of their lives.

Methods: We applied the lens of Maslow's theory of human motivation to examine findings of a systematic review of the qualitative literature examining experiences of OOPCs for health care among people with chronic conditions in Australia.

Results: Impacts of the burden of OOPCs were evident throughout Maslow's hierarchy. Despite prioritising "physiological needs", trade-offs were made between medications and health consultations, food, housing and lifestyle. Reduced income, use of savings and early retirement due to health impacted people's sense of financial security and "safety". Forgone social activities reduced social connectedness and "sense of belonging". Triggers, including financial stress and foregone career opportunities negatively impacted "self-esteem and self-worth", as well as dimensions of "self-actualisation".

Conclusions: For many people living with chronic conditions in Australia, the OOPCs of health care present prohibitive barriers to enacting recommended treatment plans and impact their capacity to meet basic physiological, safety and emotional needs, and higher aspirations.

Impact: Maslow's theory of human motivation provides a valuable lens for policymakers that may inform improvements to more equitable health financing in Australia.

TITLE: "I'd Rather You Just See Me for What I am, than Assume What I am not": Understanding Harm-Based Microaggressions in LGBTQ+ Healthcare Encounters

AUTHORS: Mik Bartels, University of Canberra; Caroline Ng Tseung-Wong, University of Canberra; Dimity Crisp, University of Canberra; Patricia Brown, University of Canberra; Research Partner ACON; Research Partner AGMC

ABSTRACT

Introduction (Background and Significance): Lesbian, gay, bisexual, trans, queer or questioning (LGBTQ+) populations experience poorer physical and mental health outcomes than non-LGBTQ+ populations, disparities largely attributed to discrimination, stigma, and structural inequities. In healthcare settings, subtle forms of discrimination known as microaggressions may undermine patient trust, legitimacy, and engagement with care. However, most research has focused on categorising microaggressive behaviours rather than examining the harms experienced by those who encounter them.

Aims/Question: This study examined how LGBTQ+ individuals perceive and experience harm-based microaggressions within medical and mental healthcare settings and explored what participants identify as features of positive healthcare experiences.

Methods: Eighteen adults from the LGBTQ+ community in Australia participated in semi-structured interviews. Data were analysed using reflexive thematic analysis informed by intersectionality theory and a harm-based microaggression framework.

Results: Participants described three forms of harm: marginalisation-based self-identity harms (experiences that undermine or invalidate individuals' identities), epistemic harms (dismissal of patients' knowledge or credibility regarding their bodies, identities, or needs), and emotional harms (including anxiety, vigilance, and avoidance of care). These harms frequently intersected with broader structures of power, including cisheteronormativity, racism, ableism, and sexism. Participants described positive experiences as being characterised by practitioners who listened, respected patient knowledge, and demonstrated competence in LGBTQ+ health.

Conclusion: Findings suggest that subtle interactions within healthcare can reproduce broader systems of power by undermining identity recognition, epistemic authority, and emotional safety.

Impact: Understanding harm-based microaggressions in healthcare can inform training, institutional practices, and patient-centred care approaches aimed at improving trust in healthcare services and reducing health inequities experienced by LGBTQ+ populations.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 11:05 – 12:20

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING SEMINAR ROOM 1, SESSION 2

TITLE: cGAS Engages Nutrient-Sensing Enzymes to Promote Tumorigenesis

AUTHORS: Shreya Mahajan, Australian National University; Dr. Abhimanu Pandey, Australian National University; Dr. Chinh Ngo, Australian National University; Prof. Si Ming Man, Australian National University

ABSTRACT

Introduction: Colorectal cancer is the second leading cause of cancer-related deaths worldwide. Mislocalised DNA released from damaged or dying cells is detected by innate immune DNA sensors in the gut, leading to inflammation and cancer. However, the contribution of the DNA sensor cGAS in colorectal cancer is poorly defined.

Aims: To investigate the role of cGAS in mice carrying a heterozygous mutation in the adenomatous polyposis coli gene (ApcMin/+), a well-established model of human APC-mutant colorectal cancer.

Methods: Tumour burden was analysed in littermate ApcMin/+cGas–/– mice and ApcMin/+ mice.

Immunoblotting and 32-plex ELISA were performed to assess molecular signalling and cytokine production. A proteomic screen followed by biochemical and functional assays was performed to identify molecular signalling networks controlled by cGAS.

Results: We found that ApcMin/+ mice lacking cGAS had reduced tumours, exhibited substantially reduced histopathological damage and had a decreased number of proliferating intestinal epithelial cells compared with ApcMin/+ littermates. Unexpectedly, these tumour-promoting effects of cGAS were independent of known functions of cGAS in driving inflammation. Instead, we discovered that cGAS interacts with the nutrient-sensing pathway enzymes GFPT1 and GFPT2, forming a novel tripartite signalling complex. This complex promotes OGT-mediated O-GlcNAcylation of NF-kB (p65), which promotes beta-catenin mediated activation of cell cycle proteins cMyc and Cyclin E, promoting cell proliferation and tumourigenesis.

Conclusion: cGAS promotes the development of colorectal cancer by activating the nutrient-sensing pathway.

Impact: Together, these findings suggest that cGAS, GFPT-1 and GFPT-2 could serve as biomarkers and that the therapeutic targeting of this signalling axis could improve the health outcomes in patients with colorectal cancer.

TITLE: Platelet Activation Impairs Stem Cell Health in Autologous Harvest Products

AUTHORS: Justin Xia, Australian National University; Loretta Huckstepp, Canberra Health Services; Vijay Bhoopalan, Australian National University; Jereme Spiers, Australian National University; Natasha Vassileff, Australian National University; Yee-Lin Thong, Australian National University; Johanna Kok, Canberra Health Services; Elizabeth Gardiner, Australian National University; Philip Choi, Canberra Health Services

ABSTRACT

Introduction: Autologous stem cell transplantation (ASCT) requires sufficient reinfusion of viable CD34⁺ haematopoietic stem and progenitor cells (HSPCs) for rapid immune reconstitution. In HSPC harvests, leukocyte content and cryopreservation conditions are tightly controlled. Platelet burden in HSPC collection bags remains largely overlooked despite emerging evidence that platelet activation impacts stem cell function.

Aim: Evaluate platelet burden and level of activation in HSPC collection bags.

Methods: Retrospective unicentre analysis on 448 autologous HSPC collections assessed multivariable relationships using cellular and clinical parameters. Prospective flow and imaging cytometry quantified platelet-CD34⁺ interactions and platelet activation. Quantitation of platelet-derived proteins and pro-inflammatory cytokines measured in harvest supernatants by enzyme-linked immunosorbent assay and in cell lysates by mass spectrometry.

Results: In fresh HSPC harvests, platelet concentrations negatively correlated with viable CD34⁺ cell recovery post-thaw ($r=-0.45$; $P<0.0001$). HSPC products contained activated platelet-CD34⁺ aggregates expressing P-selectin, increasing by 27% following freeze-thaw ($P<0.00001$). Harvest supernatants showed >5-fold post-thaw increases in platelet activation markers alongside accumulation of powerful platelet-derived cytokines, indicating a pro-apoptotic and pro-inflammatory graft environment. Platelet-CD34⁺ cell lysates were enriched in proteins supporting platelet-driven neutrophil activation associated with acute inflammatory and oxidative stress pathways and suppression of DNA synthesis.

Conclusion: Platelets in HSPC products activate, bind CD34⁺ cells and release mediators that impair stem cell viability.

Impact: Platelet burden is a modifiable parameter. Platelet concentration thresholds could inform collection and processing protocols to minimise platelet burden, improve graft quality, reduce infection risk and limit repeat mobilisation or collection.

TITLE: The Development of Monk Inhibitors as a Novel Therapy for Autoimmune Kidney Disease

AUTHORS: Tom Lea-Henry, Australian National University; Thuy Nguyen Huynh, Australian National University; Jean Cappello, Australian National University; Somasundhari Shanmuganandam, Australian National University; Gemma Hart, Australian National University; Justin Chan, Australian National University; Vicki Athanasopoulos, Australian National University; Simon Jiang, Australian National University

ABSTRACT

Introduction: Autoimmune glomerulonephritis (GN) is one of the most common causes of end-stage kidney disease worldwide. We have discovered that the pseudonymised gene “MONK” licenses GN in several autoimmune mouse models and have developed novel drugs targeting this protein.

Aims/Question: Can glomerulonephritis be treated by targeting MONK?

Methods: A bespoke mouse model carrying a loss-of-function Monk single nucleotide polymorphism (Monkvar) was created using CRISPR-Cas9 genome editing. This was crossed to core mouse models of autoimmune kidney disease and analysed using flow cytometry, immune cell activation assays, autoantibody measurement, and kidney histology.

Results: Monkvar protects mice from kidney inflammation across 3 core mouse models of autoimmune GN: Lyn-/-, MRL:FasLpr, and nephrotoxic serum nephritis. Novel compounds were developed and screened for inhibitory activity against MONK protein. Two of these are specific for the MONK protein and show a favourable toxicity profile in early testing.

Conclusions: The loss-of-function Monkvar protects against the development of autoimmune GN in core mouse models of human disease. We have developed two novel compounds that form the basis of ongoing drug development efforts to create a new therapy for GN.

Impact: We have expanded the scientific understanding of Monk by discovering previously unrecognised immune roles and a central role for this protein in the development of autoimmune GN. This has led to the development of compounds that could be a first-in-class therapy for this condition which is responsible for an estimated 17.3 million prevalent cases of dialysis-requiring chronic kidney disease worldwide.

TITLE: Exploring the Determinants of Mortality in Warm Autoimmune Haemolytic Anaemia

AUTHORS: Kyle Cavanagh, Australian National University; Jun Yen Ng, Canberra Health Services; Ry Cambourne, Canberra Health Services; Meidelynn Ooi, Canberra Health Services; Saratkrishna Menon, Canberra Health Services; Phil Choi, Canberra Health Services

ABSTRACT

Introduction: Warm autoimmune haemolytic anaemia (wAIHA) is an uncommon immune-mediated disorder characterised by autoantibody-driven destruction of red blood cells. wAIHA is associated with significant morbidity and mortality due to haemolysis, transfusion, immunosuppression, and thrombo-inflammatory complications. Evidence suggests outcomes are influenced by disease severity, comorbidity burden, secondary causes, and treatment-related complications such as infection and thrombosis. However, the determinants of mortality in contemporary clinical practice remain uncertain.

Aims: To characterise mortality and identify clinical predictors of death in adults with wAIHA managed at an Australian tertiary referral centre.

Methods: We conducted a retrospective cohort study at The Canberra Hospital. Adults diagnosed with wAIHA between 01/01/2018 and 11/11/2022 were identified through screening of positive direct antiglobulin tests (DATs) in the Australian Capital Territory pathology database. Diagnosis required laboratory evidence of haemolysis with a positive DAT and a clinician-adjudicated diagnosis. Clinical and laboratory data were extracted from electronic medical records. Comorbidity burden was assessed using the Charlson Comorbidity Index. Overall survival was analysed using Kaplan–Meier methods and predictors of mortality will be evaluated using Cox proportional hazards regression.

Results: Incidence of wAIHA was 2.1 per 100,000/year. Positive DATs 623 from 1256 performed, of whom only 46 patients were diagnosed wAIHA. Hospitalisation in 26 (56.5%), with median length of stay 7 (5–11.8) days. Fourteen patients (30.4%) died, including six (42.9%) deaths within two weeks of diagnosis. Most early deaths attributable to fulminant haemolysis.

Conclusion: Warm autoimmune haemolytic anaemia is associated with substantial early mortality.

Impact: Identifying predictors of mortality may improve early risk stratification and guide monitoring and treatment strategies.

TITLE: Improving Vaccination Equity: Factors Influencing Uptake in Culturally Diverse Communities in Australia

AUTHORS: Mary-Ellen Hooper, University of Canberra; Natasha Jojo, University of Canberra; Deborah Davis, University of Canberra; Julie Blackburn, University of Canberra; Amal Al-Ghareeb, University of Canberra; Kerry Hampton, University of Canberra; Marjorie Atchan, University of Canberra; Cathy Knight-Agarwal, University of Canberra; Glenys Frank, University of Canberra; Holly Northam, University of Canberra; Elyse Ladbrook, University of Canberra; Mary Bushell, University of Canberra

ABSTRACT

Background: Vaccination is a cornerstone of disease prevention, however, inequities in uptake persist among culturally and linguistically diverse (CALD) communities in Australia, creating pockets of under-immunisation and increasing vulnerability to vaccine-preventable diseases. Understanding the determinants of vaccine uptake is essential to inform culturally responsive and equity-focused immunisation strategies. This integrative review aimed to identify factors influencing vaccination uptake among people from CALD backgrounds in Australia.

Methods: A systematic integrative review was conducted following Whittemore and Knafl's framework and reported in accordance with PRISMA guidelines. Electronic databases (CINAHL, MEDLINE, Web of Science, Scopus and Google Scholar) were searched for peer-reviewed studies examining factors influencing vaccination uptake among CALD populations in Australia. Extracted data were synthesised using a narrative and thematic synthesis approach.

Results: Twenty-eight studies representing 4617 participants were included, comprising qualitative (17), quantitative (9), and mixed-methods (2) research. Participants included people from CALD communities (n = 3941) and professionals working with CALD communities (n = 676). Five overarching themes were identified: knowledge, beliefs and risk perception; trust and confidence in systems and providers; access to information; healthcare system and provider factors; and socioeconomic and access barriers. Trust in healthcare providers and community leaders emerged as a key facilitator of vaccine acceptance, while language barriers, complex catch-up vaccination processes, and challenges navigating health services were commonly reported.

Conclusions: Vaccination uptake among CALD communities is shaped by intersecting social, cultural, and health system factors. Improving vaccination equity requires culturally tailored communication, partnerships with trusted community leaders, and coordinated health system responses to address structural barriers to immunisation.

TITLE: Highly Prevalent TNFAIP3 Variants Contribute to Kidney Disease among Indigenous Australians

AUTHORS: Tom Lea-Henry, Australian National University; Thuy Nguyen Huynh, Australian National University; Somasundhari Shanmuganandam, Australian National University; Gemma Hart, Australian National University; Dulika Sumathipala, Australian National University; Azure Hermes, Australian National University; Brendan McMorran, Australian National University; Vicki Athanasopoulos, Australian National University; Simon Jiang, Australian National University

ABSTRACT

Introduction: Kidney disease (KD) is highly prevalent among Indigenous Australians with early onset and higher rates of morbidity and mortality. The Indigenous Australian inhabitants of the Tiwi Islands have the highest reported rates of KD worldwide with genetic factors previously identified as the dominant driver of this disparity. We have found a cluster of damaging variants in the anti-inflammatory TNFAIP3 gene that are highly prevalent among the Tiwi Islanders.

Aims/Question: Do TNFAIP3 variants identified among Indigenous Australians contribute to KD?

Methods: A bespoke Tnfaip3N102S mouse was created using CRISPR-Cas9 editing that replicates the most damaging TNFAIP3 variant in the Tiwi Islanders. This was crossed to several mouse models of KD. The impact of this variant was investigated using flow cytometry, ex-vivo immune stimulation assays, quantification of autoantibody titres, and organ histology.

Results: 93% of Tiwi Islanders have at least one missense TNFAIP3 variant. Tnfaip3N102S mice have evidence of dysregulated Toll-like receptor (TLR) responses and inflammatory cytokine release. When crossed to Lyn-/- mice, Tnfaip3N102S worsens the autoimmune phenotype and histologic evidence of KD.

Conclusions: Tnfaip3N102S worsens KD across two mouse models and is a novel target for combating the disparity in KD outcomes among Indigenous Australians. We have successful targeted this dysregulated pathway in ex vivo assay.

Impact: Using the first mouse avatar of a genetic variant identified in an Indigenous Australian, we discover that loss-of-function TNFAIP3 variants contribute to worsening kidney outcomes. This is a potential novel therapeutic target to treat KD in Indigenous Australians.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 11:05 – 12:30

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING SEMINAR ROOM 2, SESSION 3

TITLE: Vision Services Integrated into a Novel Embedded, Multidisciplinary Allied Health Model of Care for Older People in Residential Aged Care

AUTHORS: Faran Sabeti, University of Canberra; Alice Pashley, University of Canberra; Michael Tran, University of Canberra; Diane Gibson, University of Canberra; Nathan D'Cunha, University of Canberra; Kasia Bail, University of Canberra; Helen Halloway, University of Canberra; Stephen Isbel, University of Canberra

ABSTRACT

Introduction: Vision is essential for ageing well, supporting independence and quality of life of older people. Vision impairment is high in residential aged care, with many impairments potentially correctable; however, there is poor accessibility to optometry services for residents.

Aims: The aim of this study is to define the role of an optometrist in an embedded allied health multidisciplinary team.

Methods: This was a mixed-methods study conducted within the pragmatic paradigm. Optometrists, including final year optometry students, conducted comprehensive vision and eye health assessments for all residents who opted in for optometry services. Qualitative interviews were conducted with the optometrist, optometry students, residents, and family members participating in the trial.

Results: Twenty-nine of the 36 recruited participants opted in for optometry assessments. Vision impairment was identified in most participants (65%). Optometry interventions were provided for 24 (82.7%) of the participants who received assessments, including a significant increase in the number of new or updated spectacle prescriptions, referrals to ophthalmology, vision aids, and environmental modification conducted through collaboration with an occupational therapist.

Conclusion: This novel study confirms the important role of optometrists in promoting quality of life in residential aged care, and value of their inclusion in multidisciplinary teams. Future quantitative research investigating impact on patient outcomes, integrations of optometrists within multidisciplinary teams and how to support this model in usual practice is warranted.

Impact: The Inclusion of optometrists in multidisciplinary teams is valuable for supporting clinicians' shared learning and for providing comprehensive, timely vision care to residents.

TITLE: Assessing Medication Chart Errors During Transitions from Acute Care to Residential Aged Care, Pre- and Post-Intervention

AUTHORS: Kate Gorell, Canberra Health Services; Justin Somers, Canberra Health Services; Sony Palikhe, Canberra Health Services; Clare Stephenson, Canberra Health Services; Ash Smyth, University of Western Australia; Carol Chan, Canberra Health Services; Nicole Sep, University of Canberra; Fariza Binti Nordin, Canberra Health Services; Kasia Bail, University of Canberra

ABSTRACT

Introduction: During first time transition from hospital to Residential Aged Care (RAC), 50% of people received at least one wrong medication. Medication charts are historically transcribed by junior medical officers onto handwritten charts without pharmacist reconciliation. These charts are sent to RAC providers up to two weeks before discharge, increasing the risk of chart errors.

Aims/Question: To examine whether a digitally derived documentation package reduces the incidence of medication errors during transitions from hospital to RAC

Methods: A retrospective comparison was conducted comparing error rates, including 20 pre and 20 post intervention medication charts across two wards at The Canberra Hospital, which were reviewed for errors, comparing the chart to the discharge summaries. Errors were categorised as medication errors or administration errors for analysis.

Results: Errors were present on 95% of charts with 131 errors pre-intervention, and 50% of charts with 17 errors post-intervention. Error frequency improved following the intervention, decreasing from 95% pre-intervention to 50% post-intervention (p=0.003). Pre-intervention administration errors included 14 missing identifiers, two allergy omissions, and three missing MO signatures. None were identified post-intervention. 83 medication errors were identified pre-intervention, comprising 67 chart discrepancies and 16 dose errors. 17 medication errors were identified post-intervention, 11 medication omissions, 5 incorrect timings and 1 dose error.

Conclusion: Introducing the pharmacist-reconciled digital medication discharge chart improved medication chart accuracy for people transitioning to RAC. This demonstrates enhanced discharge processes.

Impact: The medication chart intervention demonstrated increased medication safety during first-time transitions to RAC, clearly reducing error rates and streamlining the discharge process.

TITLE: Healthy Ageing in the ACT

AUTHORS: Ayesha Alhassan, Health and Community Services Directorate; Glenn Draper, Health and Community Services Directorate

ABSTRACT

Introduction: Population ageing is reshaping health needs, service demand and prevention priorities in Australia, with these trends particularly pronounced in the Australian Capital Territory (ACT). Understanding how demographic change, behavioural and physiological risk factors, and the social and environmental determinants of health interact across the life course is essential to informing effective primary prevention and health promotion. This presentation reports key findings from the Healthy Ageing in the ACT report and associated scoping and system mapping work.

Aim/Question: To examine population level demographic, behavioural and health system indicators to inform primary prevention and health promotion policy and programs targeting adults aged 35 years and over in the ACT

Methods: Data were drawn from administrative and publicly available sources, including the ACT Admitted Patient Collection and national datasets from the Australian Bureau of Statistics and the Australian Institute of Health and Welfare. Quantitative analyses were complemented by a structured scoping process, including mapping and gapping of existing policies, programs and system levers.

Results, Conclusion & Impact: The ACT is experiencing rapid population ageing, with residents aged 65 years and over representing the fastest growing age group, increasing by an average of 5.1% per year between 1971 and 2023. This demographic shift has significant implications for health service demand, workforce capacity and long term system sustainability. A prevention focused, systems based approach to healthy ageing is critical to supporting wellbeing and moderating future demand on the health system. The findings provide an evidence base to guide strategic planning and targeted prevention initiatives in the ACT.

TITLE: An Embedded Allied Health Model of Care in Residential Aged Care Improves Quality of Life and Reduces Depression

AUTHORS: Stephen Isbel, University of Canberra; Alice Pashley, University of Canberra; Nathan D'Cunha; Lara Wiseman; Paresh Dawda; Ananthan Ambikairajah; Claire Pearce; Diane Gibson; Camellia Aksharan; Jennifer Hewitt; Jane Kellett; Kasia Bail

ABSTRACT

Background: The Royal Commission into Aged Care Quality and Safety identified major gaps in allied health service provision in residential aged care. The Enhancing Allied Health for Older People in Residential Care (EAHOP) trial was designed to address some of these shortcomings.

Aim: To evaluate the effectiveness of the EAHOP model on falls, frailty, physical function, and quality of life among residents of a residential aged care home.

Methods: The EAHOP trial was a pragmatic, non randomised pre–post clinical study conducted in a Canberra nursing home. Participants received up to 36 weeks of interdisciplinary allied health intervention delivered by six allied health disciplines, delivered through a transdisciplinary model. Primary outcomes were falls, quality of life (QOL) (QOL ACC), frailty (Frail NH), and physical performance (SPPB), assessed across seven time points. A general linear mixed model was used.

Results: Thirty five residents enrolled in the trial (mean 86; 51% female; 43% with dementia).

Medium-to-large effect sizes were seen with QOL at Week 24 (β = 3.11, P = 0.007, d=0.60) and a medium effect on depressive symptoms at Week 36 (β = −3.27, P = 0.008, d=0.51). Falls increased during the intervention period (RR 1.61, 95% CI:1.19 – 2.17) but reduced in the follow up period (RR 0.74 95% CI:0.52 -1.06).

Conclusion/Impact: The EAHOP intervention improved quality of life and decreased depression but did not affect frailty and physical functioning. Falls increased during the intervention period and more work is required to understand this further. EAHOP demonstrated a transdisciplinary allied health service is useful in residential aged care.

TITLE: Time-to-care Disparities Between Adult and Geriatric Major Trauma Patients: An 11-Year Retrospective Analysis

AUTHORS: Rebecca Brown, Canberra Health Services; Joe Lynch, Australian National University; Tom Harrysson, Australian National University

ABSTRACT

Introduction: Trauma represents one of the leading causes of morbidity and mortality in Australia. Older adults represent approx. 30% of major trauma yet experience over 50% of total mortality compared to younger adults. Timely access to assessment and definitive care are crucial in the management of all severe injury, yet age-related disparities in time to care remain understudied.

Aims: This study assessed the differences in care times (CT, ED length of stay [LOS] and hospital LOS) between adult and geriatric trauma patients as well as examination of associated/contributing factors.

Methods: Retrospective analysis of the ACT Trauma Registry (2014–2024); with Injury Severity Score (ISS) >12 grouped by Adult (18-64yrs) and Geriatric (>=65yrs). Demographics, injury severity (ISS), triage category, LOS, and time to CT were analysed. Differences between groups were assessed using linear models controlling for score ISS and triage category.

Results: 3,182 patients were eligible (Geriatric=954; Adult=2228). The Geriatric group had significantly longer time to CT (122vs100 minutes ±86SD), ED LOS (7.2 vs 6 hours ±3.9SD) and hospital LOS (15.7 vs 14.5 days ±22.4SD). However, ISS was the same (20.3 vs 20.2)

Conclusions: Older trauma patients experienced consistently longer wait times to access early diagnostics and spent longer in ED than younger patients. This is despite similar injury severity and even when groups were analysed by the same triage category.

Impact: This study identified statistically and clinically significant disparities in time to early trauma care between adult and geriatric trauma patients. This highlights a critical need to investigate underlying system factors and identify opportunities to improve timely care for older adults.

TITLE: Barriers to Safe Transitions of Care Between Hospital and Residential Aged Care

AUTHORS: Kate Gorell, Canberra Health Services; Justin Somers, Canberra Health Services; Sony Palikhe, Canberra Health Services; Clare Stephenson, Canberra Health Services; Carol Chan, Canberra Health Services; Chrysta Bridge, Health and Community Services; Fariza Binti Nordin, Canberra Health Services; Ash Smyth, University of Western Australia; Kasia Bail, University of Canberra

ABSTRACT

Introduction: High-quality care transitions for older adults are paramount for safe and effective continuity of care. Transitions to residential aged care (RAC) are high-risk, with 50% of medication errors occurring during transitions. Previous work has demonstrated improved RAC staff satisfaction following implementation of the digital documentation package; however, the experience of CHS staff and processes has not been explored.

Aims/Question: to explore barriers experienced by hospital staff in preparing discharge paperwork for residents transitioning to RAC.

Methods: Post-discharge surveys across pilot wards were completed with CHS staff, evaluating the barriers and enablers to large-scale implementation of an improved RAC medication information sharing process. Descriptive analysis was used to identify themes.

Results: Overall, 67% of residents transitioning to RAC were provided with dose administration aid (DAA) medications, compared with 84% of first-time admissions. Barriers to DAA information sharing included unplanned discharges, particularly for returning residents, late notification of bed offers, and delayed medication planning processes. Accuracy of the nursing transfer summary relies heavily on flowsheet completion, which is infrequently cross-checked at discharge and often lacks essential transfer information.

Conclusion: Further optimisation of the Digital Health Record is required to better support transitions of care. Clearer standardised processes are needed to improve medication information exchange and documentation accuracy for older adults transitioning between health systems.

Impact: Findings identify system-level barriers and provide practical direction to strengthen digital workflows, discharge planning, and medication safety during transitions to RAC.

TITLE: Process Evaluation of the SPICE Program - A Multicomponent Rehabilitation Service for People with Dementia and their Care Partners in the ACT

AUTHORS: Georgina Chelberg, University of Canberra; Ash Smyth, University of Western Australia; Veronica Vandermaide, Canberra Health Services; Lara Wiseman, University of Canberra; Stephen Isbel, University of Canberra; Kasia Bail, University of Canberra; Angela Chau, University of Canberra; Stephanie Mulhall, University of Canberra; Rachel Mitterfellner, Canberra Health Services; Michelle Bennett, Canberra Health Services; Diane Gibson, University of Canberra; Nathan D'Cunha, University of Canberra

ABSTRACT

Introduction: Early, strengths-based interventions can improve quality of life for people with dementia and care partners. The 12-week Sustainable Personalised Interventions for Cognition, Care, and Engagement (SPICE) program is a group-based rehabilitation intervention delivered by Canberra Health Services, in collaboration with University of Canberra. Participants engage in twice-weekly sessions of exercise, Cognitive Stimulation Therapy, care partner support, along with individualised nutrition advice and occupational therapy home visits.

Aim: This process evaluation explores SPICE program implementation, context and mechanisms of impact for the first 30-months of service delivery (2022–2025) following Medical Research Council guidance.

Methods: Fourteen SPICE groups involved up to seven people with dementia (78.2±6.5yrs; 44% female) and seven care partners (71.6±10.8yrs; 68% female). The mixed-methods evaluation examined reach, attendance, and dose using population and service data. Participant acceptability (n=182) and multidisciplinary staff reflections on implementation (n=18) were collated from interviews and surveys.

Results: Participant attendance was high (90%) for people with dementia and care partners, and mean program dose was 67hrs/person. Participants valued the meaningful activities, support, and social connections. University and health services staff reported recruitment and intervention fidelity, with validity in their roles. Perceived impact mechanisms included program and staff excellence, plus the development of therapeutic relationships between participants and with staff. Implementation challenges were proportionate to a complex intervention including resourcing, scheduling complexity, and communication.

Conclusion and Impact: SPICE was highly regarded, feasible and meaningful for people with dementia and care partners, with high protocol fidelity, yet adaptable to individual needs. Ongoing research seeks to refine optimal SPICE delivery models and enhance accessibility to dementia rehabilitation.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 16:05 – 17:25

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING MAIN CONFERENCE ROOM SESSION 1

TITLE: Waluwin Ngurambang, Waluwin Bagir-ngun, Waluwin Mayiny: Wiradyuri Women Restoring Country, Restoring Health

AUTHORS: Aunty Maria Williams, Australian Catholic University; Professor Sue Green, Australian Catholic University; Jade Ryall, Australian Catholic University; A/Prof Jessica Russ-Smith, Australian Catholic University

ABSTRACT

Introduction: Country is health infrastructure. International evidence links harm to Country directly to health disease in First Nations communities, yet dominant frameworks treat environment and health as separate concerns, continuing pan-Indigenous models that focus on disease categories rather than Nations and women. In Australia, this evidence gap is acute, no Nation-specific research examines how environmental degradation on Country shapes women's intergenerational health. Existing health frameworks are failing First Nations, and in conjunction with harm to Country, Wiradyuri communities are experiencing alarming health issues. Wiradyuri cultural law holds that women are custodians of Country, and when Country is sick, people are sick.

Aims: To examine how cultural connection and on-Country practice influence Wiradyuri women's social, emotional, and physical wellbeing across generations, with particular attention to the reciprocal relationship between women's health and the health of Country.

Methods: A Wiradyuri Nation Building and Data Sovereignty methodology guides this three-year study. Multi-generational Wiradyuri women participate in on-Country camps facilitated by Wiradyuri Elders. Data are collected through culturally-grounded surveys, semi-structured interviews, and wayamiilbuwawanha (deep reflective practice).

Results: Preliminary findings from three on-Country camps illuminate wirimbirra ngurambang-gu, caring for Country, as central to Wiradyuri women's wellbeing. Early data show consistent community concerns about biodiversity loss, chemical exposure, and water stress as embodied health threats experienced across generations.

Conclusions: Wiradyuri women's wellbeing is inseparable from the wellbeing of Country. Planetary health cannot be achieved without restoring matriarchal cultural roles.

Impact: This research offers a sovereign, community-led model with direct application to ACT and national policies addressing First Nations and environmental health now and for future generations.

TITLE: The Association Between the American Heart Association Life's Essential 8 and Depression Trajectories among Postmenopausal Women: Findings from National Health and Nutrition Examination Survey 2011–2020

AUTHORS: Harshini Meegaswatte, University of Canberra; Siraphat Taesuwan, Chiang Mai University; Andrew McKune, University of Canberra; Demosthenes Panagiotakos, Harokopio University; Martin Veysey, Australian National University; Nenad Naumovski, Singapore Institute of Technology

ABSTRACT

Background: Depression is a psychological condition affecting mood and behaviour, with women experiencing 50% greater burden than men. Postmenopausal women are at increased risk of developing cardiovascular disease, depression and other mental health issues. Life's Essential 8 (LE8) is a relatively new health assessment index comprising eight health behaviours and factors.

Aim: To investigate the association between Life's Essential 8 and prevalence of depression among postmenopausal women.

Methods: National Health and Nutrition Examination Survey data from 2011-2020 were extracted. Life's Essential 8 score, the average of eight components categorised into low (0-49), moderate (50-79), or high (80-100) cardiovascular health status. Depression severity was assessed using the Patient Health Questionnaire-9. Complex survey-adjusted regression models were used.

Results: 5472 postmenopausal women were included (mean-age: 63.0 years), 654 (12%) met the criteria for depression. The Life's Essential 8 scores for those living with and without depression were (mean ± SD) 53.2 ± 14.6 and 64.9 ± 14.7 ($p < 0.001$). Higher Life's Essential 8 scores were associated with lower odds of depression (0.65, 95% CI: 0.60–0.72, $p < 0.001$). Dietary quality was inversely associated with odds of depression ($p = 0.02$) where women in the 50th–74th percentile and ≥95th percentile had 49% (OR: 0.51, 95% CI: 0.29–0.91) and 77% (OR: 0.23, 95% CI: 0.08–0.67) lower odds of depression.

Conclusion: The inverse relationship between Life's Essential 8 scores and depression further confirms the link between the cardiovascular disease management and potential use to mitigate depression in postmenopausal women.

TITLE: Assessing Infant Feeding Practices: An Interactive Map of Infant Formula Use among Newborns in Hospitals in New South Wales, Australia

AUTHORS: Joseph Anumba, University of Canberra; Andini Pramono, Australian National University; Susan Tawia, University of Canberra; Julie Smith, University of Canberra; Nasser Bagheri, University of Canberra

ABSTRACT

Introduction: Despite national efforts to promote exclusive breastfeeding, infant formula use remains common in Australian hospitals, with one third of healthy term breastfed infants receiving formula. The Baby Friendly Hospital Initiative (BFHI) is a framework to support breastfeeding, yet accreditation in New South Wales (NSW) remains limited. Little is known about how BFHI status, hospital sector, or geographic location influence feeding practices at discharge.

Aim: This study assessed infant formula use at discharge across NSW, comparing BFHI accredited and non accredited hospitals, public versus private sectors, and metropolitan, regional, and rural settings.

Methods: We conducted a cross sectional geospatial analysis using 2022 NSW Perinatal Data Collection records. Hospitals with more than 200 births were included (n=138). Formula use was mapped in ArcGIS Pro and displayed through an interactive dashboard. Descriptive statistics summarised formula use across hospital categories, enabling comparison by BFHI status, sector, and geography.

Findings: Among 46 hospitals with complete data, BFHI accredited facilities reported lower mean formula use (23%) than non accredited hospitals (30%), though this difference was not statistically significant. All private hospitals were non BFHI, yet formula use rates (≈31%) closely resembled those in public hospitals. Geospatial mapping showed BFHI hospitals concentrated in Greater Sydney, with minimal availability in regional and rural NSW.

Conclusion: Lower formula use in BFHI hospitals aligns with global evidence supporting BFHI implementation; however, sectoral and geographic disparities indicate broader structural and demographic influences on feeding outcomes.

Impact: These findings highlight the need to expand BFHI coverage—particularly in regional and private hospitals—to strengthen breastfeeding support and reduce unnecessary formula use across NSW.

TITLE: What are the Experiences of Women Living with an Eating Disorder During Pregnancy? A Qualitative Systematic Review

AUTHORS: Annie Moffitt, University of Canberra

ABSTRACT

Introduction: Eating disorders (EDs) are serious mental health conditions characterised by unhealthy eating behaviours in addition to an abnormal self-preoccupation with body image and/or weight. Pregnancy is a time of enormous transformation where women's eating behaviours and changing body shape are highly scrutinised by others. The impact this has on the experiences of pregnant women living with an ED has been little investigated.

Aims/Question: To explore the experiences of women living with an ED during pregnancy through the lens of qualitative evidence.

Methods: Several databases were systematically searched for English-language peer-reviewed studies from 2000 to 2025. Studies that were not qualitative or mixed methods in design or did not focus on women's experiences of EDs during pregnancy were excluded.

Results: Nine qualitative studies were included in this review. Following data analysis, 5 overarching themes were identified: 1) Self and motherhood; 2) Shame and Stigma; 3) Isolation and Fear; 4) Anger and Disgust; 5) Conflict and Control.

Conclusion: Pregnancy for women living with an ED is a uniquely complex experience that reshapes identity, magnifies emotional vulnerability, and tests personal agency. The interplay of shame, fear, and control delineates a psychological landscape where recovery and relapse coexist. Understanding these interwoven themes is vital for antenatal healthcare providers to ensure that best practice support and treatment modalities are available for at-risk women.

Impact: Our findings could be used to support development of up-to-date, patient-centred care pathways for women living with an ED during pregnancy.

TITLE: The CARE-Peanut Study: Knowledge, Attitude and Practice among New Parents Regarding Prevention of Peanut Allergy

AUTHORS: Emily Bek, Canberra Health Services; Deepti Raina, Canberra Health Services; Blessy Charles, Canberra Health Services

ABSTRACT

Introduction (Background and Significance): Peanut allergy (PA) affects approximately 3% of Australian children. Following the landmark Learning Early About Peanut Allergy (LEAP) trial, which demonstrated that early peanut introduction reduces PA risk by 75%, Australasian Society of Clinical Immunology and Allergy (ASCIA) guidelines recommend early peanut introduction for all infants. Despite this, translation into routine practice remains inconsistent and under-researched, and there are no robust local data regarding early peanut introduction and peanut allergy within the ACT region.

Aims/Question: The CARE-Peanut (Canberra Allergy Reduction and Education for Peanuts) study aims to identify local knowledge, attitude and practice (KAP) gaps contributing to non-compliance with early introduction guidelines, implement a brief targeted educational intervention, and evaluate its potential to reduce PA incidence. Local data are essential to optimise paediatric allergy services in Canberra.

Methods: Eligible parents of infants born at Canberra Health Services between November 2025 and January 2026 were contacted by telephone to complete a KAP survey, followed by delivery of a brief educational intervention.

Results: Preliminary analysis indicates that approximately half of surveyed parents were aware that early peanut introduction is safe and protective. Misconceptions were more common among parents born overseas who had lived in Australia for fewer than 10 years.

Conclusion: Culturally and linguistically diverse families may be at increased risk of non-compliance with ASCIA guidelines.

Impact: CARE-Peanut findings will inform targeted, culturally responsive educational strategies to improve early peanut introduction practices. A follow up study when infants are 12 months old will evaluate whether this brief education modifies feeding behaviours and reduces PA incidence in Canberra.

TITLE: Respiratory Syncytial Virus in Infancy: A Disease of the Un-Immunised?

AUTHORS: Nicola Irwin, Canberra Health Services; Chelsey Helliwell, Canberra Health Services; Deepti Raina, Canberra Health Services; Susan Hartono, Canberra Health Services; Florian Vogt, UNSW; James Wood, UNSW

ABSTRACT

Introduction: Respiratory Syncytial Virus (RSV) is a leading cause of acute respiratory illness in infants. A long-acting monoclonal antibody (nirsevimab), was introduced for vulnerable infants in 2024, followed by a combined maternal and infant immunisation program in 2025.

Aim: To assess the impact of RSV immunisation on disease burden and hospital costs.

Methods: Our observational cohort study included all ACT-resident infants aged <2 years with laboratory-confirmed RSV and/or receipt of nirsevimab during the 2022-2025 winter seasons. Outcomes included emergency department (ED) presentations, hospitalisations, clinical severity indicators, and hospital costs.

Results: Across the study period, 2,792 RSV cases were identified, including 1,890 ED presentations and 803 hospitalisations. Among 805 infants receiving nirsevimab, breakthrough RSV infection occurred in 1.6%. In 2025, RSV related ED presentations decreased from 44.41 to 39.84 per 1,000 infant years, and hospitalisations from 18.25 to 16.81. The effect was greatest in infants entering their first season, with relative reductions of 46.4% in ED presentations and 61.8% in hospitalisations. Hospitalised infants demonstrated reduced length of stay (–16.8 hours; $p<0.001$) and respiratory support use (–33.3%; $p<0.001$), with more pronounced effects in younger infants (length of stay -22.1 hours, $p<0.001$; respiratory support -42.3%, $p<0.001$).

Hospital costs decreased by 16.7% for ED bronchiolitis presentations and 43.7% for RSV-coded hospitalisations. In younger infants, costs decreased by 30.0% and 50.6%, respectively.

Conclusions and Impact: RSV disease burden and hospital costs substantially decreased following the introduction of the combined maternal and infant RSV immunisation program. These findings provide granular, relevant evidence to inform local policy and service planning, and support national immunisation policy decisions.

TITLE: Evaluating an Interdisciplinary Treatment Pathway for Endometriosis and Pelvic Pain: Insights from the CaPPPE Project

AUTHORS: Taylor Wallace, Canberra Health Services; Ella Cameron, Canberra Health Services; Melissa Parker, Canberra Health Services

ABSTRACT

Introduction: Pelvic pain and endometriosis services are experiencing increasing demand and prolonged waits due to reliance on specialist appointments and recent staffing and COVID-related pressures. To overcome these system barriers, we developed an interdisciplinary pathway that shifts care from a narrow diagnosis focused model toward holistic triage, group-based education, and more efficient allocation of allied-health and medical resources.

Aims: To evaluate the impact of an interdisciplinary, early-education pathway on accessibility, appropriateness of care, and system efficiency.

Methods: A retrospective audit was undertaken of all patients referred with pelvic pain or suspected endometriosis between 2022-2025. Innovations included: (1) 4-hour group education workshops delivered by nursing, physiotherapy, psychology and dietician; (2) screening questionnaires guiding personalised referral pathways; and (3) IDT (nurse & physio) clinics providing coordinated follow up. Data collected included workshop attendance, screening outcomes, allied health engagement, medical referrals, and wait time data. Pre–post surveys measured changes in knowledge and self-management capacity.

Results: Among 166 workshop participants, screening triaged patients to tailored pathways: 43% to the IDT clinic, 27% to physiotherapy, 12% to nurse consults 2% to medical review and16% to phone follow up. Following this, 56% of patients were referred for ongoing physiotherapy, highlighting this central role in pelvic pain management. Wait times decreased by 77%. Screening improved triage accuracy and reduction in medical appointments. Knowledge and self-management scores increased.

Conclusions: Interdisciplinary, education first care substantially reduces bottlenecks, supports early intervention, and enhances patient capability.

Impact: This model demonstrates a service innovation framework that improves flow, reducing reliance on medical specialists, and strengthens holistic pelvic pain care within public health.

TITLE: The Healthy Immigrant Effect in Women Accessing a Co-Designed Physical Activity Program in the ACT: A Cross-Sectional Study

AUTHORS: Suya Xie, Australian National University; Mary Bushell, University of Canberra; Angela Douglas, University of Canberra; Mary-Ellen Hooper, University of Canberra; Alison Shield, University of Canberra; Kathryn Speer, University of Canberra; Zakia Patel, Multicultural Hub Canberra & Regional NSW; Ivapene Seiuli, Health Care Consumers' Association; Deborah Davis, University of Canberra

ABSTRACT

Introduction (Background and Significance): Women from culturally and linguistically diverse (CALD) backgrounds face multifaceted barriers to physical activity and can experience complex health risks.

Aims/Question: To investigate the health profiles of those seeking community-based physical health support in the ACT, an area where little is currently known.

Methods: This cross-sectional study examined baseline health screening data from 450 women registering for Active Beginnings, a co-designed physical activity programme in the Australian Capital Territory. Binary logistic regression examined associations between migration-related factors (country of birth income level, length of residence) and health risk status assessed via the Adult Pre-Exercise Screening System, adjusting for age.

Results: The cohort was diverse (69.6% born overseas), with self-identified health risks predominantly symptom-based (dizziness, chest pain) rather than diagnosed disease. Recent arrivals (<1 year) had 82% lower odds of elevated health risk compared with long-term residents and Australian-born participants (aOR = 0.177, 95% CI: 0.040–0.786, p = .023). Women from low and lower-middle income countries showed a non-significant trend toward elevated odds of health risk (aOR = 1.763, 95% CI: 0.979–3.173, p = .059).

Conclusion: The Healthy Immigrant Effect was evident among recent arrivals, with this health advantage diminishing within the first few years after settlement.

Impact: The early post-migration period represents a critical intervention window. Health promotion programmes targeting physical activity should prioritise early engagement with newly arrived women from CALD backgrounds and provide sustained support for longer-term residents experiencing acculturation-related health decline.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 16:25 – 17:45

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING SEMINAR ROOM 1, SESSION 2

TITLE: Falling Behind: Tackling Long COVID Balance Deficits at Home

AUTHORS: Michaela McGrath, University of Canberra; Angie Fearon, University of Canberra; Gordon Waddington, University of Canberra; Bernie Bissett, University of Canberra

ABSTRACT

Introduction: Balance impairment is increasingly recognised in long COVID (LC), and likely reflects disruption in the integration of visual, vestibular, and somatosensory (VVS) inputs and motor outputs. These deficits may limit activity and increase an individual's risk of fall. Interactive balance-board technologies may offer an accessible home-based rehabilitation option.

Aims/Question: To explore preliminary effects of a home-based interactive balance-board motor imagery visual, vestibular, and somatosensory (MIVVS) training program on VVS function in individuals with LC.

Methods: 30 adults with LC were randomised to a 6-week MIVVS intervention (n=15) or a usual-activity control group (n=15). Intervention included balance, target-acquisition, motor imagery, and visual-conflict tasks performed on an instrumented balance board three times weekly. VVS function was assessed pre- and post-intervention via visual-vestibular testing: smooth pursuit and voluntary saccades; and somatosensory testing using the Active Movement Extent Discrimination Assessment (AMEDA) protocol. Time×group interactions were analysed using linear mixed models (significance=0.10).

Results: 24 participants completed the study (n=12 per group). A significant time×group interaction was observed for AMEDA performance, with the intervention group demonstrating greater improvement than controls (estimate = 7.71, $p<0.001$). No significant interactions were identified for smooth pursuit or voluntary saccades (all $p>0.10$).

Conclusion: Interactive balance board rehabilitation may be a feasible option to improve somatosensory deficits in individuals with LC. Enhancement of somatosensory function is clinically relevant given its association with falls risk. Further research is needed to determine potential benefits for visual–vestibular function.

Impact: This home based technology shows potential to enhance ACT LC rehabilitation pathways by improving access to somatosensory training and supporting targeted intervention for VVS-related disability.

TITLE: Why Not Adopt 90-Watt QMODE+ Ablation for All Point-by-Point AF Ablations? Experience from Canberra Hospital

AUTHORS: Tom Harrysson, Australian National University; Dibbendhu Khanra, Canberra Health Services; Stella Zografos, Canberra Health Services; Kasey Banbury, Canberra Health Services; Avitasha Darshni, Canberra Health Services; Jagan Srinivasan, Canberra Health Services; Anupam Rao, Canberra Health Services

ABSTRACT

Aim: The aim of this study was to compare safety and efficacy of 90W ablation all around to 90W ablation in the posterior wall / 50W ablation in the anterior wall.

Method: All first-time AF ablations were included (2024/2025); redo and cryo AF ablations were excluded. All cases were performed under general anaesthesia utilising high-frequency, low-tidal-volume ventilation. Pulmonary vein isolations were performed with QDOT catheters using either 90W or 90W/50W at the operators' discretion.

Results: 66 patients were included (90W: 31; 90/50W: 35). Overall, 78% of patients had persistent AF, 60% had previous cardioversions, median LAVI was 41 ml/m2. 2/3rds of cases utilised single trans-septal access and 1/3rd utilised temperature monitoring. Total ablation counts were comparable between the groups (90W:83±14 vs. 50W:79±24, p=0.51) including additional carinal touch-up lesions (71% vs 67%, p=0.71). However, the 90W group demonstrated significantly shorter ablation times (6 ± 1 mins) compared to the 90W/50W group (12±4 mins) (p vs. 90W/50W: 135±33 mins) (p group; however, two patients in the 90W group and one in the 90/50W group developed pericarditis. 1 patient each in 90W and 90/50W had recurrence of atrial arrhythmia in the blanking period. With median follow-up of 6 months, only 1 patient required repeat ablation from the 90W/50W group.

Conclusion: Although limited sample size, short follow-up, and high proportion of persistent AF and dilated left atria, 90W only AF ablations have performed as good as 90/50W ablation with shorter ablation and procedure times.

TITLE: Setting the Standard: A Group Based Goal-Setting Model for Bariatric Care

AUTHORS: Emma Prior, Canberra Health Services

ABSTRACT

Introduction: The CHS Department of Bariatric Medicine (DBM) historically relied on individual case management, but increasing demand and limited staffing reduced the effectiveness of one-to-one contacts. DBM therefore introduced a Goal Setting Group to replace individual case management, offering standardised orientation, structured goal planning, behaviour change support, and foundational lifestyle education (with option for further allied health support).

Aims: To evaluate patient perspectives on the acceptability, usefulness, and early impact of the Goal Setting Group as a replacement for individual case management.

Methods: Fourteen sessions were delivered between August 2025-February 2026. Patient reported experience measures (PREMs) were collected using de identified structured feedback forms. Quantitative data were summarised descriptively, and qualitative comments were thematically analysed.

Results: 89 patients responded (88% response rate). Overall satisfaction was high (91% reported being satisfied or very satisfied). Participants reported improved ability to plan health goals (90% agree/strongly agree) and clearer understanding of DBM processes (82% agree/strongly agree). SMART goal setting, peer discussion, and facilitator support were most valued. Suggestions included longer sessions, scheduling flexibility, and hybrid delivery. Downstream engagement was strong :83% for Exercise Physiology, 78% for Dietetics, and 65% for the Healthy Living Support Group, noting that patients could enrol in multiple services.

Conclusions: Replacing individual case management with a structured Goal Setting Group is feasible, well received, and enhances readiness for behaviour change.

Impact: This model improves service efficiency, standardises patient education, and supports autonomous goal setting, contributing to health services research and quality improvement priorities.

TITLE: Younger Cardiac Arrest Patients had More Shockable Rhythms and Shorter Downtime – Experience from the Canberra Hospital

AUTHORS: Luke Pole, Canberra Health Services; R Sukumar, Canberra Health Services; S Menon, Canberra Health Services; S Joseph, Canberra Health Services; D Khanra, Canberra Health Services

ABSTRACT

Aim: Ischemic aetiology represents most cardiac arrests in older people whereas non-ischaemic causes are more common in the younger age-group. This retrospective study explores the differences between younger and older group of patients presenting with out of hospital cardiac arrests (OOHCA) in the Canberra Hospital.

Methods: Digital hospital records were searched for OOHCA between 2023 and 2025. In hospital arrests and non-cardiac aetiologies were excluded. Included presentations were stratified and hospital outcomes were measured.

Results: 330 patients were screened and 100 were included (Younger 33, older 67). Median age of presentations were 37 years and 54 years respectively in the younger and older age-groups with significantly more younger patients (42% vs 18%, P=0.01) from New South Wales. Shockable rhythms were observed significantly more in the younger age group (82% vs 64%, P =0.07) and the downtime to ROSC was significantly shorter (median 9 mins vs 20 mins, P = 0.02) compared with the older age-group. However, mortality was statistically comparable across the groups (33% vs 51%, P=0.10). Genetic tests and intra-cardiac defibrillators (54%) were more utilized in the younger age-group whereas stress tests and stents (62%) were more utilized in the older age-group. 5 patients in the younger age group had QT prolongation on baseline ECG and received non-transvenous ICDs.

Conclusion: Mortality remains high in OOHCA patients across the age-groups. Stents and ICDs are lifesaving for older and younger OOHCA patients respectively. Cardiac MRI and genetic tests can yield definitive diagnosis for the younger non-ischaemic OOHCA patients.

TITLE: Translating Coffee-Bamboo Textile Evidence for Dermatological Skin Protection

AUTHORS: Marwa Metwalli, Australia Catholic University

ABSTRACT

Introduction (Background and Significance): Atopic dermatitis, eczema, herpes zoster, and diabetic lower limb infections impose growing burden on ACT patients and health services. No textile integrates antimicrobial, ultraviolet (UV)-protective, and anti-inflammatory properties in a single evidence-based platform.

Aims/Question: This review synthesised evidence for bamboo lyocell and coffee-infused fabrics as a smart medical textile platform to define specifications for a future ACT-based clinical trial.

Methods: A scoping review across PubMed, Scopus, ScienceDirect, and Web of Science synthesised evidence across five domains — antimicrobial efficacy, UV protection, wound healing, odour control, and moisture management — using terms spanning bio-functional textiles, coffee bioactives, bamboo lyocell, and diabetic foot infection.

Results: Five synergistic bio-functional properties were identified. Coffee-infused fibres — delivering chlorogenic acid, caffeic acid, and caffeine through microencapsulation — showed antibacterial activity against Staphylococcus aureus, methicillin-resistant S. aureus (MRSA), and Escherichia coli; biofilm inhibition of 17–76% was recorded against diabetic foot ulcer isolates. UV protection exceeded 98% (Protection Factor 50+). Wound closure exceeded 98% at 72 hours. Bamboo lyocell delivered superior moisture vapour transmission, thermal regulation, and a hypoallergenic surface for compromised skin barriers. A 2023 systematic review of 23 studies identified zero plant-derived smart bio-functional garments in clinical use.

Conclusion: This synthesis translates laboratory evidence into a bio-functional textile framework, providing randomised controlled trial specifications and a non-pharmacological option for ACT clinicians managing infection, UV damage, and skin barrier dysfunction.

Impact: Translation could reduce antibiotic prescribing and wound care hospitalisations for ACT patients with chronic dermatological conditions, directly benefiting dermatologists, wound care nurses, and general practitioners in the ACT learning health system.

TITLE: A Pilot Study Scoping Training Needs for Health Professionals to Support Body Image in Chronic Illness

AUTHORS: Kristen Murray, Australian National University; Jessica Hewitt, Australian National University; Elizabeth Rieger, Australian National University; Anna Olsen, Australian National University; Rachel Bacon, Central Queensland University

ABSTRACT

Background: Chronic illness accounts for a substantial disease burden, and negatively impacts quality of life and well-being. High rates of body image distress have been reported in people with a chronic illness, yet these are rarely addressed in healthcare even though patients report a desire to do so.

Aim: We aimed to address this gap through a pilot study scoping body image training needs across diverse types of health professionals.

Methods: A mixed method design was employed, with 49 health professionals (87.8% in Australia) completing an online survey assessing current practice, perspectives on roles, task confidence and relevance, barriers, and training preferences. The sample represented diverse practitioners (primarily dietitians [35%] and psychologists [27%]), work settings (primarily hospital-based [43%]), and patient populations.

Results: A strong interest in training was evident. Despite estimating 65% of patients had body image concerns, these were discussed with just 45%, with numerous client-, clinician-, and system-level barriers identified. Clinicians were confident in describing and responding to body image concerns. However, confidence gaps in assessment and treatment were reported. This discrepancy was particularly concerning for psychologists who rated assessment and treatment as highly relevant to their role, and who were overall considered best placed to manage body image concerns by the sample.

Conclusion: The study provides insight into key body image practice strengths and gaps that can be addressed through training sensitive to shared and distinct role scope.

Impact: The findings can be used to design training programs which increase body image knowledge, confidence and skills in diverse health professionals supporting health and well-being in chronic illness.

TITLE: Why Not Discharge all AF Ablation Patients on the Same Day? Experience from The Canberra Hospital

AUTHORS: Tom Harrysson, Australian National University; Dibbendhu Khanra, Canberra Health Services; Stella Zografos, Canberra Health Services; Kasey Banbury, Canberra Health Services; Avitasha Darshni, Canberra Health Services; Jagan Srinivasan, Canberra Health Services; Anupam Rao, Canberra Health Services

ABSTRACT

In Australia, radiofrequency atrial fibrillation (AF) ablation under general anesthesia (GA) is routinely followed by overnight hospital admission, increasing healthcare costs and bed utilisation. This retrospective study aims to evaluate the safety and cost-effectiveness of same-day discharge (SDD) for AF ablation patients at The Canberra Hospital.

All AF ablations were performed in 2025 under GA. ACT patients were discharged on the same day after 4 hours of monitoring in the day ward, and NSW patients were discharged to hospital accommodation (patient cost: $75). Appropriate patients were kept in the coronary care unit (CCU) overnight (hospital cost: $5,801.30) at the operators' discretion.

Between March and December 2025, 71 patients underwent pulmonary vein isolation (PVI) [>65 years: 32; NSW: 40; redo ablation: 7]. Z-stitches or Proglides were utilized in 62/71 (87%) of the cases for groin haemostasis. 34 (48%) patients had SDD, including 15 NSW patients who were discharged to hospital accommodation. Of the 37 (52%) non-SDD patients [NSW: 25], 5 cases were completed after 4 PM, 6 cases had a procedure time of over 3 hours, 4 cases required non-PVI ablations (2 posterior wall isolations, 2 SVC isolations), and 1 experienced pericarditis-related chest pain. No serious acute complications requiring interventions were noted, and during the 30-day follow-up, 2 additional patients developed pericarditis. With a median follow-up of 6 months, only 1 patient required repeat ablation.

Same-day discharge after AF ablation is safe and feasible in the majority of cases. Wider adoption of criteria-led discharge could substantially reduce bed utilisation and healthcare costs across public hospitals in Australia.

TITLE: Nutrient and Discretionary Food Intake in Vegan Adult Australians: A Cross-Sectional Study

AUTHORS: Linda Smillie, University of Canberra; Michelle MInehan, University of Canberra; Cathy Knight-Agarwal, University of Canberra

ABSTRACT

Introduction: Interest in plant-based diets, is increasing. Yet, there has been limited assessment of the dietary intake of contemporary vegans in Australia.

Aims: To assess the dietary and supplementary nutrient intake of a sample of Australian vegans via four-day, semi-weighed food record collected on two occasions and determine the contribution of discretionary foods to energy intake.

Methods: Sixty-six adult Australian vegans completed a four-day, semi-weighed food diary on two occasions. Intake from diet and supplements and diet alone was compared to the Australian Nutrient Reference Values (NRVs) for selected nutrients. Risk of micronutrient inadequacy was assessed using the cut-point method, with comparison to the Estimated Average Requirement (EAR) or Adequate Intake (AI). The contribution of Discretionary Food (DF) intake to total energy intake was examined.

Results: A total of 466 days of dietary data were analysed. Macronutrient distribution matched the Acceptable Macronutrient Distribution ranges (AMDR). Total protein intake aligned with measures of adequacy and guidelines for optimal protein intake. Nutrients most at risk in our sample were vitamin B12, calcium, iodine, selenium, zinc and long-chain omega-3 fatty acids. Supplementation did not fully resolve under-consumption. Discretionary Foods (DFs) contributed 24.2 +/- 11.8% to total energy intake.

Conclusion: Our data show that macronutrient intake for adult vegans was within acceptable ranges. However, even with the addition of dietary supplements, multiple micronutrients were under-consumed. Theoretically, a well-planned vegan diet can be nutritionally adequate, however support is needed to ensure adequate intake in practice.

Impact: This research can guide tailored nutrition support for vegans and ultimately improve long-term population health outcomes.

DATE: WEDNESDAY 17 JUNE 2026

TIME: 16:05 – 17:05

LOCATION: UNIVERSITY OF CANBERRA, ANN HARDING SEMINAR ROOM 2, SESSION 3

TITLE: Scaffolding Student Learning to Make Complexity in Gerontological Nursing Visible

AUTHORS: Jenny Weller-Newton, University of Canberra; Stephanie Munk, University of Canberra; Eliza Stewart, University of Canberra; Leesa Scott, University of Canberra; Ash Smyth, University of Western Australia; Seng Giap Marcus Ang, Edith Cowan University; Victoria Traynor, University of the Sunshine Coast; Kasia Bail, University of Canberra

ABSTRACT

Introduction: Australia's ageing population and the persistent shortage of registered nurses in aged care highlight the need for high quality placement experiences that make the depth and scope of gerontological nursing visible to nursing students. The Clinical Placements with Older People program supports students with gerontologically prepared Clinical Facilitators who guide learning in care settings where older people receive care. Clinical Facilitators (CFs) foreground leadership, coordination, clinical decision making and person centred care as core components of complex gerontological practice.

Aim: To describe the development and use of a co designed clinical scaffolding document that supports CFs to enhance student learning and recognise the complexity of gerontological nursing.

Methods: A collaborative co design process was undertaken, involving academics, CFs, consumers, care partners, student nurses and early career nurses. The living document was aligned with gerontological nursing competency domains, with care setting specific examples mapped to student year-level scope.

Results: Since 2023, the program has upskilled more than 169 Clinical Facilitators and supported nearly 2,000 placements. The scaffolding document offers practical examples across residential and acute care settings. CFs use it to draw attention to often overlooked areas of gerontological practice, including recognition and management of deterioration, leadership, interprofessional coordination, clinical reasoning and psychosocial care. Anecdotal feedback indicates greater clarity for facilitators, improved supervision by registered nurse buddies and deeper student appreciation of the complexity within gerontological nursing.

Conclusion: Scaffolding strengthens facilitation practices, enhancing the visibility of complex gerontological nursing.

Impact: By transforming student perceptions and supporting high quality learning, the scaffold contributes to a well prepared future gerontological nursing workforce.

TITLE: From Learners to Leaders: SRMOs Bridging the Transition with Simulation-Based Ward Call Training

AUTHORS: Darcy Row, Canberra Hospital; Joshua Thornton, Canberra Hospital; Brianna Flynn, Canberra Health Services; Candi Riedel, Canberra Health Services

ABSTRACT

Introduction: After hours, 5-7 Junior Medical Officers (JMOs) are the first responders to deteriorating ward patients and all Medical Emergency Team (MET) calls. After-hours ward cover can be one of the most challenging parts of a JMO's role—particularly when responding to deteriorating patients or medical emergencies.

Aims/Questions: Can a Senior Resident Medical Officer (SRMO) led simulation program help JMOs build their clinical skills and confidence for MET calls?

Methods: In late 2024, two CHS SRMOs piloted an SRMO-led simulation program for JMOs. This built on an existing CHS-run JMO simulation program, responding to feedback that JMOs wanted more practice with 'peri-MET' scenarios—such as acute hypoxia, hypotension, and reduced GCS.

The program focuses on clinical reasoning and non-technical skills, including teamwork, communication, structured assessment, temporising management, and escalation. Sessions run in a realistic ward-based environment with authentic equipment, gas supplies, and a mock Digital Health Record (DHR).

Each session includes pre-brief and debrief and is facilitated by an embedded nurse, patient actor, and scenario director.

Results: Over the first eight months, approximately thirty JMOs participated in the program. All strongly agreed it improved clinical skills and outcomes, and 100% would recommend it. Median confidence rose from "neutral/somewhat confident" to "somewhat/extremely confident."

Conclusion: Near peer simulation teaching models such as this one pioneered at Canberra Hospital can help JMOs develop skills and confidence for MET calls.

Impact: This success of this program paves the way for the development of additional simulation-based training and near to peer educational programs for JMOs across Canberra.

TITLE: Outcomes of a Novel Pharmacist Intervention in Residential Aged Care: A Mixed-Methods Study

AUTHORS: Rachel Hill, University of Canberra; Nathan D'Cunha, University of Canberra; Mark Naunton, University of Canberra; Claire Pearce, University of Canberra; Sam Kosari, University of Canberra; Helen Holloway, University of Canberra; Kasia Bail, University of Canberra; Diane Gibson, University of Canberra; Stephen Isbel, University of Canberra

ABSTRACT

Background: Pharmacist involvement in residential aged care is linked to improved quality use of medicines, fewer medication related adverse events, and more appropriate prescribing. Pharmacists enhance nursing staff knowledge and support more accurate care planning. Within this context, the Enhancing Allied Health for Older People in Residential Care (EAHOP) trial was implemented in a Canberra residential aged care home, integrating six allied health disciplines providing coordinated, discipline specific interventions within a single service.

Aim: To describe the pharmacy intervention and outcomes within the EAHOP trial.

Method: The trial used a pragmatic, non randomised pre–post design in one residential aged care home over 36 weeks. Participants received interdisciplinary care from up to six allied health professionals alongside nursing and general practitioner involvement. The pharmacist provided medication reviews and advice to the GP and team about medications. A mixed methods approach was used to evaluate workforce outcomes, clinical outcomes, and stakeholder perceptions.

Results: The pharmacist's role combined increased clinical input with strengthened communication across the team. They made 124 recommendations for 34 residents, an average of 3.65 per- resident, exceeding typical review rates. Participation in GP case conferences led to 70% of recommendations being accepted, with 9% declined, and 21% not discussed. The embedded role allowed for direct and indirect care time and enhanced communication with the allied health team, care staff, residents, and families. These contributions enabled coordinated decision-making and improved quality of care.

Conclusion/Impact: The EAHOP model shows potential to complement existing pharmacy services in residential aged care by supporting multidisciplinary collaboration among GPs, nurses, pharmacists, and allied health professionals.

TITLE: Within the Classroom and Beyond, Enhancing the Capabilities of Educators

AUTHORS: Jenny Weller-Newton, University of Canberra; Alice Kim, University of Canberra; Emily Wallis, University of Canberra; Karen O'Brien, Canberra Health Services

ABSTRACT

Introduction: Faculty practice in clinical settings enhances nursing academics' confidence and teaching capabilities (Fowler et al., 2017). Clinical nurses with education roles – such as Clinical Development Nurses (CDNs) - are well embedded within Australian healthcare. One healthcare service has employed CDNs for two decades to support their clinical nursing workforce's on-going professional development. However, CDNs often lack formal preparation and expressed feeling under-valued. This innovative pilot explored whether a faculty exchange program model could enhance professional development and education/practice capabilities for CDNs and nursing academics.

Methods: A mixed methods realist evaluation approach guided an online pre/post-questionnaire, and post-exchange interviews were conducted after the exchange/teaching semester. Interviews were transcribed verbatim. During the exchange, participants were encouraged to submit weekly reflective anecdotes. Descriptive and content analyses of the questionnaires was undertaken, and thematic analysis of the interviews and reflective anecdotes.

Results: Five CDNs and one nursing academic participated. The pre-questionnaire indicated the majority saw participation as an opportunity to develop collegiate relationships/connections. Emergent themes focused on the exchange experiences and impacts with participants sharing it was 'A whole new experience', providing recommendations for future iterations. Post-questionnaire, all CDNs indicated an increase in confidence in their teaching, and the academic in their clinical care.

Discussion: The exchange program was an invaluable learning experience, professionally and personally for participants. CDNs broadened their understanding of curriculum and pedagogy, learning how to engage with diverse students. All participants had unique experiences, expanding their professional networks. This model offers genuine workforce development opportunities across teaching, clinical practice, along with facilitating new peer collaborations.

TITLE: Integrating Evidence-Informed Palliative Care Content into Pre-Registration Nursing Curricula: Barriers, Facilitators and Strategies for Success

AUTHORS: Sylvia Nilsson, University of Canberra; Jo Gibson, University of Canberra; Angie Fearon, University of Canberra; Catherine Paterson, Flinders University; Patrick Crookes, University of Canberra

ABSTRACT

Introduction: Research demonstrates that there is minimal research informing palliative care content in pre-registration nursing curricula. Evidence-informed palliative care curricula content provides a resource for teaching, particularly for educators with little to no experience in palliative care. Globally, multiple institutions are pioneering the standardisation and integration of palliative care content.

Aim: To work with a panel of international palliative care experts to identify key barriers and facilitators influencing the integration of evidence-informed palliative care content into pre-registration nursing curricula.

Methods: Two international online focus group discussions were conducted with 12 academics, educators, and clinicians with expertise in pre-registration palliative care education. The Knowledge to Action (KTA) Framework served as the conceptual framework to guide the discussion's structure. Data analysis was performed using a 16-step directed qualitative content analysis method, as proposed by Assarroudi et al.

Results: A total of 12 palliative care experts from eight countries participated in the discussions. Clear unanimity was demonstrated. Within three overarching categories, the following subcategories were conceptualised;

Barriers: Fear, Lack of Capacity

Facilitators: Acceptance, Capacity Building

Strategy: Preparation, Support, Reflective Practice

Conclusion: The findings, informed by existing theoretical frameworks, provide a roadmap for successfully integrating evidence-informed palliative care curricula content. The focus groups facilitated an opportunity for field experts to collaborate and consolidate insights that promote the integration of evidence-informed content and have the potential to be transferred across different topic areas.

TITLE: "Changing Mindsets": Developing Clinical Facilitators for High Quality Nursing Placements with Older People

AUTHORS: Kelly Marriott-Statham, University of Canberra; Stephanie Munk, University of Canberra; Tracey Moroney, Australian College of Applied Professions University College; Victoria Traynor, University of the Sunshine Coast; Karen Strickland, Edith Cowan University; Jennifer Weller-Newton, University of Canberra; Kasia Bail, University of Canberra

ABSTRACT

Introduction: Registered nurses are key to high quality care for older people, yet pre-registration students often report low-value placement experiences that reinforce negative narratives about aged care. To address this, a Commonwealth-funded program equipped Clinical Facilitators with specialised gerontological knowledge and facilitation skills to strengthen supervision quality and make the complexity of practice visible to students.

Aim: To examine how participation in the Clinical Placements with Older People program influenced Clinical Facilitators' development, professional identity, and facilitation practices during student placements.

Methods: Ethnographic notes were recorded during education workshops and Community of Practice meetings with Clinical Facilitators. Data were analysed using reflexive thematic analysis to identify patterns in development, practice changes, and perceived impact.

Results: Since 2023, more than 169 Clinical Facilitators have engaged in the program, supporting close to 2,000 placements across the Australian Capital Territory, New South Wales, Queensland and Western Australia. Clinical Facilitators reported strengthened gerontological identity and renewed professional pride; expanded facilitation skills, including coaching for clinical reasoning, structured feedback, and guided reflection; intentional strategies to set expectations and support registered nurse buddies; increased confidence to teach complex elements of practice (leadership, deterioration recognition, interprofessional collaboration, and psychosocial care); and benefits of belonging and shared problem-solving through the Community of Practice.

Conclusion: The program cultivated capable, confident Clinical Facilitators who model gerontological leadership, translate complexity into teachable moments, and create conditions for meaningful learning.

Impact: By investing in Clinical Facilitator practice and identity, the program improves supervision quality and placement value, supporting a better prepared gerontological nursing workforce for our ageing population.

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