



Central Coast
Local Health District



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA



BOOK OF PROCEEDINGS

2025 RESEARCH & INNOVATION SYMPOSIUM

Central Coast Clinical School and
Research Institute, Gosford, NSW

11-13 February 2025

Our Partners



NSW Regional
Health Partners



Bolton
Clarke



Central Coast
Health & Wellbeing
Living Lab



NSW REGIONAL CANCER
RESEARCH NETWORK





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Acknowledgment of Country

We pay our respect to these lands that provide for us.

We acknowledge and pay respect to the ancestors that walked and managed these lands for many generations before us.

We acknowledge and recognise all Aboriginal people who have come from their own country and who have now come to call Darkinjung country their home.

We acknowledge our Elders who are our knowledge holders, teachers and pioneers. We acknowledge our youth who are our hope for a brighter and stronger future and who will be our future leaders.

WELCOME

Professor Nicholas Goodwin, Director of Research CCLHD



Welcome to the 2025 CCLHD Research and Innovation Symposium!

The Central Coast Health and Wellbeing Precinct is rapidly emerging as a regional Centre for Research and Innovation. At its heart sits the Central Coast Clinical School and Research Institute, our state-of-the-art research and education facility that will be our host over the 11th to 13th of February. This facility provides the ideal environment to bring leading researchers and research groups from across our region to share knowledge, showcase innovation, and build awareness of the benefits that our research brings to improve the outcomes and experiences of our Central Coast community and the effectiveness of the health and care services we provide.

Over the three days, under the theme of Enabling a Healthier Future, the Symposium will demonstrate the growth and impact of our clinical trials portfolio and its national and international reach. It will provide space for the sharing of innovative new ideas and service solutions that address core issues such as health promotion and health equity, active and healthy ageing, the delivery of technological and virtual care solutions, as well as debate the future of health systems and the actions required to support environmental sustainability.

The Symposium will also be a key opportunity for the Coast to celebrate and strengthen the unique contribution it is making to research and innovation in health and healthcare, helping to build new relationships and collaborations between individual researchers and research organisations, and acting as a forum to share ideas and best practice.

For all those attending, I hope you enjoy the breadth and depth of our 2025 Research and Innovation Symposium. I would like to provide thanks to our professional and hard-working team at the CCLHD Research Office, to our pro-active co-hosts at the University of Newcastle, and to all our sponsors and supporters for enabling the Symposium to happen.



KEYNOTE SPEAKER

Professor Jeffrey Braithwaite



'The Future of Health and Health Systems to 2030 and Beyond in the Era of Global Boiling'

Professor Jeffrey Braithwaite is Founding Director of the Australian Institute of Health Innovation, Director of the Centre for Healthcare Resilience and Implementation Science and Professor of Health Systems Research at Macquarie University.

Professor Braithwaite is a leading health services and systems researcher with an international reputation for his work investigating and contributing to systems improvement. He is visiting or adjunct Professor at Newcastle University and University of Birmingham in the UK; University of Southern Denmark; University of Stavanger, Norway; University of New South Wales; and Honorary Senior International Research Fellow at the Canon Institute for Global Studies in Tokyo,

Japan. He is the Immediate Past President of the International Society for Quality in Health Care (ISQua), having been President from 2020 to 2023. He has considerable expertise in researching the culture and structure of acute settings, leadership, management and change in health sector organisations, quality and safety in health care, accreditation and surveying processes in international context and the restructuring of health services.

Professor Braithwaite is well known for bringing management and leadership concepts and evidence into the clinical arena. He has published extensively about organisational, social and team approaches to care (over 835 refereed contributions and 1,490 publications) with more than 34,650 citations. He has presented at or chaired international and national conferences, workshops, symposia and meetings on more than 1,470 occasions, including over 135 keynote addresses. Theories and ideas he has shaped or devised are now in common use; for example, multi-method, triangulated approaches to research, the boundary-less hospital, accreditation models in general practice and beyond, clinician-managers as key players in reform initiatives, fundamental principles for the governance of health systems, diversity in clinical professional groups, and inter-professional learning and culture change as a more sustainable strategy for reform. His empirical results have exposed the distinctive attitudes of clinical professional groups, how clinician-managers enact their leadership responsibilities, the behavioural displays of clinicians in service structures and the status of system-wide patient safety improvement initiatives.

Professor Braithwaite referees for 31 journals and the health research bodies of Ireland, New Zealand, Switzerland and the United Kingdom as well as for many international conferences and symposia. He publishes in the leading journals in three convergent fields and thus expresses his work at a unique intersection of organisational studies, health services research and clinical care. Journals he contributes to include *Nature Climate Change*, *The Lancet Psychiatry*, *Journal of the American Medical Association*, *BMC Medicine*, *the British Medical Journal*, *The Lancet*, *PLoS Medicine*, *Journal of the Royal Society of Medicine*, *Health Services Management Research*, *BMJ Quality and Safety*, *International Journal for Quality in Health Care*, *Social Science & Medicine*, *BMC Health Services Research*, *International Journal of Health Planning and Management* and *Journal of Health, Organisation and Management*.

GOSFORD HOSPITAL SITE MAP



GENERAL INFORMATION

The Central Coast Clinical School & Research Institute (CCCSRI) is adjacent to the main pedestrian entry of Gosford Hospital.

Access is available from Holden Street (North & South) as well as via the Multistorey P2 car park lifts.

Parking & public transport

On-site paid parking is available in the Gosford Hospital Multistorey P2 car park. Alternatively Gosford train & bus station is a short walk down Showground Road from CCCSRI.

Disability facilities

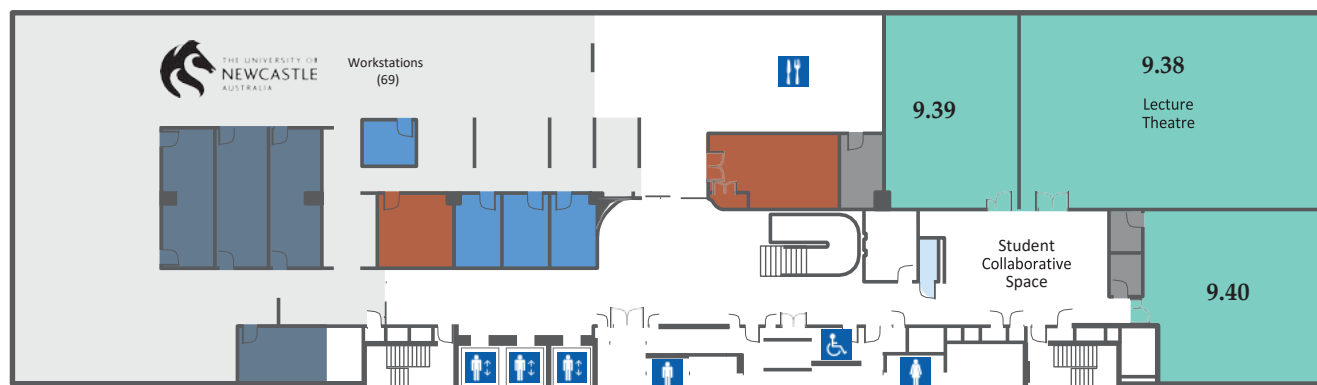
1. On-site parking
2. Entry to all rooms and facilities
3. Disabled toilets
4. Lifts

CCCSRI BUILDING FLOOR PLAN

Ninth Floor

< Holden Street South

Holden Street North >



KEY

Consultation room	Office space	Storage	Male Toilet	Kitchen
Laboratory	Quiet room	Teaching space	Female Toilet	Lift
Meeting room	Cleaners room	Training room	Accessible Toilet	

PROGRAM

Clinical Trials Partnership Day – Tuesday 11 February 2025

Central Coast Clinical School and Research Institute (CCCSRI), Level 9 – Room 9.38	
9:00 – 9:05 am	<i>Acknowledgment of Country</i> Steve Ella, District Director of Aboriginal Health, CCLHD
9:05 – 9:15 am	<i>Welcome: Clinical Trials on the Central Coast</i> Presenters: Nick Goodwin, Director of Research, CCLHD Fiona Wilkinson, District Director Quality, Strategy and Improvement, CCLHD
9:15 – 9:30 am	<i>NSW Clinical Trials Unit</i> Presenter: Kath Irish, Manager clinicaltrialsNSW, Ministry of Health
9:30 – 10:15 am	<i>Rural, Regional & Remote (R3) Northern Cluster Clinical Trials Support Unit (CTSU) – Supporting Clinical Trials in the Bush: Developing Teletrials</i> Presenters: Joan Torony, R3 CTSU Cluster Manager, HNELHD; Melanie Poxton, Assistant Director of Nursing, Australian Teletrial Program (ATP)-QLD, Office of Research and Innovation, Queensland Health
10:15 – 10:45 am	Morning Tea
10:45 – 11:30 am	Panel Discussion – Developing Clinical Trials on the Central Coast, with our collaborative & commercial sponsors Chair: Nick Goodwin
11:35 – 11:50 am	<i>The RecoverEsupport Program: A digital health intervention to support colorectal and breast cancer patients prepare for and recover from surgery.</i> Presenter: Rebecca Wyse, School of Medicine & Public Health, The University of Newcastle and Population Health, HNELHD
11:55 – 12:10 pm	<i>Efficacy and toxicity in older patients receiving anticancer agents: A retrospective analysis of Australian patients.</i> Presenter: Joseph Taylor, Medical Oncology, CCLHD
12:15 – 12:30 pm	<i>Targeting moving tumours with radiotherapy: An overview of current research and clinical trials at Central Coast Cancer Centre.</i> Presenter: Ben Zwan, Radiation Oncology, CCLHD
12:30 – 1:30 pm	Networking Lunch <i>Tour of the Central Coast Clinical School and Research Institute Building</i>
1:30 – 1:45 pm	<i>Research and Clinical Trial results from the CCLHD Haematology Clinical Trials Unit –local to global initiatives to improve treatment and outcome for haematological disorders.</i> Presenter: Tasman Armytage, Haematology, CCLHD
1:50 – 2:05 pm	<i>A randomised, double-blind controlled trial of alkalinised lignocaine vs non-alkalinised lignocaine to determine safety and efficacy for airway topicalization.</i> Presenter: Frances Page, Anaesthesia & Pain Management, CCLHD
2:10 – 2:25 pm	<i>Assessment of outcomes of palliative percutaneous biliary stenting in adult patients from the Central Coast in NSW with malignant hilar biliary obstruction: 50 patient series.</i> Presenter: Raja Chaganti, Medical Oncology, CCLHD
2:30 – 3:00 pm	Afternoon Tea
3:00 – 4:30 pm	<i>Enhancing Translational Cancer Research Capacity in Regional NSW: The Role of the NSW Regional Cancer Research Network</i> Presenter: Nikola Bowden, Research Fellow, The University of Newcastle and Hunter Medical Research Institute (HMRI)
4:30 – 5:30 pm	Networking Session Refreshments provided

PROGRAM

Workshop Timetable – Wednesday 12 February 2025

Central Coast Research Group Level 9 –Room 9.39		Healthy Ageing Level 9 –Room 9.38	
		7:30 – 9:00 am	<i>All-Inclusive Care for Older People (ALICE) Breakfast workshop (Invite only)</i> <i>Challenges and Solutions to Establishing the Link Worker Role in a Complex Service Environment</i>
9:00 – 10:00 am	<i>Optimising Online Research Profiles and ORCID ID to maximise visibility and promote research output</i> Facilitator: Leila Mohammadi, Library Services, CCLHD		9:30 – 10:00 am
		10:00 – 10:30 am	<i>Community Healthy Ageing Initiative (CHAI): Improving ageing-related health literacy in diverse communities</i> Presenter: Frini Karayanidis, School of Psychological Sciences, The University of Newcastle (UoN)
10:00 – 11:00 am	Morning Tea		
10:30 – 11:30 am	<i>The Nutrition Navigator: A Research showcase from the HMRI Food and Nutrition program</i> Facilitators: Tracy Burrows, Clare Collins and Melinda Hutchesson, Food and Nutrition Program, HMRI; and School of Health Sciences, UoN	11:00 – 12:30 pm	<i>Living Lab Approaches for Healthy Ageing</i> Facilitators: Courtney Molloy, The University of Newcastle and Natassia Smith, CCLHD; Central Coast Health & Wellbeing Living Lab
11:30 – 12:30 pm	<i>Reaching people where they are – supporting integration of population and preventive health services into clinical care.</i> Facilitators: Kat Taylor, Sarah Davies, Donna Moore and Niki Kajons, Public Health and Health Promotion, CCLHD		
12:30 – 1:30 pm Lunch			
1:30 – 2:30 pm	<i>Higher Degree Research Student Networking session</i> Chair: Erin Bonvino, Master of Philosophy Candidate, UoN	1:30 – 2:30 pm	<i>Meeting the Challenge of Longevity on the Central Coast</i> Facilitators: Abby Bloom & Annie Elias, PrimeLife Partners
2:30 – 4:00 pm	<i>Towards a More Sustainable Health System: A Call to Action.</i> Facilitators: Karlie Proctor and Nick Goodwin, CCLHD, Yvonne Zurynski and K-Lynn Smith, AIHI Macquarie University, Sarah Browning, UoN	2:30 – 4:00 pm	<i>Healthy@Home</i> <i>Using Sensor-Based Technology to Support Ageing at Home: A Showcase</i> Facilitators: Paul Egglestone, The University of Newcastle Catherine Oates-Smith, NSSN
4:00 – 5:00 pm	Networking Session Refreshments provided		

PROGRAM

Research & Innovation Symposium 2025 – Thursday 13 February

8:00 am	Registrations open -Central Coast Clinical School & Research Institute (CCCSRI), Level 9, Student Collaborative Space (near Room 9.38)	
8:30 – 9:00 am	Welcome to Country: Uncle Gavi (Kevin) Duncan; CCCSRI, Level 9, Room 9.38 Opening Address: Minister David Harris Welcome & Introduction: CCLHD Chief Executive; Pro-Vice Chancellor, College of Health, Medicine & Wellbeing, The University of Newcastle	
9:00 – 9:40 am	Keynote Speaker: The Future of Health and Health Systems to 2030 and Beyond in the Era of Global Boiling Professor Jeffrey Braithwaite, Founding Director of the Australian Institute for Healthcare Innovation (AIHI), Macquarie University	
9:40 – 10:00 am	Panel Discussion: Towards environmental sustainability in health systems: a call to action Chair: Nick Goodwin (CCLHD), Panellists: Jeffrey Braithwaite (AIHI), Karlie Proctor (CCLHD), K-Lynn Smith (AIHI), Sarah Browning (UoN)	
10:00 – 10:30 am	Morning Tea – Level 9	
Oral Presentations	Emerging Therapies, Tools & Technologies CCCSRI, Level 9, Room 9.39	Improving Health & Wellbeing in the Community CCCSRI, Level 9, Room 9.38
10:30 – 10:45 am	(OP1) Machine Learning Model Reveals Determinators for Admission to Acute Mental Health Wards from Emergency Department Presentations. Presenter: Oliver Higgins, Mental Health, CCLHD	(OP12) Central Coast Publicly Funded Homebirth Model: Outcomes and experiences for women, families and midwives in the first twelve months. Presenters: Karen Kennedy and Danielle Clack, Central Coast Midwifery Group Practice, Maternity Services, CCLHD
	QUESTIONS	QUESTIONS
10:50 – 11:05 am	(OP2) Impact of Antimicrobial Stewardship on Antibiotic Prescribing for Community Acquired Pneumonia in the Short and Long Term. Presenter: Juliet Leicester, Department of Respiratory and Sleep Medicine, CCLHD	(OP13) Acceptability and feasibility of the Domestic, Family and Sexual Violence Primary Care Outreach Team Central Coast pilot: A qualitative study Presenter: Zoi Triandafilidis, Central Coast Research Institute
	QUESTIONS	QUESTIONS
11:10 – 11:25 am	(OP3) Impacts of Sarcopenia on Prostate Cancer patients undergoing Docetaxel chemotherapy Presenter: Gemma Tyler, Medical Oncology, University of New England	(OP14) The role experiences, challenges, organisation, and competencies of care navigators in the space between health and social care systems: a review of reviews Presenter: Shalini Wijekulasuriya, Australian Institute of Health Innovation, Macquarie University
	QUESTIONS	QUESTIONS
11:30 – 11:45 am	(OP4) Mental Health Care in the Digital Age: Exploring Attitudes and Perspectives of Mental Health Professionals Towards Using e-Mental Health Tools for Suicide Prevention Presenter: Carol Hood, Mental Health, CCLHD	(OP15) “It Sounded a Lot Simpler on the Job Description”: an Evidence Review on Health and Social Care Navigators in General Practice Presenter: Suzanne Lewis, Central Coast Research Institute
	QUESTIONS	QUESTIONS
11:50 – 12:05 pm	(OP5) Evaluation of a Community Breastfeeding Assessment Tool Presenter: Dianne Zammit, Child & Family Health, CCLHD	(OP16) Thirsty? Choose Water! Primary Schools- 2024 Pilot Presenter: Michelle Syddall, Health Promotion, CCLHD
	QUESTIONS	QUESTIONS

12:10 – 1:00 pm Lunch and Poster Viewing – Level 6		
Oral Presentations	Quality & Effectiveness of Safe Patient Care CCCSRI, Level 9, Room 9.39	Improving Health & Wellbeing in the Community CCCSRI, Level 9, Room 9.38
1:00 – 1:15 pm	(OP6) The CLEaning and Enhanced DisinfectioN study: The CLEEN study Presenter: Kate Browne, Nursing, Avondale University	(OP17) Mental Health Allied Health Community Team: Supporting transitions to primary care after mental health crisis. Presenters: Daneill Davis and Simone Horal, Mental Health & Allied Health, CCLHD
	QUESTIONS	QUESTIONS
1:20 – 1:35 pm	(OP7) SAFER-IVK: Safety, Appropriate potassium route, Follow-up, Efficient dosing, Risk management, Reducing Infusion discomfort, Vascular access maintenance, and knowledge promotion. Presenter: Jacqueline Colgan, Cardiology, CCLHD	(OP18) Pre-existing diabetes in pregnancy, a multidisciplinary model of care. Presenter: Carina Martin, Nutrition Services, CCLHD
	QUESTIONS	QUESTIONS
1:40 – 1:55 pm	(OP8) Enhancing Medication Safety, Governance and Cost Efficiencies: The Impact of the Pharmacy PROcurement and FORMulary Improvement (PRO-FORM-I) Initiatives at CCLHD Presenter: Claire McCormack, Pharmacy, CCLHD	(OP19) Self-administration of subcutaneous Bortezomib (SLAM-B) in the home setting in regional NSW: A feasibility study Presenter: Jacqueline Jagger, Cancer Services, CCLHD
	QUESTIONS	QUESTIONS
2:00 – 2:15 pm	(OP9) Peer workforce development in mental health: collaborative research from regional Australia Presenter: Rachel Sheather-Reid, Mental Health, CCLHD	(OP20) Valuable insights from the evaluation of a motor neuron disease multidisciplinary clinic on the Central Coast Presenter: Karen Hutchinson, Physiotherapy, Macquarie University
	QUESTIONS	QUESTIONS
2:20 – 2:35 pm	(OP10) Professional Quality of Life is related to Emotional Intelligence, Self-Care, and Work Conditions: Findings from a moderated mediation analysis. Presenter: Lourdes Ferrer, Brunel University	(OP21) Evaluation of a transitional workshop to support new graduate midwives to work in continuity of care models. Presenter: Allison Cummins, Midwifery, The University of Newcastle
	QUESTIONS	QUESTIONS
2:40 – 2:55 pm	(OP11) Assessing the impact of Partnered Pharmacist Medication Charting in Wyong Emergency Department on Patient Safety and Multidisciplinary Staff Satisfaction Presenter: Jennifer Duncan, Pharmacy, CCLHD	(OP22) How social class shapes perspectives of ‘breast cancer candidacy’ and prevention practices among Australian midlife women – A qualitative study. Presenter: Samantha Batchelor, Health Promotion, CCLHD
	QUESTIONS	QUESTIONS
3pm – 3:30 pm Afternoon Tea – Level 9		



Lightning Talks	Quality and Effectiveness of Safe Patient Care CCCSRI, Level 9, Room 9.39	Improving Health & Wellbeing in the Community CCCSRI, Level 9, Room 9.38
3:30 – 3:35 pm	(LT1) Application and Evaluation of a Front-Loaded Emergency Department Pharmacy Service on Pharmacy Workload Presenter: Jessica Oxby, Pharmacy, CCLHD	(LT10) Disproportionate mental health presentations to Emergency Departments in coastal regional community in Australia of First Nations people Presenter: Oliver Higgins, Mental Health, CCLHD
3:35 – 3:40 pm	(LT2) Navigating the Challenges of Delivering Safe Haven Services in Non-Clinical Spaces Presenter: Rachel Sheather-Reid, Mental Health, CCLHD	(LT11) Lifesaving Health at home: elevating community care with novel naloxone kit access Presenter: Mikie Hughes, Pharmacy, CCLHD
3:40 – 3:45 pm	(LT3) A Suicide Prevention Pathway designed to enhance staff competencies in recognising and responding to distress. Presenter: Laura Christie, Mental Health, CCLHD	(LT12) Improving discharge communication with Community General Practitioners and Pharmacists Presenter: Kara Pollard, Health Information Services, CCLHD
3:45 – 3:55 pm	QUESTIONS	QUESTIONS
3:55 – 4:00 pm	(LT4) Nurturing New Nurses: Enhancing Transition to Professional Practice Presenter: Rachel Newell, Nursing & Midwifery, CCLHD	(LT13) Oral health in patients on second generation antipsychotics – a scoping review Presenter: Dileep Sharma, Oral Health, The University of Newcastle
4:00 – 4:05 pm	(LT5) Rainbow Ready-LGBTQI+ Inclusion Capacity Building in our Non-Acute Adult Mental Health Services Presenter: Blake Richards, Mental Health Promotion, CCLHD	(LT14) Non-urgent Emergency Department presentations by pre-school aged children. Opportunities for new clinical pathways to child and family health. Presenter: Karen Myors, Child & Family Health, CCLHD
4:05 – 4:10 pm	(LT6) Artificial Intelligence in nursing: trustworthy or reliable? Presenter: Oliver Higgins, Mental Health, CCLHD	(LT15) Co-production, co-creation, and co-design: Fostering health and wellbeing for people in the community within the primary health care context using the Three-Cs. Presenter: Cate Dingelstad, The University of Newcastle
4:10 – 4:20 pm	QUESTIONS	QUESTIONS
4:20 – 4:25 pm	(LT7) Sleep Disturbances in Adults with Chronic Kidney Disease: An Umbrella Review Presenter: Ginger Chu, The University of Newcastle	(LT16) Advanced care planning and palliative care among older people of Chinese ethnicity: findings from two pilot studies in residential aged care Presenter: Minah Gaviola, The University of Newcastle
4:25 – 4:30 pm	(LT8) Sleep Hygiene Strategies in Adults with Chronic Kidney Disease: A Scoping Review Presenter: Ginger Chu, The University of Newcastle	(LT17) The history, educative and therapeutic benefits of the 'Brazilian' Samba community in Australia. Presenter: Susan Smith, Healthcare Improvement Unit, CCLHD
4:30 – 4:35 pm	(LT9) Enhancing Clinical Education Environments – A Collaborative Continuity Model of Clinical Education in Practice Presenter: Gary Crowfoot, The University of Newcastle	(LT18) Developing best practice approaches to support the economic evaluation of care pathways: A Scoping Review Presenter: Kristy Fakes, The University of Newcastle
4:35 – 4:45 pm	QUESTIONS	QUESTIONS
5:00 – 6:00 pm	Networking Event & Presentation of Prizes – Level 6 – Refreshments provided	

ABSTRACTS

Clinical Trials Partnership Day

The RecoverEsupport Program: A digital health intervention to support colorectal and breast cancer patients prepare for and recover from surgery. Study protocol for 2 RCTs.

Rebecca Wyse^{1,2}, Emma Sansalone^{1,3}, Alison Zucca^{1,2}, Priscilla Viana da Silva^{1,4}, Erin Forbes^{1,4}, Anna Palazzi-Parsons^{3,4}, Owen Morris⁵, Kristy Fakes^{1,4}, Mariko Carey⁶, Sally-Anne Johnston⁷, Sancha Robinson^{8,9}, Mitch Duncan¹, Chris Oldmeadow^{1,3}, Penny Reeves^{1,3}, Jonathan Gani^{1,7}, Ross Kerridge^{1,8}, Steve Smith^{1,5}

1. University of Newcastle; School of Medicine and Public Health, NSW, Australia
2. Hunter New England Population Health, NSW, Australia
3. Hunter Medical Research Institute, NSW, Australia
4. Health Behaviour Research Collaborative, The University of Newcastle, NSW, Australia
5. Department of Surgery, Calvary Mater Hospital, NSW, Australia
6. Central Coast Research Institute, NSW, Australia
7. Department of Surgery, Hunter New England Local Health District, NSW, Australia
8. Department of Anaesthetics, John Hunter Hospital, Hunter New England Local Health District, NSW, Australia
9. Department of Anaesthetics, Calvary Mater Hospital, NSW, Australia

Background: International 'Enhanced Recovery After Surgery' (ERAS) guidelines include patient-led behaviours to reduce post-surgical complications and length of hospital stay, such as early mobilisation, and rapid resumption of feeding and fluids, and breathing and physiotherapy exercises. However, patients need support to adhere to these guidelines, and a digital health intervention (DHI) may be an effective, cost-effective, and scalable solution. In response, we co-designed the RecoverEsupport intervention (with researchers, clinicians and patients). RecoverEsupport consists of a website and SMS/email prompts to encourage patient self-management using evidence-based behaviour change strategies such as information provision, goal setting, skills training, behavioural self-monitoring and feedback, and prompts and cues.

Objectives: This paper describes protocols for 2 RCTs within this research program, targeting colorectal and breast cancer patients. Both trials aim to evaluate the effectiveness and cost-effectiveness of the RecoverEsupport intervention.

Methods: Patients recruited from pre-operative appointments will be randomised (1:1 ratio) to receive usual perioperative care (control) or RecoverEsupport (intervention). Outcomes include: Length of Stay, Quality of Life (EORTC QLQ-C30), Quality of Recovery (QoR15), emergency department admissions, adherence to ERAS guidelines, and health care costs. Data will be collected from medical records and from patient online surveys. ACTRN12621001533886 (prospectively registered).

Results/Conclusion: If effective, the RecoverEsupport intervention could be rapidly scaled up and/or adapted for other surgical patient groups.



Efficacy and toxicity in older patients receiving anticancer agents: A retrospective analysis of Australian patients

Joseph Taylor^{1,2}, Cassandra White^{2,3}, Ben Moran^{2,4}, Larissa Collins², Craig Kukard^{1,2}

1. Central Coast Cancer Centre, Gosford Hospital, Gosford, Australia

2. University of Newcastle, Callaghan, Australia

3. Maitland Hospital, Maitland, Australia

4. Gosford Hospital, Gosford, Australia

Introduction: The proportion of older adults is rapidly increasing and the majority of cancers occur in those ≥ 65 years old. Despite this, older patients are under-represented in clinical trials. Those who are included are unlikely to be an accurate reflection of real-world patients as many are excluded based on performance status and comorbidities. There is a distinct paucity of data examining the toxicity, and efficacy, of systemic therapy in this group.

Methods: Retrospective data from patients' ≥ 75 years, on treatment for a solid organ malignancy, in an Australian regional centre was collected to assess the toxicity, and efficacy, of immunotherapy and chemotherapy.

Results: 92 patients were included. Mean age was 81. There was no significant difference in overall survival based on; age, ECOG score or number of comorbidities. Only 27% of treatments were ceased due to toxicity. 35% of patients on chemotherapy had had a dose reduction during treatment. Grade ≥ 3 toxicity was experienced by 32% of patients who received chemotherapy containing regimens and 22% who received immunotherapy containing regimens.

Conclusion: To our knowledge, this is the first study providing real-world data on the efficacy, and safety, of anti-cancer agents in older patients in a regional Australian centre across multiple tumour streams. Our results suggest that screening tools which assess frailty such as: the Geriatric 8 score and the Cancer and Ageing Research Group (CARG) score are likely more appropriate than using age alone in supporting decision making regarding treatment in this cohort.

Targeting moving tumours with radiotherapy: An overview of current research and clinical trials at Central Coast Cancer Centre

Ben Zwan, Cameron Stanton, Richard Clayton, Rebecca Cone, Ben Tacon, Katie Sadler, Andrew Glenn, Rajasekar David, Simon Tang

Central Coast Cancer Centre, Gosford, Australia

Respiratory motion presents several unique challenges for external beam radiation therapy. For tumours within lung, Liver, breast and the upper abdomen respiratory motion can result in geometric miss of the target and over-irradiation of healthy tissue and organs, resulting in sub-optimal treatment outcome and adverse side effects. Recent advances in imaging technology and the use of artificial intelligence have led to several clinical trials and research studies to measure and compensate for complex tumour motion in real-time, during treatment.

In this overview, we provide an update on current research being undertaken at Central Coast Cancer Centre to better target moving tumours. Included within this update are:

1. The LARK clinical trial: A prospective trial where liver tumour motion is measured and accounted during the delivery of radiation using a novel technology called Kilovoltage Intrafraction Monitoring.¹
2. The LEARN clinical trial: Collection of imaging data and development of artificial intelligence techniques to measure tumour and organ motion during radiotherapy.
3. The LEILA study: A study to track the location of internal anatomy in real-time during breath-hold breast radiotherapy.²
4. Breath-hold lung radiotherapy: A local retrospective study to assess the benefits of breath hold techniques to reduce respiratory motion for lung cancer.

These technology-based trials and research studies have the potential to significantly improve outcomes for patients by increasing treatment accuracy for sites effected by respiratory motion.

References

1. Lee YY, Nguyen DT, Moodie T, O'Brien R, McMaster A, Hickey A, Pritchard N, Poulsen P, Tabaksblat EM, Weber B, Worm E. Study protocol of the LARK (TROG 17.03) clinical trial: a phase II trial investigating the dosimetric impact of Liver Ablative Radiotherapy using Kilovoltage intrafraction monitoring. *BMC cancer*. 2021 May 3;21(1):494.
2. Vasina EN, Greer P, Thwaites D, Kron T, Lehmann J. A system for real-time monitoring of breath-hold via assessment of internal anatomy in tangential breast radiotherapy. *Journal of Applied Clinical Medical Physics*. 2022 Jan;23(1):e13473.

Clinical Trials Partnership Day

Research and Clinical Trial results from the CCLHD Haematology Clinical Trials Unit – local to global initiatives to improve treatment and outcome for haematological disorders

Tasman Armytage, Yao Yao, Mark Lacey, Smitha Abraham, Cecily Forsyth, Catherine Tang, Richard Blennerhassett, Mark Dean, Anna Nelson, Alison Lyons, Jenna Langfield

Gosford Hospital, Gosford, Australia

CCLHD Haematology Clinical Trials unit has contributed to research in over 100 studies of malignant and benign haematological disorders since 2000. From local investigator-initiated studies to ALLG co-operative group trials to international landmark therapeutic studies, the unit has made significant contributions to the landscape of malignant therapies, improved treatment delivery experiences for patients and developed our understanding of disease biology.

Recently presented and published research for this presentation will focus on NHL33 mantle cell lymphoma study, LARDR analysis of patients with high and low BMI and diffuse large B cell lymphoma and currently recruiting studies in malignant haematology.

NHL33 an Australian multi-centre co-operative group study to assess the safety and response to acalabrutinib + rituximab followed by chemotherapy and autologous stem cell transplant in fit patients with mantle cell lymphoma. The study recruited patients in metropolitan, regional sites and by telehealth. 44 patients with a high response rate (88%), high minimal residual disease negativity rate and no prohibitive toxicity.

Chemotherapy dose in diffuse large B cell lymphoma for patients with extreme BMI remains controversial. There remains a knowledge gap whether chemotherapy pharmacodynamics and toxicity are common across the spectrum of weight and BMI ranges. This CCLHD local investigator initiated study used registry data from the Australian Lymphoma and Related Disease Registry (LARDR) to provide clinically relevant insights into lymphoma response for these patients. Results will be publicly available in January 2025.

We will provide an update on the strategies for current clinical trial involvement and recruitment.

References

1. A Window Study of Acalabrutinib & Rituximab, Followed By Chemotherapy & Autograft (ASCT) in Fit Patients with Treatment Naive Mantle Cell Lymphoma (MCL): First Report of the Investigator-Initiated Australasian Leukaemia & Lymphoma Group NHL33 'Wamm' Trial. Hawkes E., Lee ST et al Blood (2023) 142 (Supplement 1): 735.

Clinical Trials Partnership Day

A randomised, double-blind controlled trial of alkalinised lignocaine vs non-alkalinised lignocaine to determine safety and efficacy for airway topicalization

Clare Hayes-Bradley¹, Frances Page², Mary Keehan², Jacob Ungerer³, Brett McWhinney³, Kelly-Ann Bowles⁴, Matthew Miller¹

1. Aeromedical Operations, NSW Ambulance, Sydney, Australia
2. CCLHD, Gosford, Australia
3. Dept Chemical Pathology, Pathology Queensland, Brisbane, Australia
4. Dept Paramedicine, Monash University, Melbourne, Australia

Background: Medical retrieval teams travel to remote facilities providing critical care including awake bronchoscopic-guided intubation. Topicalisation techniques need to be safe, tolerable, effective, and transportable or available locally. 2% lignocaine can be ineffective in clinical practice. Superior alternatives may be topical lignocaine, or alkalinised lignocaine.

Aims: A double blind randomised controlled trial to compare plasma lignocaine levels, total lignocaine dose, and visual analogue scores (VAS), for two lignocaine preparations, for airway topicalisation at an awake fibreoptic intubation course.

Methods: 49 doctors were randomised 1:1 into two groups by block design. Alkalinised lignocaine was 30ml 2% lignocaine with 2ml 8.4% sodium bicarbonate. Topical 4% lignocaine (www.phebra.com) was diluted to 2% with saline. Both groups followed a standardised supervised topicalisation to enable toleration of endoscopy to the carina. Primary outcome was plasma levels at 15, 30, 45, 60, 75 and 90 minutes. Total lignocaine dose and VAS discomfort for topicalisation and endoscopy were secondary outcomes.

Results: The participants were similar in sex, age and weight distributions.

The alkalinised lignocaine group had significantly higher plasma levels at earlier time points (multilevel model). All participants were well below the toxic threshold of 5 mcg/ml.

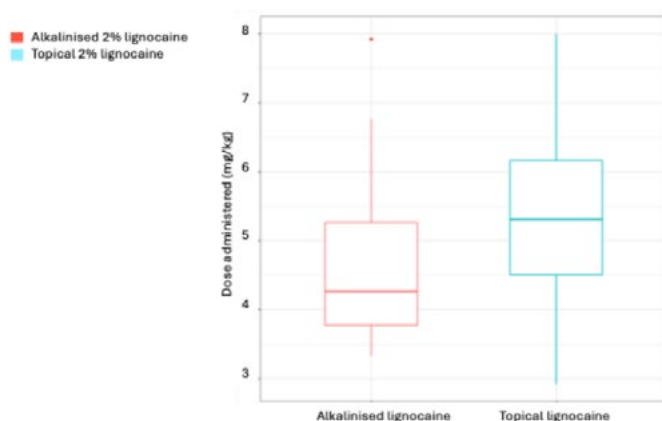
The alkalinised 2% lignocaine group used less lignocaine (Figure 1). VAS scores of discomfort were similar for topicalisation and endoscopy, though topicalisation with alkalinised lignocaine had a few higher scores.

Conclusions: Both preparations achieve topicalisation for endoscopy to the carina with safe lignocaine levels, when used by relative novices. The alkalinised lignocaine needed lower doses yet created higher plasma levels. VAS scores for topicalisation discomfort suggested some individuals found the alkalinised lignocaine unpleasant.

References

1. Brown T, Cook O, Hayes-Bradley C. Flexible Fiber-Optic Scope Use in Retrieval Medicine: A Case Series. AMJ 2024
2. DiFazio C.D CH, Grosslight K.R, Moscicki J.C, Bolding W.R, Johns R.A. Comparison of pH-Adjusted Lidocaine Solutions for Epidural Anesthesia. Anesthesia and Analgesia 1986; 65: 760-4
3. Jain TK, Jha R, Tiwari A, et al. Comparative Study to Evaluate the Anesthetic Efficacy of Buffered Versus Non-buffered 2% Lidocaine During Inferior Alveolar Nerve Block. Cureus 2022; 14: e31855
4. Konrad C, Gerber H, Schnider T, Schüpfer G. Is an alkalinized lignocaine solution a better topical anaesthetic for intratracheal application. EJA 1997; Volume 14: 616-22
5. Li H, Cheng Y, Li J, et al. NaHCO3-Buffered Lidocaine Gel for Outpatient Rigid Cystoscopy in Men. J Perianesth Nurs 2016; 31: 154-7
6. Williams KA, Barker GL, Harwood RJ, Woodall NM. Combined nebulization and spray-as-you-go topical local anaesthesia of the airway. BJA 2005; 95: 549-53

Figure 1





Assessment of outcomes of palliative percutaneous biliary stenting in adult patients from the Central Coast in NSW with malignant hilar biliary obstruction: 50 patient series

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Objective: Patients with malignant hilar biliary obstruction have a poor prognosis and limited treatment options. Biliary stenting via percutaneous transhepatic cholangiography (PTC) is regularly performed for palliation. This study reviews local data from the Central Coast to assess outcomes of bilirubin reduction, overall survival, length of hospitalisation and capacity to have systemic anticancer therapy for patients undergoing PTC for malignant hilar biliary obstruction. The intention was to identify factors which predict poor outcomes, to assist discussions with patients and clinicians.

Method: A retrospective search was performed via patient electronic medical records for adult patients who successfully underwent a primary PTC for malignant hilar obstruction. 50 eligible patients were identified from Jan 2013 to Dec 2020.

Results: Within the cohort the median age was 69 years. 30 were male and 20 were female. PTC involved a multi-stage procedure in 45/50 cases. 50% of the patients had some form of post-procedure complication, most commonly procedure-site pain. PTC led to a significant reduction in bilirubin, HR 0.66, $p < 0.0001$. The median overall survival was 81.9 days post procedure. The median length of hospital stay was 11.5 days. 19 patients went on to have further systemic therapy following their PTC. There was no significant difference in bilirubin improvement following PTC between different cancer types, but improvement in bilirubin significantly positively correlated with patients being offered further chemotherapy ($p = 0.016$). There was no significant difference in overall survival following PTC between patients with HPB cancers versus other cancers ($p = 0.49$). Adjusting for tumour type, multivariate analysis confirmed that cirrhosis ($p = 0.03$), presence of extrahepatic disease ($p = 0.02$) and bilirubin improvement ($p < 0.0001$) each independently impact survival after PTC.

Conclusion: PTC provided meaningful bilirubin reduction, with only 16% having no improvement in bilirubin levels. The extent of bilirubin reduction is clinically relevant not only to alleviate symptoms, but also to allow administration of systemic therapy, which was subsequently commenced in 38% of patients. PTC for malignant biliary obstruction has a beneficial role in palliative management of cancer patients but should be pursued only with significant caution in those with cirrhosis.

Clinical Trials Partnership Day

Enhancing Translational Cancer Research Capacity in regional NSW: The Role of the NSW Regional Cancer Research Network

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Hunter Medical Research Institute (HMRI), New Lambton Heights, Australia

The NSW Regional Cancer Research Network (the Network) was established in 2022 to build cancer research capacity within regional communities.

The Network unites a diverse group of health professionals, researchers, cancer service providers, and individuals affected by cancer from regional Local Health Districts (LHDs) including the Central Coast, Hunter New England, Mid-North Coast, and Northern NSW. Through fostering collaboration, the Network identifies clinical research questions that reflect local needs. This collective approach ensures regional voices drives research and improvements in cancer care.

Funded by the Cancer Institute NSW through a Translational Cancer Research Capacity Building Grant and established by NSW Regional Health Partners, the Network is committed to enhancing regional cancer research capabilities. Key objectives include fostering partnerships for knowledge sharing, building local research skills and expertise, funding regionally informed research projects, and expanding participation in innovative studies that address the unique challenges of regional populations.

The Network employs several strategic actions: a virtual platform for collaboration opportunities, education and enhanced stakeholder engagement; funding and specialised professional research support for regionally focused cancer research; and facilitating collaborative projects aimed at improving cancer outcomes in regional NSW.

By prioritising collaboration and community engagement, the Network empowers regional healthcare professionals and researchers to conduct high-quality, locally informed research with people who live in their communities. Through these initiatives, the NSW Regional Cancer Research Network aims to build capacity for translational cancer research to improve the equity of health outcomes for individuals in regional areas.



ABSTRACTS

Pre-Symposium Workshops

Central Coast Research Group

Optimising Online Research Profiles and ORCID ID to maximise visibility and promote research output

Leila Mohammadi

Library Services

Central Coast LHD, Gosford, Australia

Introduction: In today's digitally connected research environment, online profiles are pivotal for showcasing research impact, reaching broader audiences, and establishing professional visibility. An optimised research profile not only promotes individual research outputs but also strengthens collaborations and funding opportunities by enhancing discoverability across scholarly networks. This workshop provides participants with a practical roadmap to building and refining online profiles, focusing specifically on the strategic use of ORCID iD to unify and optimise research presence across platforms.

Workshop Objectives and Content: This interactive workshop will guide participants through setting up or enhancing their ORCID profiles, linking them with major databases and professional websites to maximise visibility. Key learning objectives include understanding how ORCID functions within research ecosystems, identifying essential elements for a comprehensive profile, and applying strategies to connect profiles with institutional repositories, Scopus Author profile and Google Scholar. Participants will also gain hands-on experience linking publications, datasets, and other research outputs to ORCID, ensuring a seamless digital footprint.

Outcomes: By the end of this workshop, attendees will have the tools to build robust, integrated research profiles that boost discoverability, streamline research administration, and enhance individual and institutional impact. Participants will leave with actionable steps for maintaining dynamic profiles that not only reflect their research contributions but also support career advancement through increased exposure and collaboration opportunities. This workshop is essential for researchers committed to strategically positioning their work in the global academic landscape.

The Nutrition Navigator: A Research showcase from the HMRI Food and Nutrition program

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This workshop unites researchers from projects from the Hunter Medical Research Institute Food and Nutrition Program covering dietary assessment, e health and technology innovations to scale the delivering of care as well as a focus on mental health. Exemplar projects will include:

- The No Money No Time (NMNT co-designed interactive web platform (nomoneynotime.com.au) hosts recipes, nutrition information resources and a validated nutrition screener tool (Health Eating Quiz-HEQ)^[1-3] to help people who are time-poor to eat more healthily within a budget^[4]. The website name reflects consumers key needs and constraints. It uses social marketing principles to maximise reach and engagement, particularly young adults^[5, 6]. The website is a recognisable and trusted brand inter/nationally, achieving the goal of becoming a social movement. The content is evidence-based and written by Accredited Practicing Dietitians.
- The TRACE (Targeted Research for Addictive and Compulsive Eating) program^[7], co-designed with consumers^[8] and health professionals, recently run a three-arm RCT to decrease addictive eating symptoms and improve mental health in adults in the community. Results show significant changes in eating behaviours, depression anxiety and stress^[9].

University students are at risk of poor health behaviours, including physical inactivity, poor diet, inadequate sleep and substance use which negatively affect mental health and psychological wellbeing^[10, 11]. The transition to university often impacts and exacerbates the mental health of students. Informing the implementation of appropriate policies and strategies to support Australian university students' mental health and psychological wellbeing, requires quality evidence^[12]. Research priorities regarding the role of health behaviours in supporting the mental health and wellbeing of Australian university students will be outlined.

Food insecurity is a large issue especially those facing mental health challenges, results from evidence synthesis and study overview on an innovative project involving citizen science to address food insecurity will be described. This project will be carried out amongst young adults who are users of mental health outpatient clinic services at CCLHD.

The new knowledge presented will guide future research and clinical practice given the significant gaps found in the current evidence investigating the intersection between nutrition and chronic disease.

References

1. Burrows T, et al., Validation of overweight childrens fruit and vegetable intake using plasma carotenoids. *Obesity*, 2009. 17(1): p. 162-168.
2. Collins CE, et al., Reproducibility and comparative validity of a food frequency questionnaire for Australian adults. *Clinical Nutrition*, 2014. 33(5): p. 906-914.
3. Ashton L, et al., Comparison of Australian Recommended Food Score (ARFS) and Plasma Carotenoid Concentrations: A Validation Study in Adults. *Nutrients*, 2017. 9(8): p. 888.
4. Whatnall M, C.E., Adam MTP, Ashton LM, Burrows T, Hutchesson M, et al. v, Diet Quality of Adolescents and Adults Who Completed the Australian Healthy Eating Quiz: An Analysis of Data over Six Years (2016–2022). *Nutrients*. 2022;14(19):4072. . *Nutrients* 2022(14): p. 19.
5. Ashton LM, R.M., Adam MTP, Burrows T, Shrewsbury VA, Collins CE., Process Evaluation of the No Money No Time Healthy Eating Website Promoted Using Social Marketing Principles. A Case Study. *International Journal of Environmental Research and Public Health*, 2021 18.
6. Whatnall M, A.L., Adam MTP, McCormick H, Clarke ED, Lavelle F, et al., 'How Can We Support Healthy Eating in Young Adults with Low Diet Quality? A Survey of Users of the 'No Money No Time' Healthy Eating Website.', *Nutrients*, 2022. 14: p. 5218.
7. Skinner JA, et al., Examining the efficacy of a telehealth intervention targeting addictive eating in Australian adults (the TRACE Programme): a randomised controlled trial protocol. *BMJ Open*, 2023. 13(6): p. e064151.
8. Leary M, et al., Designing an online intervention for adults with addictive eating: a qualitative integrated knowledge translation approach. *BMJ Open*, 2022. 12(6): p. e060196.
9. Skinner JA, et al., A three armed randomised controlled trial of a telehealth intervention targeting improvement in addictive eating for Australian adults (the TRACE program). *Appetite* 2024(10 Jan).
10. Hutchesson M, W.M., Fenton S, Ashton L, Patterson A, Smith J, et al., Are health behaviors associated with mental health among tertiary education students? A systematic review of cohort studies. *J Am Coll Health*, 2023: p. 1-13.
11. Knapp A, B.T., Whatnall M, Leigh L, Leask S, Hutchesson M, Trends in Health-Risk Behaviors and Psychological Distress among Australian First-Year University Students. *International Journal of Environmental Research and Public Health*, , 2024. 21: p. 620.
12. Hutchesson M, W.M., Hunt S, Ashton LM, Young MD, Patterson A, et al., Implementation of health and wellbeing policies and programs for students: Views of Australian universities. *Health Promot J Austr*, 2024. 35: p. 840-843.



Reaching people where they are – supporting integration of population and preventive health services into clinical care

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2. University of Newcastle, Newcastle, Australia

The Central Coast is home to a growing and ageing population, with unique challenges in population health status and forecast demand for healthcare services. The benefits both to individuals and to the health system of a shift towards greater prevention, early intervention and a focus on wellness is widely recognised.

One such example of this type of approach has been the roll out of an opportunistic vaccination service, which was piloted in inpatient settings and outpatient clinics across Central Coast Local Health District in 2023 and 2024. Evaluation of this service model, led by Authorised Nurse Immunisers, found it to be a relatively low-cost intervention which increased coverage rates of influenza and COVID-19 vaccinations in higher-risk target groups. Further, patient feedback indicated that the service overcame barriers for many in accessing vaccinations in the community. The service prioritised patients in geriatric & aged care, renal, rehabilitation, respiratory, cardiology, mental health and drug & alcohol services. It found inpatients had lower vaccination rates on admission compared to the general population and higher rates after service contact. In addition, outpatients were found to have low influenza vaccination rates in previous years but high rates of consent when the vaccination was offered opportunistically.

This workshop will explore this example (and potentially others) and draw on the experience of participants to discuss further ideas on how different types of prevention strategies can be embedded into frontline service delivery.

Towards a More Sustainable Health System: A Call to Action

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2. AIHI, Macquarie University, Sydney, Australia

Can we have a sustainable health system? This was a challenge posed by Professor Jeffrey Braithwaite from the Australian Institute for Health Innovation at Macquarie University for the Routledge Handbook of Climate Change and Health System Sustainability^[1] to ChatGPT. Its answer was 'yes' it was possible to meet the current healthcare needs of the population and consider the long-term social, environmental, and economic impacts of what health system do. Key solutions included: a stronger focus on preventative health, more efficient resource management, investment in health technologies and virtual care, use of renewable energy and infrastructure, mobilising community-based partnerships to support alternate care models, promoting health literacy, and establishing a supporting policy and governance structure.

Yet, as Braithwaite recounts, these solutions fall short of a roadmap for how to navigate the complex task of implementing such new systems of care. For example, how they might future-proof technological change, address workforce shortages, overcome inequalities in care, and the costs of care that are increasingly unaffordable. As health systems grow and become more complex themselves to meet demand, how do we now change the wheels of the speeding car to alter the direction we are taking?

This workshop will discuss what a 'call to action' might comprise, including the following questions:

1. What is meant by sustainable health care?
2. What are the components of a more sustainable health system?
3. What actions are needed, what new approaches to care must we take?
4. Where do we go from here?

References

1. Braithwaite J, Zurynski Y, Smith CK (Eds) (2024) Routledge Handbook of Climate Change and Health System Sustainability, Routledge, London

Building the value case for integrated care: the All-Inclusive Care for Older People (ALICE) program on the Central Coast, Australia

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3. Paxon Group, Sydney, Australia
4. HMRI, Newcastle, Australia
5. HNECCPHN, Broadmeadow, Australia

ALICE is a new model of care that has been co-designed with local residents to support the health and social care needs of all community-dwelling older people aged over 65 (or aged 50+ for Aboriginal and Torres Strait Islander community) living in priority Central Coast communities. The ALICE model comprises three elements: a 'Health Kiosk' (community hub) that provides a local, physical focal point for information, wellness support and health promotional events; a Link Worker service that provides relational continuity to high-needs older people; and a commitment to healthy place-making, which seeks to enable a built and natural environment that supports older people in living active, healthy lifestyles in their local community.

The presentation will describe and assess the establishment of ALICE as a translational research program, and provide the results of ALICE's co-design process to the period where it established the value case for its new model of integrated community care. Specifically, the presentation will examine the period between July 2022 and May 2024 where the ALICE program started from the development of its initial concept to the delivery of a coaxed benefits case and implementation plan. It will describe how ALICE used the Implementation Model for Integrated Care⁽¹⁾ to inform a stepwise process to build its value case, including: the results of a joint needs assessment, international evidence review, ongoing co-design process with local residents, and the building of an economic benefits case for ALICE and its phased implementation plan. The presentation will reflect on the challenges in building the business case for ALICE, including the effectiveness of its co-design methodology. It will conclude with a look ahead to the future development of ALICE as an ongoing program of care innovation on the Coast.

The ALICE Program is an initiative of the Hunter New England and the Central Coast Primary Health Network (HNECCPHN), Central Coast Local Health District (CCLHD), Central Coast Council and the Department of Regional New South Wales.

References

1. Goodwin N (2021) Change management. In Amelung V, Stein V, Suter E, Goodwin N, Nolte E, Balicer R (Eds) (2021) Handbook Integrated Care. 2nd Edition. Springer International Publishing, pp.247-269

Healthy Ageing

Community Healthy Ageing Initiative (CHAI): Improving ageing-related health literacy in diverse communities

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Modifiable lifestyle factors can help promote and maintain brain and cognitive health across the lifespan and reduce the risk of dementia in old age⁽¹⁾. Midlife interventions can reduce the risk of dementia, prolong years of healthy life, and compress years of ill health in old age⁽¹⁾, with important personal, social and economic benefits. Health literacy is critical for health-related self-efficacy^(2,3). Yet, 60% of adult Australians have low health literacy⁽⁷⁾ and poor understanding of risk factors for dementia and diseases of ageing⁽⁵⁾. This is most prominent amongst priority groups, as health information is not targeted to their needs⁽⁶⁾ and lifestyle activities are not culturally aligned⁽⁷⁾ or readily accessible. Community-based programs that promote customised and accessible health information, services and activities can improve health behaviours⁽⁸⁾ and support healthy ageing.

CHAI aims to address this critical gap in health information access and literacy by leveraging on our partnerships with community leaders and regional partner organisations to tailor healthy ageing information and programs to the needs of local communities. CHAI is envisaged as community-based health hubs, i.e., one-stop-shops for access to evidence-based health information in a social, approachable and interactive environment. CHAI-Hubs will be operated by community champions and supported by professional interns and their supervisors from diverse fields, include nursing, psychology, creative arts, nutrition etc.

We are currently trialling a number of small-scale hubs across urban and regional centres to co-design engaging activities and resources, and to establish the feasibility and acceptability of this model across diverse communities. We will report early data from surveys and focus groups collected from end user and professionals regarding current access to health information and preferences regarding content and context of access. We will highlight pilot hub activities and their evaluation using qualitative and quantitative data collected from community members, champions and interns. We will discuss opportunities to work with local community members, professional organisations and service providers to extend CHAI-Hubs across diverse communities in order to improve health and wellbeing in mid-late life and reduce the risk of diseases of ageing.

References

1. Livingston et al (2024) Dementia prevention, intervention, and care: 2024 report of the Lancet standing Commission. [doi.org/10.1016/S0140-6736\(24\)01296-0](https://doi.org/10.1016/S0140-6736(24)01296-0)
2. Coughlin et al (2020) Journal of Environment and Health Sciences, 6, 3061
3. Shahid et al (2022) Impact of low health literacy on health outcomes. BMC Hlth Services Res 22 1148
4. Australian Commission on Safety and Quality in Health Care Annual Report 2015–16, Sydney, 2016
5. Siette et al (2023) BMC Public Health 23, 1021
6. Consumers Health Forum of Australia Rural, Regional and Remote Roundtable Report (2022). https://chf.org.au/sites/default/files/220222_rural_regional_remote_roundtable_report_final.pdf
7. English et al (2023) Widening participation in creative activities for older adults: Report on a symposium held in Australia. In Voices: A World Forum for Music Therapy (Vol. 23, No. 3)
8. Chandler et al (2024) Deductive thematic analysis of experiences at an arts-based dementia risk reduction exhibit. Archives of Gerontology and Geriatrics, 123

Innovating Together: Living Lab Approaches for Healthy Ageing

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The Central Coast Health & Wellbeing Living Lab (CCLL) will hold a dynamic half-day workshop titled "Innovating Together: Living Lab Approaches for Healthy Ageing" at CCLHD Research & Innovation Symposium 2025. This interactive session introduces participants to living lab methodologies and their application in fostering innovation for healthy ageing.

The workshop will bring together various stakeholders, including healthcare professionals, older people, caregivers, technology innovators, and policymakers. Through rapid ideation techniques and co-creation activities, participants will experience firsthand the power of collaborative innovation in addressing complex challenges associated with ageing.

Key objectives of the workshop include:

1. Introducing living lab approaches and their potential in driving innovation for healthy ageing
2. Facilitating cross-sector relationship building and knowledge exchange
3. Engaging in collaborative project ideation focused on real-world ageing challenges
4. Identifying hidden assets within participant networks that can be leveraged for innovation
5. Demonstrating practical tools for stakeholder engagement and co-creation in living lab settings

Participants will leave the workshop with:

- A deeper understanding of living lab methodologies
- New cross-sector connections and potential collaborations
- Practical experience in rapid ideation and co-creation techniques
- Insights into leveraging diverse expertise for innovation in healthy ageing
- A collaboratively developed project concept addressing a key healthy ageing challenge

This workshop offers a unique opportunity to experience the transformative potential of living lab approaches in creating user-centered, impactful solutions for healthy ageing. Join us in this hands-on exploration of collaborative innovation methodologies that can shape the future of ageing well in our communities.

ORAL PRESENTATIONS

Emerging Therapies, Tools & Technologies

(OP1) Machine Learning Model Reveals Determinators for Admission to Acute Mental Health Wards from Emergency Department Presentations

Oliver Higgins^{1,2}, Stephan Chalup³, Rhonda Wilson^{1,2}

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2. CCLHD, Gosford, Australia

3. University of Newcastle, Newcastle, Australia

Background: This research addresses the critical issue of identifying factors contributing to admissions to acute mental health wards for individuals presenting to the Emergency Department (ED) with mental health concerns as their primary issue, notably suicidality.

Aims: This study aims to leverage machine learning models to assess the likelihood of admission to acute Mental Health (MH) wards for this vulnerable population. Data collection for this study used existing ED data from 01/01/2016 to 31/12/2021. Data selection was based on specific criteria related to the presenting problem.

Methods: Analysis was conducted using Python and the InterpretML machine learning library. InterpretML calculates overall importance based on the Mean Absolute Score, which was used to measure the impact of each feature on admission. A person's "Age" and "Triage category" are ranked significantly higher than "Facility identifier", "Presenting problem", and "Active Client".

Results: The contribution of other presentation features on admission show a minimal effect. Aligning the models closely with service delivery will help services understand their service users and provide insight into financial and clinical variations.

Conclusion: Suicidal Ideation negatively correlates to admission yet represents the largest number of presentations. The nurse's role at triage is a critical factor in assessing the needs of the presenting individual. The gap that emerges in this context is significant; MH triage requires a complex understanding of MH and presents a significant challenge in the ED. Further research is required to explore the role that machine learning can provide in assisting clinicians in assessment.

References:

1. Higgins, O., Chalup, S. K., & Wilson, R. L. (2024). Machine Learning Model Reveals Determinators for Admission to Acute Mental Health Wards from Emergency Department Presentations. *International Journal of Mental Health Nursing*, 1-16. <https://doi.org/10.1111/inm.13402 >



Emerging Therapies, Tools & Technologies

(OP2) Impact of Antimicrobial Stewardship on Antibiotic Prescribing for Community Acquired Pneumonia in the Short and Long Term

Juliet Leicester¹, Athiththa Satchithanandha¹, Victoria Kristensen², Clarence Ratnakumar¹, Josh Hokin¹, Richard Lee¹

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2. University of Newcastle, Gosford, Australia

Introduction: The antimicrobial stewardship (AMS) program has been implemented at Gosford hospital since 2014. One of its goals is to improve empirical antibiotic prescription, to reduce future antibiotic resistance.

Aim: The study aimed to evaluate the long-term effects of AMS on empirical antibiotic prescription for community-acquired pneumonia (CAP) after its initial implementation.

Methods: This was a retrospective study comparing consecutive patients admitted with CAP between May-July 2014 (pre-AMS), May-July 2015 (immediately post-AMS) and May-July 2023 (long term post-AMS). Adherence to empirical antibiotic treatment was evaluated against Australian guidelines, utilising the SMART-COP scores to determine pneumonia severity. The impact of AMS on antibiotic guidelines compliance between groups was analysed using Chi-square test and Kruskal-Wallis Test.

Results: 107 patients were identified in the pre-AMS period, 104 immediately post-AMS and 99 long-term post-AMS. Overall antibiotic compliance was significantly higher in the period immediately post-AMS implementation (60.6% vs 37.4% $p=0.001$), however rates declined in the long-term post AMS compared to pre-AMS (22.2% vs 37.4% $p=0.001$). Typical bacteria antibiotic compliance was lowest long-term post AMS, followed by pre-AMS and highest immediately post-AMS (24.2% vs 45.8% vs 67.3%; $p<0.001$). However, atypical organism antibiotic compliance was lowest pre-AMS, then long term post-AMS and highest immediately post AMS (55.1% vs 71.7% vs 76.9%, $p=0.002$). Between the three groups, there was no significant difference in rates of 30-day readmissions (19.3% vs 13.7% vs 10.9% $p=0.26$), mortality rates (11.1% vs 11.5% vs 11.2%, $p=0.99$) or mean length of stay (6.0 vs 7.8 vs 5.9 days $p=0.51$).

Conclusion: Antimicrobial stewardship improved adherence to empirical antibiotic prescription for CAP and reduced the use of broad-spectrum antibiotics in non-severe cases one year after implementation; however, its long-term efficacy has diminished. Adherence to guidelines does not significantly affect length of hospital admission, mortality, or readmission rates. Improvement to the AMS program and further research are necessary to enhance its effectiveness.

Emerging Therapies, Tools & Technologies

(OP3) Impacts of Sarcopenia on Prostate Cancer patients undergoing Docetaxel chemotherapy

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Background: Sarcopenia is an important prognostic factor in cancer patients due to its known association with increased treatment-related toxicity, morbidity, and mortality⁽¹⁾.

Aim: This study examines how sarcopenia affects chemotherapy outcomes in Australian prostate cancer patients.

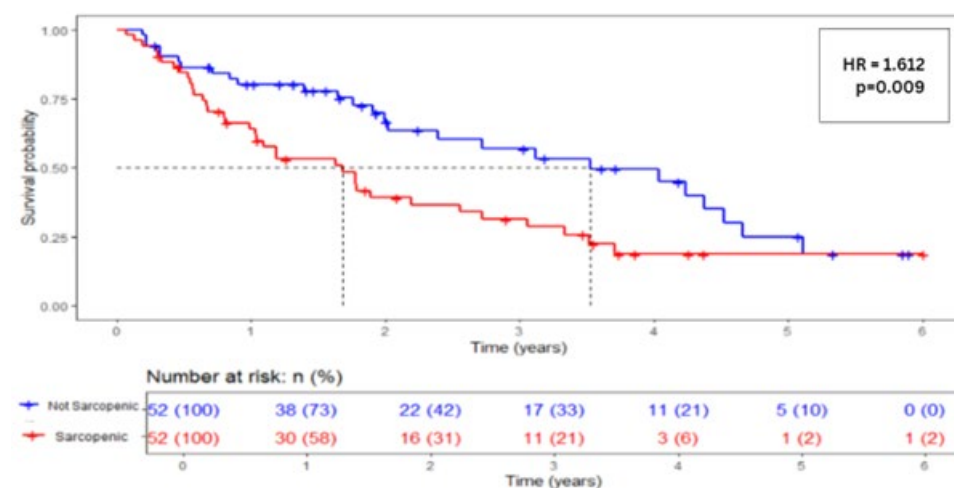
Methods: This retrospective study examined the impact of sarcopenia on patients receiving docetaxel chemotherapy in the CCLHD between 2013-2022. The presence of sarcopenia was determined by measuring the cross-sectional area of the psoas muscle at L3 vertebrae to calculate the Psoas Muscle Index (PMI) on computed tomography (CT) scan. Sarcopenia was predefined as $PMI < 5.7 \text{ cm}^2/\text{m}^2$ and additional data was obtained from patient records. Statistical analysis was used to determine the impact of sarcopenia on median overall survival (mOS) using Kaplan-Meier and Cox-proportional hazards methods. Additional comparisons were also drawn between castrate-sensitive prostate cancer (CSPC) and castrate-resistant prostate cancer (CRPC) groups.

Results: In this study, 104 patients were identified in which 50% (N=52) were determined to have sarcopenia. Sarcopenic patients had higher mortality risk than non-sarcopenic patients (HR 1.61 CI 1.12-2.32, $p=0.010$). The CRPC group was more likely to have sarcopenia than the CSPC group (57% versus 34%, $p=0.022$) and had a significantly lower body mass index (BMI) ($p=0.010$). Sarcopenic patients demonstrated significantly shorter mOS (416 vs 682 days, $p=0.009$). When analysed by castrate sensitivity, the CSPC group showed no difference in mOS based on sarcopenia status (633 vs 706 days, $p=0.095$). However, the CRPC group showed significantly shorter mOS in those with sarcopenia (380 vs 642 days $p=0.049$). There was no difference in hospitalisation on chemotherapy between sarcopenic and non-sarcopenic groups (N=26 vs 27, $p=0.845$).

Conclusion: Sarcopenia is a significant prognostic factor for OS in prostate cancer patients receiving docetaxel chemotherapy, specifically in those with CRPC. This highlights the need for larger-scale prospective studies and interventional strategies to address sarcopenia to improve treatment outcomes.

References

- Ohtaka A, Aoki H, Nagata M, Kanayama M, Shimizu F, Ide H, et al. Sarcopenia is a poor prognostic factor of castration-resistant prostate cancer treated with docetaxel therapy. *Prostate International*. 2019;7(1):9-14.



Emerging Therapies, Tools & Technologies

(OP4) Mental Health Care in the Digital Age: Exploring Attitudes and Perspectives of Mental Health Professionals Towards Using e-Mental Health Tools for Suicide Prevention

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Background: Suicide is a serious global health issue, and the leading cause of death among Australians aged 15 to 44¹. Mental health services are facing increasing demand for care, as well as workforce shortages, all of which have been exacerbated in the wake of the COVID-19 pandemic. Electronic Mental Health (eMH) tools, such as apps and online programs, offer a promising adjunct to the delivery of mental healthcare, including suicide prevention. However, in the context of suicide prevention, there is a gap in the research regarding factors that influence the likelihood of health professionals integrating eMH tools into their practice.

Aim: This study aimed to better understand the attitudes and perspectives of mental health professionals towards using eMH tools for suicide prevention, and to gain insights into strategies that may encourage their greater adoption and expanded use of these tools in practice.

Methods: A diverse group of mental health professionals were recruited to focus groups from the Mental Health Service of Central Coast Local Health District in NSW, Australia, between July and September 2023. All focus groups were recorded and transcribed verbatim, and thematic analysis was carried out, guided by the Consolidated Framework for Implementation Research².

Results: Mental health professionals expressed overall positive attitudes toward using eMH for suicide prevention, with a majority willing to use these tools in practice as an adjunct to care. Analysis is ongoing and suggests that barriers to use include concerns about time constraints, the availability of appropriate eMH tools for suicide prevention, and the suitability of these tools for the differing abilities and needs of mental health consumers. Participants also put forward strategies to encourage use, including the provision of a curated list of evidence-based eMH tools.

Conclusion: The study's findings will provide insights into the issues that influence the use of e mental health tools for suicide prevention by mental health professionals. The knowledge gained from this study aims to inform strategies to support the better integration of e-mental health tools for suicide prevention into professional practice, as well as improving the quality and experience of mental healthcare in NSW.

References

1. Australian Institute of Health and Welfare. Suicide and self harm monitoring 2022 [updated 03/11/2023]. Available from: <https://www.aihw.gov.au/suicide-self-harm-monitoring/data/deaths-by-suicide-in-australia/suicide-deaths-over-time>.
2. Damschroder LJ, Reardon CM, Widerquist MAO, Lowery J. The updated Consolidated Framework for Implementation Research based on user feedback. *Implementation Science*. 2022;17(1):1-16.

Emerging Therapies, Tools & Technologies

(OP5) Evaluation of a Community Breastfeeding Assessment Tool

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Background: Most women commence motherhood intending to breastfeed their baby; however, many do not reach their breastfeeding goals⁽¹⁾. Breastfeeding support is a core component of child and family health (CFH) nursing. However, the education in post graduate child and family health nursing courses includes limited breastfeeding education. Therefore, many nurses commence in the CFH role with limited understanding about how breastfeeding works, how to assess a breastfeed and how to support women achieve their breastfeeding goals.

A literature review identified 21 breastfeeding assessment tools^(2,3) but none were comprehensive enough to capture all the variables possible in the community setting. A new Community Breastfeeding Assessment Tool (CBAT) was developed. The CBAT has been designed for both new and experienced CFH nurses, in a variety of settings. The CBAT is accompanied by two pages of Consideration for the Clinician. These are tips and information to be considered by the nurse. It can be used to assist a breastfeeding assessment, to promote reflection and identify learning needs, and guide documentation.

Aims:

To evaluate if the Community Breastfeeding Assessment Tool across two LHDs, CCLHD and WSLHD, and identify if the CBAT is:

1. Fit for purpose
2. Enhances CFH nurses' breastfeeding knowledge
3. Builds CFH nurses' confidence
4. Easy to use.

Methods: Following an education and information strategy, the nurses will be provided with the CBAT to use in their clinical setting. A link to a REDCap survey will be emailed to all CFH nurses.

Results: Data collection is planned to be completed by December 2024. Results will be available at the Symposium.

Conclusions: The CBAT will be revised to better meet the needs of CFH nurses. It will be submitted to peer reviewed journals to address the current gap in the literature.

The project was made possible by a 2023 CCLHD "Caring for our Future" Research Grant.

References

1. Moss, K. M., et al. (2021). "Which Australian women do not exclusively breastfeed to 6 months, and why?" *Journal of Human Lactation* 37(2): 390-402.
2. Pados, B. F., et al. (2016). "Assessment tools for evaluation of oral feeding in infants younger than 6 months." *Advances in Neonatal Care* 16(2): 143-150.
3. Saxon, J. (2010). Review of breastfeeding assessment tools. Management of Acute Malnutrition in Infants (MAMI) Project. C. K. Angood, M. McGrath, M. Shoham, J. UNICEF Inter-Agency Standing Committee: 139-152.

Quality & Effectiveness of Safe Patient Care

(OP6) The CLEAning and Enhanced Disinfection study: The CLEEN study

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Background: Despite the impact of healthcare-associated infections (HAIs), there is a lack of randomised control trials (RCT) to inform prevention activities. To date, trials evaluating the impact of cleaning and disinfection have focussed on evaluating routine and or discharge cleaning. Contaminated shared medical equipment presents an important transmission route and a point of contention for cleaning responsibility –yet it is rarely studied. The CLEEN study is the first RCT to evaluate the impact of improving the cleaning of shared medical on HAIs.

Aims: The CLEEN study assessed the effectiveness of an environmental cleaning bundle, focusing on how enhanced cleaning and disinfection of shared medical equipment affected the rate of HAIs.

Methods: The CLEEN study used stepped wedge randomised controlled design in 10 wards of an Australian hospital over 36 weeks. The intervention consisted of three additional hours per weekday for the dedicated cleaning and disinfection of shared medical equipment on each ward, in addition to education, audit and feedback. The primary outcome was the effectiveness of the intervention in reducing all HAIs as measured by fortnightly point prevalence studies. Analysis estimated the within-ward change in the primary outcome before and after intervention exposure using a generalized linear mixed model. The secondary outcomes included the thoroughness of cleaning assessed using fluorescent marker gel. Cleaning staff were blinded to the placement of the gel. The data collector was blinded to intervention allocation.

Results: The findings from this study are published in The Lancet Infectious Diseases¹. 5,002 participants were included. In unadjusted results, 433 of 2,497 (17.3%) and 301 of 2,508 (12.0%) (control vs intervention) participants acquired a HAI. The intervention was associated with a significant reduction in all HAIs, OR 0.61 (95%CI 0.47-0.81, $p < 0.001$), corresponding to an adjusted absolute reduction of 5.1% (95%CI 2.3-8.2), which was consistent in sensitivity analyses. From 1,786 cleaning audits, the intervention was associated with an increase of shared medical equipment cleaned OR 6.45 (95%CI 4.51 to 9.22).

Conclusion: Additional cleaning of shared medical equipment was effective at reducing HAIs. Our work demonstrates the importance of cleaning shared medical equipment and will inform hospital cleaning policy and practice globally.

References

1. Browne K, White NM, Russo PL, Cheng AC, Stewardson AJ, Matterson G, Tehan PE, Graham K, Amin M, Northcote M, Kiernan M. Investigating the effect of enhanced cleaning and disinfection of shared medical equipment on health-care-associated infections in Australia (CLEEN): a stepped-wedge, cluster randomised, controlled trial. The Lancet Infectious Diseases. 2024 Aug 13.

Quality & Effectiveness of Safe Patient Care

(OP7) SAFER-IVK: Safety, Appropriate potassium route, Follow-up, Efficient dosing, Risk management, Reducing Infusion discomfort, Vascular access maintenance, and Knowledge promotion

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Background: Hypokalaemia is a common electrolyte disorder among hospital patients. It is often treated with intravenous (IV) potassium replacement, which can cause significant patient discomfort¹. Errors in preparing and administering IV potassium have led to significant patient safety initiatives to reduce patient harm². However, less is known about how clinicians manage the pain associated with IV potassium.

Aims: To investigate the clinical management and prescribing patterns of IV potassium infusions in a regional Local Health District in New South Wales, Australia.

Methods: The study utilised the Plan-Do-Study-Act (PDSA) methodology through two cycles of continuous quality improvement. We gathered information from four sources:

1. Literature Review
2. Procurement Audit
3. Locally developed Staff Survey, and
4. Electronic Medical Record Audit.

Results: During the first PDSA cycle, we conducted a rapid literature review by searching academic databases, grey literature, and Twitter to find relevant references (n=26). This literature and pharmacy procurement system audit data helped us develop a case-based staff survey. The survey was conducted by 177 staff members (response rate 10%), revealing that 74% of staff reported patients' pain as a barrier to managing potassium during infusion. It also showed a variety of pain management practices by staff.

For the second PDSA cycle, we created a clinical audit tool. We used the EMR013 audit and will analyse 100 medical records of patients in departments with high usage of prescribed intravenous potassium from December 2023 to March 2024. This audit will focus on each infusion's use, appropriateness, discomfort, and pain management practices.

Conclusion: This quality improvement work provides insight into the frequency and outcomes of patient-reported pain associated with IV potassium administration, the patterns of its clinical usage, and management strategies employed by clinicians to address the pain, a subject currently not well-documented. These results show that improvements are necessary to achieve SAFER-IVK management practices. Continued research is essential to address barriers, test interventions, and refine clinical practice guidelines.

References

1. Cacioppo, F., Reisenbauer, D., Herkner, H., Oppenauer, J., Schuetz, N., Niederdoeckl, J., Schnaubelt, S., Gupta, S., Lutnik, M., Simon, A. and Spiel, A.O., 2022. Association of intravenous potassium and magnesium administration with spontaneous conversion of atrial fibrillation and atrial flutter in the emergency department. *JAMA Network Open*, 5(10), pp.e2237234-e2237234.
2. Van de Vreede, M.A., Wilson, S.G. and Dooley, M.J., 2008. Intravenous potassium chloride prescribing and administration practices in Victoria: an observational study. *Medical journal of Australia*, 189(10), pp.575-577.

Quality & Effectiveness of Safe Patient Care

(OP8) Enhancing Medication Safety, Governance and Cost Efficiencies: The Impact of the Pharmacy PROcurement and FORMulary Improvement (PRO-FORM-I) Initiatives at CCLHD

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Background: The Pharmacy PROcurement and FORMulary Improvement (PRO-FORM-I) Initiatives project was initiated by the CCLHD Pharmacy Department to enhance medication inventory management, governance, and efficiency, while achieving significant cost savings. Historically, medication procurement had not been prioritised despite its considerable budget and potential for improvement. Additionally, major changes in state medication governance practices called for local attention to ensure compliance.

Aims: To implement the PRO-FORM-I initiatives within CCLHD and assess their effectiveness and impact on medication governance practices, cost efficiency and medication safety.

Methods:

The project encompassed three key initiatives:

1. implementation of the statewide NSW Medicines Formulary,
2. introduction of new state-wide pharmaceutical contracts, and
3. establishment of a structured Pharmacy Procurement Saving Strategy (PPSS).

A dedicated team was formed to oversee these transitions, prioritizing stakeholder engagement, education, and risk assessment to ensure patient safety. Reviews were undertaken at go-live, six months and twelve months to assess impact, outcomes and outstanding practice gaps.

Results: The initiatives resulted in changes to over 2,000 medication products and significant modifications to medication governance structures. The project had achieved over \$1.7 million in cost savings at 6 months, while education efforts enhanced medication safety throughout the implementation process and provided ongoing benefits through the generation of new procedures and a Formulary App functionality. The structured PPSS also allowed for targeted cost-saving opportunities and rationalization of inventory, leading to significant, state-leading improvements in procurement compliance and medication inventory management.

Conclusion: The PRO-FORM-I initiatives represented a significant advancement in the quality and safety of patient care at CCLHD. By transforming procurement processes and governance frameworks, the project has established a model for ongoing improvement in medication safety and efficiency. The collaborative approach fostered among diverse stakeholders has not only ensured a relatively smooth transition to the NSW Medicines Formulary but has also highlighted the critical role of pharmacy in optimizing patient care. Continued focus on these initiatives promises further enhancements in patient outcomes and cost management, ultimately reinforcing the importance of effective medication governance in healthcare settings.

Quality & Effectiveness of Safe Patient Care

(OP9) Peer workforce development in mental health: collaborative research from regional Australia

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Aim: Identify key challenges and support for long term peer workforce development in mental health at a local health district level.

Methods: Action research using qualitative interviews of stakeholders contributing to peer workforce development in a regional health district in Australia.

Results: Participants across stakeholder groups agreed on key cultural, systemic, and structural success factors and hindrances. Structural recognition and integration of peer work as an equal contributor in mental health must be supported effectively at a local health district level for workforce development.

Conclusions: Research design supported open and equal discussion between stakeholders across the system providing a nuanced understanding of effectively supporting long-term peer workforce development. Equalising contributions of knowledge and experience opened up space for future co-design at local system level ensuring peer worker voices are included in decision-making, planning and implementation.

Quality & Effectiveness of Safe Patient Care

(OP10) Professional Quality of Life is related to Emotional Intelligence, Self-Care, and Work Conditions: Findings from a moderated mediation analysis

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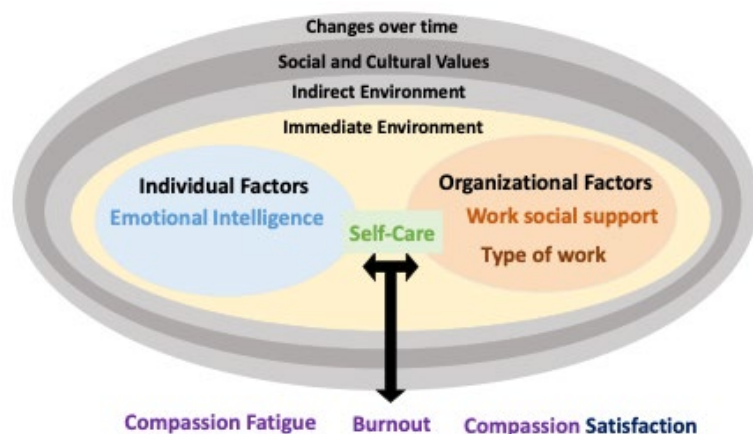
Background: Healthcare workers are at increased risk of experiencing poor professional quality of life, which negatively affects their health and the safety, quality, and cost of care. Improving burnout, compassion fatigue and compassion satisfaction – the three components of professional quality of life – is complex and requires simultaneously addressing both organisational and individual factors.

Aim: This study examined the relationships between professional quality of life, emotional intelligence, self-care, workplace social support and type of work.

Methods: A total of 343 Australian healthcare workers completed an online survey with validated questionnaires following a cross-sectional correlational design. Descriptive statistics, bivariate correlations, and group comparisons were analysed in SPSS. A moderated mediation model of relationships supported by theoretical and empirical evidence was tested using PROCESS macro.

Results: Emotional intelligence, self-care, and workplace social support were positively correlated with compassion satisfaction and negatively correlated with burnout and compassion fatigue. Differences in scores between direct providers, non-direct providers, and managers were found. The indirect effect of emotional intelligence via self-care was significant on all professional quality of life components, with higher effects for the professional aspects of self-care. The direct effect of emotional intelligence was significant on compassion fatigue, but only on burnout for regulation of emotions and on compassion satisfaction for use of emotions. The conditional direct and indirect effects (via self-care) of emotional intelligence were also significant for both moderators (type of work and workplace social support). Yet, the effects on burnout and compassion satisfaction decreased and changed the direction for non-direct providers for certain levels of support – especially for supervisor support and a sense of community.

Conclusions: Emotional intelligence, self-care, and workplace social support have a protective effect on each other and professional quality of life with significant differences between components and groups of workers. Engaging in personal self-care practice appears not sufficient to manage work-related stress and needs targeting professional self-care. Specific components of emotional intelligence influence different outcomes through different pathways. Working conditions can decrease, reduce, or increase burnout and compassion satisfaction, depending on the type of provider receiving the support. Practical and theoretical implications are discussed.



Quality & Effectiveness of Safe Patient Care

(OP11) Assessing the impact of Partnered Pharmacist Medication Charting in Wyong Emergency Department on Patient Safety and Multidisciplinary Staff Satisfaction

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Background: Partnered Pharmacist Medication Charting (PPMC) offers a progressive model of charting which attempts to improve medication management by pharmacists charting in the emergency department (ED). PPMC has not been widely trialled within NSW.

Aims: To assess the value and sustainability of PPMC as an alternative to medical officer (MO) prescribing. This includes impacts on medication safety, ED-access measures, and MO/nursing/pharmacist knowledge and satisfaction.

Methods: A one-month trial of PPMC was conducted in Wyong ED enabled by a Caring for the Coast Grant. This involved two pharmacists in ED: one to perform PPMC and another to take Best Possible Medication Histories (BPMH) as per standard-care with MO charting. Qualitative surveys were completed by all pharmacists and ED MOs/nurses.

Results: Over 18-weekdays pharmacists saw 602 patients; 79 receiving PPMC. Standard-care patients showed 3 errors/patient compared to 0.05 errors/patient for PPMC. PPMC took an average of 15-minutes compared to 13-minutes for standard-care. 100% MOs/67% nurses preferred PPMC. 63% MOs/67% nurses stated PPMC reduced their time requirements to care for patients. 100% MOs/nurses stated it improved their relationship with pharmacy. Nurses reported an increase in knowledge across a variety of areas. Both PPMC pharmacists showed an increase in confidence discussing patients with MOs. Both reported an increase in job satisfaction and improvements in working relationships with ED. The pharmacists reported patient-centred changes to their practice. 60% non-PPMC pharmacists stated PPMC reduced their workload. 100% pharmacists preferred PPMC and stated they would like to become credentialled. There was a reported increase in knowledge amongst pharmacist across a variety of areas. Impacts on ED-access measures are yet to be analysed.

Conclusion: This innovation allows pharmacists to lead medication management and work collaboratively with other professionals to improve knowledge and practices for better patient care. PPMC can improve ED charting including safety, adherence to best-practice and timeliness. Given the positive effects of PPMC shown in Wyong ED this program has now been rolled out in Gosford ED as part of a Ministry of Health statewide pilot in 2024-2025.



Improving Health & Wellbeing in the Community

(OP12) Central Coast Publicly Funded Homebirth Model: Outcomes and experiences for women, families and midwives in the first twelve months

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Introduction: There is resounding global evidence that publicly funded homebirth is safe for women without medical complexity who choose this model of primary maternity care^{1,3,4}. Despite this evidence, healthcare organisations remain challenged by the perceived risk surrounding labour and birth, ironically perpetuated by the medical interventions undertaken in the hospital environment². As the Central Coast Local Health District approaches the one-year anniversary, local data has demonstrated holistic wellness outcomes and positive patient experiences for our community, further highlighting the model's holistic safety for women and families.

Method: A mixed methods analysis of outcomes and experiences for women, neonates and midwives was undertaken across the first 12 months of a newly implemented publicly funded homebirth service. Data was collected throughout the year and cross checked for authenticity. Patient reported experience surveys were sought, de-identified and explored using a thematic analysis. Midwives were also interviewed to understand their lived experiences.

Results: A quantitative analysis revealed significantly improved outcomes when compared to standard care in the hospital setting. Of the 53 women who commenced labouring at home, 46 had a successful homebirth. Women opting to labour and birth in the home had a 96% normal vaginal birth rate, when compared to 58 % in standard care in the hospital setting. The homebirth physiological third stage rate was 74%, with a postpartum haemorrhage rate of 6.5%. Severe perineal tear rate was 3.7% for the year which was significantly less than in the hospital environment.

When considering women's experiences, women rated their care as consistently exceeding expectations. Themes included a sense of control, feeling heard in their choices and self-determined decision-making being valued. Midwives have also unanimously benefited from the mutually beneficial partnerships developed with women, working to a full scope of midwifery practice and offering primary maternity care, underpinned by the social model of midwifery.

Conclusion: Publicly funded homebirth, underpinned by midwifery led continuity of care significantly improves physical outcomes for women when compared with mainstream maternity care. These holistic wellness outcomes demonstrate an opportunity for all women without medical complexity to be offered homebirth, supported by a known midwife.

References

1. Sassine, H., Burns, E., Ormsby, S., & Dahlen, H. G. (2021). Why do women choose homebirth in Australia? A national survey. *Women and Birth*, 34(4), 396-404.
2. White, C., Tarrant, M., Hodges, R., Wallace, E. M., & Kumar, A. (2020). A pathway to establish a publicly funded home birth program in Australia. *Women and Birth*, 33(5), e420-e428.
3. Zielinski, R., Ackerson, K., & Low, L. K. (2015). Planned home birth: benefits, risks, and opportunities. *International Journal of Women's Health*, 7, 361.
4. Hauck, Y., Nathan, E., Ball, C., Hutchinson, M., Somerville, S., Hornbuckle, J. & Doherty, D. (2020). Women's reasons and perceptions around planning a homebirth with a registered midwife in Western Australia, *Women and Birth*, 33, (1), e39-e47

Improving Health & Wellbeing in the Community

(OP13) Acceptability and feasibility of the Domestic, Family and Sexual Violence Primary Care Outreach Team Central Coast pilot: A qualitative study

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Background: Access to quality primary care is an area of particular concern for families experiencing domestic, family and sexual violence (DFSV). There are limited examples of integrated healthcare programs which aim to increase access to quality primary care for women who have experienced DFV. The Hunter New England and Central Coast Primary Health Network has developed a proactive and integrated primary care outreach service on the Central Coast for women affected by family violence and their children.

Aim: This study aimed to explore the experiences of women who accessed the DFSV Primary Care Outreach Team Program ('service users'), and the service providers involved in delivering the program.

Methods: A qualitative design was used, involving interviews with 8 service providers and 6 service users to understand their experiences of the program. Interviews were guided by a semi-structured interview schedule which explored experiences of the program, informed by Levesque's Conceptual Framework of Access to Health¹. Levesque's framework takes a holistic view of healthcare access, and considers the approachability, acceptability, availability/accommodation, affordability, and appropriateness of healthcare. The interviews were analysed using the seven-step Framework Method², a pragmatic approach, popular in health research.

Results: Service providers and users reported high levels of satisfaction with the program. Outreach into refuge made care more approachable, and care was delivered for free, to women and children who would otherwise be unable to pay. Analysis of the interviews found that the program allowed a skilled outreach team to work flexibly to support women and children to engage with healthcare. Themes relating to the feasibility of the program included the

- 1) benefits and challenges of working in a multidisciplinary outreach team,
- 2) how the program was implemented and ideas for expansion, and
- 3) the complexities of supporting women and children experiencing DFSV.

Conclusions: The acceptability and feasibility of this program to both service users and providers indicates that it is a promising avenue to address health care needs of families experiencing DFSV. These findings can inform future policy and practice decisions surrounding providing high quality and trauma informed primary care to those experiencing DFSV.

References

1. Levesque, J-F., Harris, M.F., Russell, G. (2013). Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *International Journal of Equity in Health*.12(1):18.
2. Gale, N.K., Heath, G., Cameron, E. et al. (2013). Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol* 13, 117. <https://doi.org/10.1186/1471-2288-13-117>.



Improving Health & Wellbeing in the Community

(OP14) The role experiences, challenges, organisation, and competencies of care navigators in the space between health and social care systems: a review of reviews

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Background: Navigating health, social, and community care systems is complex, and can overwhelm individuals and lead to poor health and wellbeing outcomes. A growing workforce of care navigators are employed to assist individuals in navigating between health and social care systems, however, the organisation and experiences of this unique workforce are poorly understood.

Aim: The aim of this umbrella review is to synthesise the breadth of care navigator roles that operate between health and social care systems, focusing on role scope, challenges, organisation, competencies, and education of the care navigator.

Method: A review of reviews was conducted (PROSPERO: CRD42024572605). MEDLINE, CINAHL, Scopus, and PsycINFO were searched from 1 Jan 2019 to 31 May 2024. Reviews were included if they discussed the role or organisational structure of workers that coordinated services between health and social care systems.

Results: Twenty-seven reviews were included in this umbrella review, and mostly used scoping (n=13) or systematic (n=8) review methodology. Over one-third of reviews (n=10) focused on social prescribing programs delivered in primary care; other settings included hospitals, and community health settings.

Preliminary data indicates that the role titles of care navigators varied significantly; common terms were link worker, care coordinator, patient navigator, health mediator, and intermediary. There was large variability in scope of practice, however, navigators commonly facilitated coordination between health and social care services and provided educational/motivational support to individuals. Care navigators were typically trained prior to commencing their role. Teamwork and problem solving were identified as key competencies for working in multidisciplinary teams, but some reviews highlighted a lack of organisational and emotional support for these critical roles.

Conclusions: The high variation in terminology, scope, and organisational support of care navigators implies this growing workforce may operate in program siloes, with few overarching frameworks or guidelines. Scope, qualifications, and barriers and enablers related to care navigation roles are commonly addressed, however, there is little discussion of the experience of the care navigator. As care navigation services continue to spread and be delivered at scale, policy and organisational structures should be developed and implemented to reduce fragmentation and support this growing workforce.

Improving Health & Wellbeing in the Community

(OP15) “It Sounded a Lot Simpler on the Job Description”¹: an Evidence Review on Health and Social Care Navigators in General Practice

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Background: The sustainability of general practice is challenged by factors such as general practitioner shortages and increasing numbers of patients with complex health and social needs. Employment of health and social care navigators (CNs), also referred to as link workers and care coordinators, may help to manage these issues.

Aims:

This review aimed to answer four questions:

1. What are the conditions needed for successful integration of CNs into general practice?
2. What tasks do CNs in general practice undertake?
3. What is the experience of the role for patients, other practice staff and the CNs themselves? and
4. What is the impact of CNs in general practice?

Methods: Seven databases plus Google and selected websites were searched between May and October 2024. References were screened by two reviewers at both title/abstract and full text stages. Included publications: described professionally qualified CNs based in or employed by general practices, operating across both health and social care; reported CN programs operating for at least 6 months; used quantitative, qualitative or mixed methods; were written in English and published from 2019 onwards. Extracted data was presented as a narrative summary.

Results:

Thirty-two publications were included in the review. Preliminary results indicate that:

1. Successful integration of CNs into general practice depends on factors such as clear communication of role responsibilities, expectations and boundaries; presence of a GP champion for the navigation program; appropriate professional background and personal attributes of CNs; and appropriate governance, funding and reporting.
2. CNs undertake a wide range of tasks in relation to patients, practice staff, other health providers, and community organisations. Establishing positive relationships with patients, identifying goals and navigating both health and social care systems are key.
3. CN services were acceptable to, and valued by, patients; there was mixed evidence regarding the long-term feasibility of CN programs.
4. The impact of CNs in general practice is unclear.

Conclusion: Current evidence provides useful guidance for successfully implementing CN programs in general practice. However sustained investment in, and rigorous evaluation of, general practice-based CN programs is needed to establish their impact.

References

1. Rhodes J, Bell S. "It sounded a lot simpler on the job description": A qualitative study exploring the role of social prescribing link workers and their training and support needs (2020). *Health Soc Care Community*. 2021;29(6):e338-e47.

Improving Health & Wellbeing in the Community

(OP16) Thirsty? Choose Water! Primary Schools –2024 Pilot

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Background: Sugar sweetened beverage (SSB) consumption remains a public health nutrition concern for children and adolescents. As children age, daily SSB consumption more than doubles from 4.7% among 4–8-year-old children to 12.4% of 14–17-year-olds. Thirsty? Choose Water! (TCW), a whole of secondary school approach, promotes water as a drink and discourages SSB intake, with research demonstrating positive impacts on adolescent SSB consumption.

Aim: To translate TCW into primary school (PS) settings as this presents a valuable opportunity to address the concerning trend in SSB consumption, aligning with state-wide LiveLifeWell@School health promotion strategy for PS.

Methods: Central Coast LHD applied Australian and international evidence, adapting the secondary school TCW project for the PS setting. Five local health districts (LHDs) expressed interest in collaborating and to maximise efficiencies a TCW PS Working Group was established. A scoping survey explored the level of interest among PS staff in developing a water promotion program. From these results, each LHD committed to work with a small number of interested schools on a pilot program using the Health Promoting Schools Framework, testing resources and considering an Aboriginal cultural approach.

Results: 11 primary schools with a total of 2730 students and their families participated in the pilot. Results are currently being analysed in relation to the CWS usage, student knowledge, teacher feedback on resources and the Aboriginal component. Early indications show translation of TCW to the primary school settings has positive outcomes and acceptability.

Conclusion: Collaboration across LHDs facilitates depth of understanding of NSW PS perspectives, development of evidence-based health promotion initiatives to address health needs and maximises efficiency in the absence of additional funding. The integration of LHD perspectives into the TCW PS approach supports the development and evaluation of a practical and relevant approach for promoting water and reducing SSBs in schools across NSW.

References

1. Australian Bureau of Statistics (2018). National Health Survey, 2017-2018.
2. Gowland-Ella, J, Batchelor, S, David, M, Lewis, P, Kajons, N. The outcomes of Thirsty? Choose Water! Determining the effects of a behavioural and an environmental intervention on water and sugar sweetened beverage consumption in adolescents. Health Promot J Austral. 2023.



Improving Health & Wellbeing in the Community

(OP17) Mental Health Allied Health Community Team: Supporting transitions to primary care after mental health crisis

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Background: In Central Coast Local Health District (CCLHD), people who experience mental health crisis in the community are referred to the Mental Health (MH) Acute Care Team (ACT). They receive an average of two weeks of crisis support and many are discharged back only to their GP. The ACT has faced a significant increase in demand since 2020, particularly from young adults. There is a revolving cycle where these consumers cannot access the care they need in the community and one third of discharges from the ACT are repeat discharges within three months. This project considered how vacant allied health positions could be used to address the gap in care for CCLHD adult MH consumers in the community, to support mental health recovery and transitions from the ACT to primary health care.

Aim: To develop an innovative, evidence-based and sustainable allied health model of care for consumers of the mental health community ACT to facilitate seamless transitions to Primary Care by June 2025.

Methods: A Clinical Redesign methodology was utilised, which is an evidence-based framework for innovation facilitated through the Agency for Clinical Innovation and University of Tasmania. Clinical Redesign involved a five-stage process:

1. Initiation, where a clear project plan was developed;
2. Diagnostics, involved understanding the current state through consumer experience surveys, focus groups, stakeholder interviews, process mapping, consumer engagement meeting, complaints data and analysis of electronic medical record (eMR) discharge data;
3. Solutions, including stakeholder workshops, staff forum presentation with survey, literature review, benchmarking with other LHDs, solutions prioritisation and concept testing;
4. Implementation of solutions;
5. Sustainability. Stakeholders were identified and engaged through each stage, including the Lived Experience Advisory Group (LEAG).

Conclusion: A stepped-care model of allied health intervention has been developed to support more care in the community for adults being discharged from the MH ACT following a mental health crisis.

Improving Health & Wellbeing in the Community

(OP18) Pre-existing diabetes in pregnancy, a multidisciplinary model of care

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Background: Women with type 1 or 2 diabetes in pregnancy (DIP) are best supported by a multidisciplinary team (MDT) as early as possible in their pregnancy to achieve best maternal and foetal outcomes⁽¹⁻³⁾. Poorly controlled DIP has negative effects on maternal physical and psychological wellbeing, and potential adverse consequences for the foetus and the long-term health of the baby⁽²⁾. The optimisation of maternal dietary intake minimises neonatal complications attributed to postprandial hyperglycaemia^(1,2,4). Dietitian led nutrition education should be individualised based on stage of pregnancy and pre-pregnancy Body Mass Index (BMI)⁽²⁾. Managing DIP takes an emotional toll. Women should be empowered and encouraged in a supportive environment⁽¹⁾.

Aims:

1. For patients with pre-existing DIP within CCLHD to be assessed by the dietitian within 7 days of referral.
2. To refer 100% of patients with pre-existing DIP to the dietitian.

Methods: A retrospective audit identified there has been a 30% increase in pre-existing DIP over the last 3 years, with no clear referral process for dietetics in place. As a result of this audit an evidence-based review was conducted, a model of care was established and implemented in May 2024.

Results: From March 2022 until September 2023, 61 women with pre-existing DIP were seen by Diabetes Antenatal Services within the District, 28% of these were not seen by the dietitian. Of those seen by the dietitian, the time from referral to assessment averaged 10.5 days. The program was piloted in May 2024, however time to assessment increased (average 18.5 days) and 57% of patients were not assessed. System changes were identified, and the model of care adapted. From June-August 2024, time to assessment improved to 5 days with no patients missed. This improvement was contributed to being physically present in clinic allowing more efficient MDT involvement.

Conclusion: Creating an evidence-based model of care and linking with an established multidisciplinary clinic, allowed the provision of an equitable service within current resources. This benefits our patients, staff and the District as we are providing more efficient, timely person-centred care.

References

1. Anderson A. Diabetes and Nutrition Education for Pregnant Women With Preexisting Diabetes in Urban Alaska: A Retrospective Quality Improvement Study. 2020.
2. Rudland VL, Price SA, Callaway L. ADIPS position paper on pre-existing diabetes and pregnancy. Australian and New Zealand Journal of Obstetrics and Gynaecology. 2020;60(6):831-9.
3. Taylor C, McCance DR, Chappell L, Nelson-Piercy C, Thorne SA, Ismail KM, et al. Implementation of guidelines for multidisciplinary team management of pregnancy in women with pre-existing diabetes or cardiac conditions: results from a UK national survey. BMC Pregnancy and Childbirth. 2017;17(1):1-9.
4. ElSayed NA, Aleppo G, Aroda VR, Bannuru RR, Brown FM, Bruemmer D, et al. 15. Management of diabetes in pregnancy: standards of care in diabetes — 2023. Diabetes Care. 2023;46(Supplement_1):S254-S266.

Improving Health & Wellbeing in the Community

(OP19) Self-administration of subcutaneous Bortezomib (SLAM-B) in the home setting in regional NSW: A feasibility study

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Background: Bortezomib-based regimens for patients with multiple myeloma (MM) are administered in cancer day units (CDU), requiring travel to hospital 1-2 times weekly. In addition to high health care costs associated with therapy, travel adds to the financial and treatment burden experienced by the individual and family. Patients and carers in a regional hospital, reported anxiety provoked by frequency of hospital visits, waiting times, travel and parking.

Aim: This study examined the feasibility, safety and acceptability of a new model of care (MOC) enabling regional patients to self-administer subcutaneous (SC) bortezomib at home, supported by guidelines, educational resources, competency/telehealth tools, and safety protocols.

Methods: Twenty-three MM patients participated in a prospective mixed-methods study. Patients or caregivers underwent an education period and competency assessments before home administration. Patient experiences were explored through patient reported experience measures, appointment and a MOC survey. Semi-structured interviews were conducted with 8 patients. Costs were analysed for manufacture, time burden, chair time and staffing. Pre/post Self-Injection Assessment Questionnaires (SIAQ) were completed at baseline, and week 1 & 4. Safety and efficacy were evaluated using pathology results and adverse event reports. Neuropathy assessment was completed using PRO-CTCAE. Staff acceptability was explored using a survey.

Results: Patients ranged from 50–87 years, with 81% male and 57% on their first line of therapy. Twenty-one patients completed the study. SIAQ satisfaction scores showed significant improvement over time (baseline vs T1, $p = 0.0046$; vs T4, $p = 0.0139$). Self-administration required 30 minutes of the patient's time weekly compared to 1-3 hours in the CDU. Interviews revealed that the self-administration program significantly improved patients' daily lives, with time savings the most frequently reported benefit. Cost analysis indicated higher expenses for CDU-administered bortezomib (\$308 per cycle) compared to self-administration (\$216 per cycle).

Conclusion: Self-administration of SC bortezomib is a safe and feasible option for patients with MM in a regional setting. There is a high level of satisfaction from patients/carers. This model reduced the treatment burden, allowing patients and families to dedicate more time to meaningful activities. The comprehensive design of the MOC is potentially transferable and adaptable to other drugs and tumour streams.

Improving Health & Wellbeing in the Community

(OP20) Valuable insights from the evaluation of a motor neuron disease multidisciplinary clinic on the Central Coast

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Background: Access to specialised MND multidisciplinary clinics (MDC) is the optimal evidence-based approach to managing motor neurone disease (MND).¹ MND-MDCs have been shown to improve the quality of life, health outcomes, care experiences, and decision-making for people living with MND (plwMND) and their families.^{1,2} However, in Australia, the structure of MND-MDCs varies, and access is inequitable.

Aim: This evaluation explored the factors impacting the outcomes and implementation of an MND-MDC on the Central Coast, NSW.

Methods: A mixed methods implementation evaluation informed by qualitative methods used semi-structured interviews with people living with people living with MND (plwMND)⁽⁴⁾, family carers⁽²⁾, health⁽⁶⁾, and social care⁽²⁾ providers attending the clinic. A key stakeholder advisory group provided guidance and feedback on the evaluation. An inductive thematic analysis identified clinic outcomes. A deductive analysis underpinned by the Theoretical Domains Framework (TDF)³ systematically identified barriers and enablers to MND-MDC adoption, delivery, and sustainability. The TDF was mapped to the COM-B4 system for understanding Capabilities, Opportunities, and Motivations for Behaviour change. Nine healthcare professionals responded to the REDCap survey which explored the acceptability, appropriateness, and feasibility of the MND-MDC.

Findings: Providing equitable access to a specialist MND-MDC closer to home was acceptable and appropriate. MND-MDC created stronger connections between plwMND, their families, and local healthcare providers, greater awareness of the needs and challenges of plwMND, and addressed some service gaps. Key enablers of the MND-MDC included clinical expertise and knowledge of MND, interprofessional and transdisciplinary collaboration, staff commitment, trusting relationships, the inclusion of MND NSW advisors and carers support, access to an administration team and physical clinic space, and the belief that the MND-MDC optimised care and treatment. Barriers included funding limitations, poor cross-sector integration and communication, limited representation of specialist teams, and challenges with capacity building in MND management and knowledge.

Conclusion: This study provides valuable insights into the factors influencing implementation and outcomes of a MND-MDC. The location and lack of dedicated funding impacted the MND-MDC. While providing equitable access to specialised MND care is important, funding, and health infrastructure, and organisational challenges must be addressed to ensure sustainability.

References

1. Rooney J, Byrne S, Heverin M, Tobin K, Dick A, Donaghy C, et al. A multidisciplinary clinic approach improves survival in ALS: a comparative study of ALS in Ireland and Northern Ireland. *Journal of Neurology, Neurosurgery & Psychiatry*. 2015;86(5):496-501.
2. Berlowitz D, Mathers S, Hutchinson K, Hogden A, Carey K, Graco M, et al. The complexity of multidisciplinary respiratory care in amyotrophic lateral sclerosis. *Breathe*. 2023;19(3):220269.
3. Atkins L, Francis J, Islam R, O'Connor D, Patey A, Ivers N, et al. A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems. *Implementation Science*. 2017;12(1):77.
4. Michie S, van Stralen MM, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science*. 2011;6(1):42.

Improving Health & Wellbeing in the Community

(OP21) Evaluation of a transitional workshop to support new graduate midwives to work in continuity of care models.

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Background: Midwifery education standards prescribe students complete continuity of care experiences. These experiences prepare midwives at the time of graduation to provide continuity however a structured program to enable this transition is lacking.

Aim: to evaluate a transitional workshop to prepare final year students and new graduate midwives to provide continuity of care.

Methods: Online pre-post survey measured confident levels for knowledge and skills required to provide continuity with open ended questions. Descriptive statistics compared pre and post mean and median scores and content analysis was used to analyse the qualitative data.

Findings: Confidence increased for antenatal care, on-call for birth requirements, early labour assessment, discharge (at 6 hours), detecting complications requiring referral, organising caseload and balancing life/work commitment.

Conclusion: Scenario-based activities and setting personal goals for skill consolidation were positively evaluated in the workshop. Participants were inspired when working alongside the more experienced midwives and were excited to begin their midwifery careers providing continuity of care. The workshop is a valuable innovation to support the transitioning midwives.

References

1. International Confederation of Midwives. ICM Global Standards for Midwifery Education. 2021 [cited 2022 29th March]; Available from: https://www.internationalmidwives.org/assets/files/general-files/2021/09/global-standards-for-midwifery-education_2021_en.pdf.
2. Australian Nursing and Midwifery Accreditation Council. Midwife Accreditation Standards 2021. 2021 [cited 2021 1st February];
3. Cummins, A.M., C. Catling, and C.S.E. Homer, Enabling new graduate midwives to work in midwifery continuity of care models: A conceptual model for implementation. *Women and Birth*, 2018. 31(5): p. 343-349. Cummins, A.M., C. Catling, and C.S.E. Homer, Enabling new graduate midwives to work in midwifery continuity of care models: A conceptual model for implementation. *Women and Birth*, 2018. 31(5): p. 343-349. Cummins, A.M., C. Catling, and C.S.E. Homer, Enabling new graduate midwives to work in midwifery continuity of care models: A conceptual model for implementation. *Women and Birth*, 2018. 31(5): p. 343-349.

Improving Health & Wellbeing in the Community

(OP22) How social class shapes perspectives of 'breast cancer candidacy' and prevention practices among Australian midlife women – A qualitative study.

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Introduction: Breast cancer remains the most diagnosed cancer among Australian women and incidence is increasing. Despite the public visibility of breast cancer, misconceptions about breast cancer risk factors exist, complicating public health responses to modifiable risk factors for primary prevention. While secondary prevention, specifically mammography screening, might theoretically contribute to reducing the incidence, in 2022-23 Australian rates remained low at 51.7%. This underscores a need to understand what might contribute to more effective public health efforts and improve breast cancer prevention.

Aim: Noting breast cancer is socially patterned, we explore how women's life chances reflected in their social class positions shapes breast cancer prevention practices. Using breast cancer candidacy as a sociological lens to understand women's breast cancer risk perspectives, and Bourdieu's relational social class theory, we explore how women's social, cultural, and structured life contexts shape their perspectives and indicates key considerations for improved primary/secondary prevention approaches.

Methods: Forty-three women (45-64 years) from differing social classes and with differing mammography screening behaviours were interviewed. Interviews investigated women's interpretations of breast cancer risk factors and their personal risk perceptions and explored how these influence breast cancer prevention practices. Bourdieu's concepts of habitus (dispositions, habits), capitals (social, cultural, economic resources), and fields (social contexts) were considered in the analysis to understand how women's social class positions shapes risk perspectives and prevention practices.

Results: Our analysis revealed women's habitus, access to capitals and comfort in varied fields impacted prevention practices. Middle-class women's access to capitals and comfort in differing fields readily facilitated participation in health promoting practices, including screening. Affluent women tend not to consider themselves at-risk due to their healthier 'lifestyles' and used their cultural capitals to make informed decisions about not screening. Working-class women experience structural factors, like low income, stress and difficult life circumstances which hampered both primary prevention and screening, where decisions about non-participation were less active.

Conclusion: These findings suggest breast cancer prevention is enabled or constrained by women's social class position. Therefore, to improve public health approaches regarding both modifiable breast cancer risks and increasing mammography screening, the need for an equity lens is clear.

References

1. Batchelor, S., Lunnay, B., Macdonald, S., & Ward, P. R. (2024). How social class shapes breast cancer risk perspectives and prevention practices of Australian Midlife women: A qualitative study using the concept of 'breast cancer candidacy' [in press] BMC Cancer

LIGHTNING TALKS

Quality & Effectiveness of Safe Patient Care

(LT1) Application and Evaluation of a Front-Loaded Emergency Department Pharmacy Service on Pharmacy Workload

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Background: Pharmacists are overstretched to meet key performance indicators including best-possible-medication-history (BPMH) at admission. In resource-poor departments there is a focus on medication supply and discharge review at the expense of emergency department (ED) staffing. Pharmacist benefit at admission to reduce medication errors has been extensively proven internationally.

Method: Two pharmacists were rostered to ED without being seconded for backfill for one-month. This was enabled by a CCLHD Caring for our Future Research Grant to implement Partnered Pharmacist Medication Charting.

Aims: To increase the number of patients seen at admission by pharmacy and determine the workload flow-on effects.

Results: Over a three-month (62-weekday) period prior to the trial the senior ED pharmacist was rostered elsewhere 59% of the time. ED was left uncovered 27%. The ED pharmacist(s) completed 379 BPMHs (6.1 patients/day). The inpatient pharmacist team completed an average of 4.7 BPMH/day/pharmacist. During the trial-period 2-ED pharmacists completed 625 BPMH over 20-days (31.3/day). 81% of these patients were admitted to a facility including transfers whilst 58% (average 18/day) were admitted within Wyong. Of those admitted 49% would have been allocated red/amber priority with the expectation to be seen within 24-hours. 80% of pharmacists reported a reduction in workload compared to no ED pharmacy service. Dispensary pharmacists (20%) reported an increase in work they were able to action compared to having to delegate to inpatient pharmacists. Pharmacists self-report a reduction in time required to process medications at discharge if a patient has had a BPMH completed during their admission.

Conclusion: Front-loading a pharmacy service to prioritise patients for BPMH within ED during the first hours of their admission reduces medication charting errors by either correcting them in a timely manner or preventing them by providing MOs with an accurate BPMH. This reduces workload demands on inpatient pharmacists and allows other tasks such as medication supply/discharge review to be streamlined.

This frontloaded service saved the equivalent of 3.8 pharmacists total BPMH duties or 2.6 pharmacists high priority BPMH duties each day. This theoretically improves the capacity of inpatient pharmacists to focus on other important tasks.

Quality & Effectiveness of Safe Patient Care

(LT2) Navigating the Challenges of Delivering Safe Haven Services in Non-Clinical Spaces

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CCLHD, Gosford, Australia

Background: Safe Havens aim to provide a welcoming, non-clinical environment for individuals experiencing mental health crises to receive peer-led support and avoid unnecessary Emergency Department (ED) presentation. Designing and operating these services within the constraints of traditional clinical mental health systems presents a unique set of challenges. This presentation will explore key considerations and lessons learned from implementing a Safe Haven program located on a hospital campus on the NSW Central Coast.

A core component of the Safe Haven model is providing services in a warm, community-based setting rather than a clinical environment. Balancing this non-clinical therapeutic atmosphere with the necessary safety protocols and managing the risk requirements of a clinical service can be complex. Safe Haven managers and workers play a key role in promoting and advocating for the type of care available in a Safe Haven. The meaningful involvement of peer workers with a lived experience is essential, but also brings unique challenges. Peer workers' own lived experiences of mental health struggles are a strength, but also a challenge when supporting others in crisis. Fostering an environment that values peer workers' capacity for empathy while also providing ample support and encouraging and enabling self-care support is crucial.

Safe Havens must also be prepared to manage unpredictable demand for their services. Surges in utilisation can strain resources and test the boundaries between crisis response and ongoing care. Developing flexible staffing models, strong community partnerships, and clear protocols for transitions to other levels of care are strategies to address this volatility.

Conclusion: In conclusion, delivering Safe Haven services in non-clinical settings requires a delicate balance. Peer support, a welcoming environment, and a clear scope of practice must be thoughtfully integrated with the safety measures and operational structures of the overarching clinical environment of a health service. The lessons learned from this model can inform broader efforts to make mental health services, including those that support ED avoidance, more accessible and recovery oriented.

Quality & Effectiveness of Safe Patient Care

(LT3) A Suicide Prevention Pathway designed to enhance staff competencies in recognising and responding to distress.

Laura Christie

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Background: In 2018, the NSW Health Government introduced the Towards Zero Suicides Program, which includes 15 initiatives, one of which is Zero Suicides in Care (ZSiC). Two elements of the Zero Suicides in Care (ZSiC) are to improve suicide prevention skills among staff and enable a holistic clinical approach to support people experiencing mental health issues, as well as their families, to become active participants in their own care and recovery.

Aim: We aim to foster hope and connection by upskilling healthcare professionals and ensuring compassionate care. The initiative promotes a safety culture, enhancing staff confidence and the quality of support for individuals in crisis.

Methods: To support the ZSiC initiative, NSW Health commissioned SafeSide Suicide Prevention Training for clinical staff. One component of this training was developing mental health safety plans (hardcopy) with people at risk of suicide. It was rolled out across the Central Coast Local Health District (CCLHD) mental health service but not proactively and consistently. In 2022, The Agency of Clinical Innovation published the NSW Health suicide care pathway: standardising suicide prevention care for all people with identified suicide behaviours who access NSW services.

Problem –Over six months, there have been 928 suicidal presentations to the CCLHD Emergency Departments, with 574 being discharged home from WDH & GDH ED, with the probability that none left the ED with a mental health safety plan document. The additional time taken to produce safety plans under the current process adds to the length of stay.

Goal –To increase the number of MH presentations discharged from the ED with a Mental Health Safety Plan from 0% to 40% by June 2023. There was a high confidence that there were no consumers being discharged from the ED with an MH Safety Plan document.

Stakeholders –SIPOC: Data Collection Plan: Cause and Effect Diagram: PICK Matrix: Journey Mapping: PDSA Cycles: Voice of the Customer –Feasibility-Ease of Implementation: Training, Documentation, Measure & Response Plan.

Conclusion:

- There was no difference in the average length of stay
- There was confidence that consumers were being discharged from the ED with an MH Safety Plan document.
- The goal of achieving 40% completion by June 2023 was on track.
- Develop suicide prevention training for staff

References

1. Mental Health Commission of New South Wales. Shifting the Landscape for Suicide Prevention in NSW: A Whole-of-Government Strategic Framework for a Whole-of-Community Response 2022-2027. Sydney: Mental Health Commission of NSW; 2022.
2. New South Wales Health. About Towards Zero Suicides [Internet]. Towards Zero Suicides; 2023 [cited 2024 Oct 11]. Available from: <https://www.health.nsw.gov.au/towardszerosuicides/Pages/about.aspx>
3. New South Wales Health. Zero Suicides in Care [Internet]. Towards Zero Suicides; 2023 [cited 2024 Oct 11]. Available from: <https://www.health.nsw.gov.au/towardszerosuicides/Pages/zero-suicides-in-care.aspx>
4. NSW Health, Agency of Clinical Innovation. Suicide Care Pathway: A Framework for Clinicians. Sydney: NSW Health; 2022 June.

Quality & Effectiveness of Safe Patient Care

(LT4) Nurturing New Nurses: Enhancing Transition to Professional Practice

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Background: The Central Coast Local Health District (CCLHD) new graduate program introduces an innovative training and education program commencing with "O" Week (orientation week), designed to address the challenges faced by novice nurses and midwives. These challenges include bridging the theory-practice gap, refining technical skills, and navigating critical decisions in clinical practice. "O" Week emphasises emotional support, collegiality, and continuous education as crucial elements for nurturing professional growth and long-term retention.

Aim: In response to the disruptions caused by COVID-19 in 2022, we developed a structured 12-month education program in 2023 tailored to the needs of new graduate nurses and midwives. Prioritising the establishment of connections and a sense of belonging, especially vital during a time of social upheaval, our program aims to support novice professionals as they enter the workforce.

Methods: Our program equips graduate nurses and midwives for their transition year, through targeted training in resilience, wellbeing, medication safety, mandatory training and competencies, and strategic nursing and midwifery indicators. It fosters a supportive environment through clinical reflective practice sessions, simulation-based education, monthly clinical expert presentations, and preceptorship.

Results: The inaugural 2023 year of the CCLHD new graduate program demonstrated significant success, with participants acknowledging its valuable contribution to fostering a supportive culture and facilitating professional growth. Positive outcomes include enhanced clinical skills, increased confidence, team integration, and enhanced patient care quality.

Attendance at core education programs has increased compared to previous years. Additionally, the integration of simulated manual handling training has led to a decrease in manual handling injuries and associated costs during the first year of employment, positively impacting workplace health and safety. Survey findings underscore the program's relevance to participants' roles and the value of interaction with experienced staff members.

References

1. Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing practice. Prentice-Hall.
2. National Council of State Boards of Nursing. (2018). National Nursing Guidelines for Safe Administration of Medication. Retrieved from https://www.ncsbn.org/SAFE_ACT_GUIDELINES_final.pdf.
3. Australian Nursing and Midwifery Federation. (2020). GradStart Program. Retrieved from <https://anmf.org.au/campaign/entry/gradstart-program>.
4. Benner, P. (1984). From novice to expert: Excellence and power in clinical nursing practice. Prentice-Hall.
5. National Council of State Boards of Nursing. (2018). National Nursing Guidelines for Safe Administration of Medication. Retrieved from https://www.ncsbn.org/SAFE_ACT_GUIDELINES_final.pdf.
6. Australian Nursing and Midwifery Federation. (2020). GradStart Program. Retrieved from <https://anmf.org.au/campaign/entry/gradstart-program>.

Quality & Effectiveness of Safe Patient Care

(LT5) Rainbow Ready –LGBTQI+ Inclusion Capacity Building in our Non-Acute Adult Mental Health Services*Blake Richards*

CCLHD, Gosford, Australia

Background: LGBTQI+ individuals often face significant barriers in accessing inclusive Mental Health services, contributing to poorer mental health outcomes. Within the Central Coast Local Health District's Adult Community Mental Health Services, there has been a lack of consistent LGBTQI+ specific training for staff since 2017, creating a gap in the delivery of culturally sensitive care.

Aim: To address this gap, our project aimed to enhance the capacity of these services to provide LGBTQI+ inclusive care by ensuring that 90% of all staff complete in-service LGBTQI+ inclusion training within a six-month period.

Method: The project utilized Lean Six Sigma methodology to identify, assess, and improve the current state of LGBTQI+ competency within Adult Community Teams. Baseline data collected from My Health Learning records showed that only one team member had completed the LGBTQI+ inclusion module since 2018. Staff surveys indicated that the majority had not received formal LGBTQI+ specific training, with most knowledge being obtained from external agencies like ACON. Through stakeholder engagement, including managers, clinical educators, and inclusion officers, an in-service training initiative was developed and implemented, targeting identified knowledge gaps.

Results: Preliminary results show increased staff engagement and participation in LGBTQI+ training, with over 50% of staff completing the training within the first three months of the project. Qualitative feedback from staff has also highlighted a growing confidence in providing inclusive care to LGBTQI+ clients. Additionally, adjustments to educational materials were made based on PDSA cycles to improve sustainability. The outcomes of this project have led to the ongoing implementation of training across the entire Mental Health Service.

Conclusion: In conclusion, this project demonstrates the potential for capacity-building initiatives to improve LGBTQI+ inclusivity across our Mental Health services. Ongoing monitoring and refinement will ensure that the training remains a core component of professional development, ultimately leading to increased confidence levels for staff, and more equitable and affirming care for LGBTQI+ individuals.

Quality & Effectiveness of Safe Patient Care

(LT6) Artificial Intelligence in nursing: trustworthy or reliable?

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Background: Trustworthiness in Artificial Intelligence (AI) innovation is at the forefront of priorities and the role that trustworthiness plays in the acceptance of AI cannot be understated. Clinicians have highlighted trust and confidence as barriers for AI within clinical application. However, while there is a call to design and develop AI that is considered trustworthy, AI itself lacks the emotional capability to confer trust.

Aims: The objective of this paper is firstly, to highlight the enigma of seeking or expecting trust attributes from a machine, and secondly, to reframe the interpretation of trustworthiness for AI through evaluation of its reliability and validity as consistent with use of other clinical instruments. To discuss AI in terms of its trustworthiness alone risks illogically endorsing human attributes to a machine. This paper has presented a breakdown of the components of trust in the context of AI in health.

Methods: An integrative review investigating the incorporation of artificial intelligence and machine learning based decision support systems in mental health care settings. A systematic search of published empirical literature from January 2016 to December 2021 was undertaken across six databases. Four studies met the research question and the inclusion criteria (Higgins et al., 2023).

Results: While trustworthiness may seem an overly simple notion, it is a complex concept, and it should be considered as an additional barrier for nurses' acceptance of AI into practice. Communicating the system's validity and reliability while creating transparent interpretable innovations will form a significant component to support the implementation of AI-based clinical instruments in routine clinical nursing practice

Conclusion: The role of Artificial Intelligence (AI) in nursing, especially in the mental health setting, is in the early stages of design and development. Sole focus on the demonstration of trust, instead of a focus on the usual requirement for reliability and validity attributes during implementation phases, may result in negative experiences for nurses and clinical users.

References

1. Higgins, O., Chalup, S. K., & Wilson, R. L. (2024, 29 Feb 2024). Artificial Intelligence in nursing: trustworthy or reliable? *Journal of Research in Nursing*, 0(2), 143-153. <https://doi.org/10.1177/17449871231215696&nbasp>

Quality & Effectiveness of Safe Patient Care

(LT7) Sleep Disturbances in Adults with Chronic Kidney Disease: An Umbrella Review

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Aim: This umbrella review aimed to synthesise the existing evidence on sleep disturbances and sleep disorders in the adult chronic kidney disease (CKD) population and identify prioritised areas for future research.

Methods: A systematic search across five electronic databases. Reviews were grouped according to aspects of sleep and the focus of the review. The JBI critical appraisal checklist was used for quality assessment, and Preferred Reporting Items for Overviews of Reviews (PRIOR) guideline was used for reporting. The protocol was registered in the international registry PROSPERO (CRD42024527039).

Results: We identified 50 reviews covering three main aspects of sleep (sleep apnoea, restless leg syndrome (RLS) and other sleep disturbances) across five focus areas (prevalence, interventions, health outcomes, determinants of sleep and patient experience). Most reviews reported sleep disturbances (72%, 36 reviews) and focused on interventions (58%, 29 reviews). In comparison, there is scarce evidence exploring sleep determinants (n=1) and patient experience (n=1). High prevalence of sleep apnoea (47%), RLS (>27%) and other sleep disturbances (55%) were found. Non-pharmacological interventions showed promise in improving sleep, but the evidence was based on few studies with a high overlap between reviews.

Conclusions: Existing literature supports a high prevalence of sleep disturbances in patients with CKD and that various non-pharmacological interventions may be considered to improve sleep outcomes in these patients. However, more studies are needed to determine effective interventions. Future qualitative research to understand patients' perspectives on sleep is needed due to limited evidence in this area.

Quality & Effectiveness of Safe Patient Care

(LT8) Sleep Hygiene Strategies in Adults with Chronic Kidney Disease: A Scoping Review

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Background: Sleep hygiene strategies are often encouraged in people with chronic kidney disease (CKD).

Aim: We aim to summarise the existing evidence on sleep hygiene strategies in this population.

Methods: We searched four electronic databases (MEDLINE, EMBASE, CINAHL and PsycINFO) up to July 2024. Studies of any design were eligible if they reported sleep hygiene strategies and sleep outcomes for adults with CKD. We extracted data using standardised tools and synthesised the results descriptively into each component of the sleep hygiene strategy.

Results: Thirty-eight articles were included. Most studies (45%) focused on bedtime activity, with exercise and relaxation techniques showing promising effects on sleep quality. However, the timing of these strategies varied, limiting the ability to generalise these strategies in relation to bedtime activity. Few studies (18%) demonstrated positive effects of sleep hygiene education, particularly when delivered as part of cognitive behaviour therapy. Mixed results were found regarding the impact of alcohol, caffeine and cigarettes on sleep disturbances and sleep disorders. Additionally, only a few studies have been conducted on bedroom environment and sleep patterns in CKD patients.

Conclusions: This review showed that sleep hygiene education can be a useful strategy for improving sleep in people with CKD. Exercise and relaxation techniques may reduce sleep disturbances, but further research is needed to determine the optimal timing for these activities. There are methodology limitations in the existing studies and gaps in research that must be addressed to better understand the applicability of sleep hygiene strategies in the CKD population.

Quality & Effectiveness of Safe Patient Care

(LT9) Enhancing Clinical Education Environments – A Collaborative Continuity Model of Clinical Education in Practice

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Introduction: Professional experience learning is fundamental to undergraduate nursing education. Current placement models underserve students with low supervision quality⁽¹⁾, insufficient support⁽¹⁾, and deficient preparation for workforce transition⁽²⁾. These failures contribute to 'transition shock'⁽²⁾, poor care quality⁽³⁾, and low retention of new graduate nurses⁽⁴⁾. Innovative professional experience placement models are needed to support student learning and workforce transition⁽⁵⁾.

Aim: This project aims to employ a novel professional experience placement model for third-year undergraduate nursing students to improve their learning quality and workforce preparedness. The secondary aim is to explore the impact of the placement model on patient care, the nursing workforce, and health service provision.

Method: A multimethod convergent parallel service evaluation design was used to explore a novel continuity-aligned dedicated education unit (CADEU) model for undergraduate nursing student education in real-world clinical settings. Three blocks of 13 final-year nursing students (target = 39) completed a 4-week placement in semester one, followed by a 6-week placement in semester two. Students follow a seven-day rotating roster aligned to a small group of consistent preceptors for ongoing education support. An embedded specialist clinical nurse and university educator fosters student learning in the clinical environment. Preceptors working on the ward were provided with ongoing clinical education sessions and development opportunities. The placement model is evaluated by a longitudinal survey using the validated Placement Evaluation Tool (PET), a workforce preparedness question series, and supplemented with an interview series with students, preceptors, and implementation stakeholders.

Results: Successful co-design of the model with clinical and education stakeholders was achieved with the implementation of the model in March 2024. Thirty-nine (39) students were recruited to the study of which 4 withdrew. Statistically significant improvements across almost all items in the PET were identified between timepoints one and two demonstrating a substantial increase in placement quality. Data for timepoint three is still in collection.

Conclusion: The CADEU model has been successfully implemented into a clinical practice environment delivering significant improvements to the learning quality and workforce preparedness of third-year nursing students. The longitudinal evaluation of the project is ongoing.

References

1. Schwartz S. Educating the Nurse of the Future -Report of the Independent Review into Nursing Education Canberra; 2022.
2. Walker A, Costa BM, Foster AM, de Bruin RL. Transition and integration experiences of Australian graduate nurses: A qualitative systematic review. *Collegian*. 2017;24(5):505-12.
3. Ko YJ, Kim SY. Transition Shock Experience of Nursing Students in Clinical Practice: A Phenomenological Approach. *Healthcare (Basel)*. 2022;10(4).
4. Najafi B, Nasiri A. Explaining Novice Nurses' Experience of Weak Professional Confidence: A Qualitative Study. *SAGE Open Nurs*. 2023; 9:23779608231153457.
5. Voss JG, Alfes CM, Clark A, Lilly KD, Moore S. Why Mentoring Matters for New Graduates Transitioning to Practice: Implications for Nurse Leaders. *Nurse Leader*. 2022;20(4):399-403.

Improving Health & Wellbeing in the Community

(LT10) Disproportionate mental health presentations to Emergency Departments in a coastal regional community in Australia of First Nations people.

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Background: Emergency Department (ED) presentations for Mental Health (MH) help-seeking have been rising rapidly in recent years, with EDs as the main entry point for most individuals in Australia.

Aim: This research aimed to identify the service usage demographic for people seeking MH care in the ED, specifically in this case, to understand the usage by First Nation Peoples.

Method: This retrospective cohort study examined the sociodemographic and presentation characteristics of individuals seeking MH care in two EDs between 2016 and 2021. Data were collected using existing records and analysed using descriptive univariate analysis with statistical significance between the two sites determined using X2 test, $p < .05$.

Results: The overall data presented in this analysis shows an overall ED mental health presentation rate of 12.02% for those who identified as 'Aboriginal but not Torres Strait Islander origin', 0.36% as 'Both Aboriginal and Torres Strait Islander' and 0.27% as 'Torres Strait Islander' totalling 12.63%. This is an overrepresentation compared to the local population of 4.9%. One site recorded 14.1% of ED presentations identified as Aboriginal and/or Torres Strait Islander, over double the site's demographic of 6.3%.

Conclusion: Given the disproportionate representation of First Nation peoples in MH-related ED presentations, further research is required to prioritise a First Nation research perspective that draws on First Nation research methods, such as yarning and storytelling to understand the unique cultural needs and challenges experienced by First Nation people accessing MH care via ED. Understanding the demographic is but one step in supporting the cultural safety needs of Aboriginal and Torres Strait Islander people.

References

1. Higgins, O., Sheather-Reid, R. B., Chalup, S. K., & Wilson, R. L. (2024, 26 May 2024). Disproportionate mental health presentations to Emergency Departments in a coastal regional community in Australia of First Nation people. *International Journal of Mental Health Nursing*. <https://doi.org/10.1111/inm.13362>

Improving Health & Wellbeing in the Community

(LT11) Lifesaving Health at home: elevating community care with novel naloxone kit access*Mikie Hughes, Karyn Avery*

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Introduction: Did you know that more Australians are dying from unintentional drug induced deaths than on our roads¹? What if I told you that approximately half of those deaths were opioid related, which is a type of overdose that can be reversed with a medication called naloxone, that is readily available without prescription¹? Hopefully you are thinking –WHY ISN'T THIS MEDICATION EVERYWHERE!? Good question.

My colleague Dr Avery and I set out to find out if naloxone (nasal or IM) is easily accessible on the Central Coast. We found:

- Less than half of the sites that advertised stocking naloxone had it available,
- Only 1 patient was administered naloxone prior to ambulance arrival and
- Patients admitted to hospital on the Central Coast do not have access to naloxone to take home.

Our solution? Increase access with a novel program that involves providing Take Home Naloxone Packs in ED departments on the Central Coast (CC).

Methods:**Problem:**

- 167 Patients presented to Wyong and Gosford ED between May 2022 and May 2024 with opioid overdose related diagnoses. Only 1 had used naloxone (not administered by an ambulance officer).
- Naloxone only available at 37 sites on the CC.
- Naloxone for home administration (nasal or IM) not available at CCLHD hospitals for inpatients (not stocked by either pharmacy) or ED.

Solution:

- Multidisciplinary meetings with ED senior staff to discuss a novel, easy to deliver naloxone intervention.
- Collaborated with the Clinical Excellence Commission who coordinate current naloxone supply programs.

Results and conclusion:

We created a Take Home Naloxone Pack which contains:

- Patient administration education,
- 4 nasal sprays of naloxone,
- CC naloxone locations,
- Drug and Alcohol Services information.

This pack is to be provided as part of a 3-step ED intervention.

- Identify (patient eligibility/precautions)
- Intervene (purpose, education, supply, plan)
- Inventory (record, restock)

Procedure has been written, approved by the CEC (for federal funding) and is now being circulated for comment.

This combines the medication, education and ongoing care opportunity.

By creating a simple collaborative intervention, we hope to increase accessibility for those patients in direct need of naloxone on the Central Coast.

References

1. PEN_Annual-Overdose-Report-2024.pdf (penington.org.au)

Improving Health & Wellbeing in the Community

(LT12) Improving discharge communication with Community General Practitioners and Pharmacists

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Background: An inpatient discharge summary is a single integrated document which includes input from the treating hospital team about a patient's hospital stay and ongoing care plans. These summaries are transmitted via secure messaging from the hospital's eMR (electronic medical record) to practice information systems. Reporting from eHealth NSW indicated that over 30% of Central Coast Local Health District (CCLHD) inpatient discharge summaries were not reaching general practitioners after patient discharge. This information was presented to the CCLHD GP Collaboration Group and endorsement was given to commence a working group and quality improvement project.

Aims:

The working group established the following five aims for a successful quality improvement project:

1. Improve understanding of data and workflows for discharge summary transmission.
2. Completion of discharge summary transmission factsheets.
3. Review of the CCLHD discharge summary completion procedure.
4. Improve deceased patient notifications to GP Practices.
5. Increase My Health Record education (focused on access to discharge summaries).

Methods:

1. Creation of a CCLHD discharge summary working group.
2. Data collection and analyses of transmission data with digital health services.
3. Use of the 'voice of the customer' with a general practice and community pharmacy survey.
4. Establishment of a training plan for both CCLHD staff and external users of the My Health Record.
5. Text message and secure email platforms to improve communication with GPs and patients.

Results: The working group consisted of clinical, administrative and health information staff; and met over 12 months to work through the quality initiatives identified. In particular, using the practice surveys enabled the group to focus on what was needed by GPs and Pharmacists and this resulted in an increase of scope to also include a focus on death notification to practices and alerting patients when they left hospital without a GP listed in the hospital eMR.

Aims of the project have been completed and survey results show high satisfaction with the resources and outcomes produced.

Conclusion: Improving any communication with General Practitioners and Community Pharmacists will have an impact on satisfaction, and projects that promote even small improvements in this space should be pursued.

References

1. Australian Government, Australian Digital Health Agency. My Health Record Guidelines for Pharmacists. Pharmaceutical Society of Australia. 2019 Available from: <https://www.psa.org.au/wp-content/uploads/2019/09/MHR-Guidelines-for-Pharmacists.pdf>
2. NSW Health, Patient Discharge Documentation GL2022_005. 2022 Available from: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/GL2022_005.pdf

Improving Health & Wellbeing in the Community

(LT13) Oral Health in Patients On Second Generation Antipsychotics – A Scoping Review

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Background: Second-generation antipsychotics (SGAs) are widely used to treat severe mental disorders, but their potential impact on oral health has raised concerns.

Aim: This review aimed to evaluate the current evidence regarding oral health side effects associated with SGA use in treating severe mental illnesses.

Methods: A scoping review following PRISMA guidelines was conducted. Four databases (Medline via PubMed, Embase, Scopus, and Cochrane) were searched using predetermined criteria and relevant keywords. Selected studies were analysed based on design, participant demographics, specific antipsychotics used, oral health conditions examined and reported outcomes.

Results: Ten studies met inclusion criteria from an initial 254 results. Most were cross-sectional, with two retrospective cohort studies and one randomized controlled trial. Seven studies focused on dental caries and salivary gland dysfunction, while three examined periodontal disease. Significant associations were found between xerostomia and specific SGA use, especially when combined with first-generation antipsychotics (FGAs) and/or anxiolytics. However, most studies did not find a significant link between SGA use alone and increased risk of dental caries or periodontal disease.

Conclusion: Evidence suggests SGAs may impact oral health, mainly through salivary gland dysfunction. The risk of dental caries and periodontal diseases appears higher when SGAs are combined with other medications for severe mental illnesses. It is recommended that health authorities and professional organizations develop guidelines addressing oral health needs of patients on antipsychotics, including regular screening, preventive measures, and treatment strategies.



Improving Health & Wellbeing in the Community

(LT14) Non-urgent Emergency Department presentations by pre-school aged children. Opportunities for new clinical pathways to child and family health.

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Aim:

To determine:

- the proportion of non-urgent (triage categories 4 & 5) paediatric (0-5 years) presentations to Gosford and Wyong Emergency Departments and
- the proportion of these presentations that could potentially be managed by child and family (CFH) services.

Background: Increased numbers of non-urgent presentations (NUPs) to Emergency Departments (ED) has sparked international concern, particularly in paediatric population. Children younger than four years old account for 12-41% of all ED presentations and approximately one in three of these are triaged as non-urgent. These NUPs are associated with inefficient resource utilisation, increased stress struggling healthcare systems, delayed responses to higher priority cases as well as negative impacts on the family and child.

Methods: De-identified data was collected from the ED utilisation application (an electronic data dashboard).

The years 2017–2019 were chosen to avoid any possible confounding variables due to COVID-19

A community paediatrician and CFH nurse reviewed the triage categories to determine suitability for CFH.

Data were analysed in Microsoft Excel.

Results: A total of 280,105 patients presented to the EDs during the time-period. Of these, 145,051 were triaged as non-urgent, accounting for 51.79% of all ED presentations.

- The total number of paediatric presentations was 31,647 (11.3%) with 14,647 (46.3%) classified as non-urgent
- Presentations were highest for infants birth to 12 months
- Most presentations occurred on Sunday and Monday evenings (8-10pm)
- No seasonal variation was demonstrated
- Approximately 677 (4.62%) were determined to be suitable to be managed by CFH.

Discussion: Nearly half of all paediatric presentations were triaged as being non-urgent. Of these, nearly 5% were suitable for management by CFH services. There is an estimated potential cost saving of \$223,410 per annum to EDs through the use of other care models. There is also significant potential for such models to help improve health outcomes for families with young children.

References

1. Alele FO, Emeto TI, Callander EJ, Watt K. Non-urgent paediatric emergency department presentation: A systematic review. *J Paediatr Child Health*. 2019 Mar;55(3):271–7.
2. Benahmed N, Laokri S, Zhang WH, Verhaeghe N, Trybou J, et al. Determinants of nonurgent use of the emergency department for pediatric patients in 12 hospitals in Belgium. *Eur J Pediatr*. 2012 Dec;171(12):1829–37.
3. Butun A, Linden M, Lynn F, McGaughey J. Exploring parents' reasons for attending the emergency department for children with minor illnesses: a mixed methods systematic review. *Emerg Med J*. 2019 Jan;36(1):39–46.
4. Myers KA, Schmied V, White E. Child and family health nurses working with families of preschool-aged children. *J Clin Nurs*. 2014 Jan;23(1-2):181–90.
5. Samuels-Kalow ME, Niedzwiecki M, Friedman AB, Sokolove PE, Hsia RY. Comparing resource use between paediatric emergency department visits by triage level. *Emerg Med J*. 2018 Nov;35(11):681–4.

Improving Health & Wellbeing in the Community

(LT15) Co-production, co-creation, and co-design: Fostering health and wellbeing for people in the community within the primary health care context using the 'Three-Cs.'

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Background: When we consider the definition of best practice primary health care (PHC)¹, co-production, co-creation, and co-design (the Three-Cs) have the potential to enhance and underpin the interface between service provision and effective person-centred care.

Methods and approaches: To define and support the implementation of the Three-Cs are already established within the PHC context; however, they vary depending on the perspective of the project lead, the area of study, and the context. Additionally, there is very little evidence around the impact and sustained outcomes achieved through using these methods and approaches within PHC settings.

This presentation will give an overview of the work undertaken to date to:

1. Assess how co-production, co-creation, and co-design approaches have been implemented in PHC settings to improve health and wellbeing outcomes for communities,
2. Evaluate the extent to which these approaches have effected sustained system change within PHC, and
3. Provide recommendations for the development of evidence-based, localisable guidelines that outline successful ways to implement the Three-Cs and support sustainability (defined as continued capacity, continued delivery, and continued receipt of benefit from the innovation^[2]).

These aims will be explored using the following methods:

1. A systematic review of the literature to understand the scope of evidence available on the design, implementation, impact, and sustainability of the Three-Cs in PHC settings.
2. Case studies to examine the design, implementation, impact, and sustainability of a Three-Cs approach in three different PHC contexts (varied by target populations and geographical setting).
3. Development of recommendations based on the data and evidence collected to support the evidence-based implementation guidance for effective design and implementation of a Three-Cs approach, leading to impactful and sustained change.

References

1. World Health Organization. Primary Health Care. Available from: https://www.who.int/health-topics/primary-health-care#tab=tab_1
2. Urquhart, R., et al., Defining sustainability in practice: views from implementing real-world innovations in health care. BMC Health Services Research, 2020. 20(87).

Improving Health & Wellbeing in the Community

(LT16) Advanced care planning and palliative care among older people of Chinese ethnicity: findings from two pilot studies in residential aged care

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Aim: To explore the nature of advanced care planning (ACP) documentation and older Chinese people's perceptions and experiences with ACP and palliative care in residential aged care facilities (RACFs).

Background: ACP is a critical element of palliative care provision in RACFs due to the high proportion of older people with life limiting illnesses. With the cultural diversity of older Australian population¹, a culturally sensitive approach to ACP and palliative care is needed. Given that people of Chinese ethnicity are the third largest culturally diverse group², and that diversity exists across cultures, there is a need to explore ACP and palliative care specifically in the context of older Chinese.

Methods: A retrospective review of ACP documentation was undertaken among 31 older Chinese with life-limiting illnesses across two RACFs in New South Wales between March to June 2023. Descriptive statistics were undertaken. This was followed by a qualitative descriptive study involving interviews with 7 older Chinese residents and focus group and interviews with 7 registered nurses involved in their care between October to November 2023. Qualitative data were analysed using thematic analysis.³

Results: Findings from the retrospective review indicated that ACP was completed for almost all residents (90%) by staff in the presence of residents and/or their family. Preferred medical care directives were well documented, however, documentation on the cultural aspects of care was limited. Findings from the qualitative study showed that older Chinese residents' understanding of their health condition, ACP, and palliative care was limited. Engaging older Chinese and their family in ACP and palliative care discussion was challenging due to language barrier and the sensitive nature of death and dying conversations within the context of their culture.

Conclusion: For quality palliative care, there is a need to ensure that older people from culturally diverse backgrounds engage in ACP and palliative care discussion with a good understanding of the process and with sufficient consideration of their cultural background. There is a need for a model of care to guide staff in RACFs to provide equitable and culturally appropriate palliative care to residents of Chinese ethnicity.

References

1. Wilson T, McDonald P, Temple J, Brijnath B, Utomo A. Past and projected growth of Australia's older migrant populations. *Genus*. 2020;76(1):20. Wilson T, McDonald P, Temple J, Brijnath B, Utomo A. Past and projected growth of Australia's older migrant populations. *Genus*. 2020;76(1):20.
2. Australian Bureau of Statistics. 30% of Australia's Population Born Overseas 2021 <https://www.abs.gov.au/media-centre/media-releases/30-australias-population-born-overseas>.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp0630a>

Improving Health & Wellbeing in the Community

(LT17) The history, educative and therapeutic benefits of the 'Brazilian' Samba community in Australia

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Background: Samba is a 'sustainable' transcultural African Brazilian Diasporic practice that has continued from Africa to Brazil to the New World, over centuries and into the 'technoscape'. Samba was once the practice of enslaved peoples, and is now a globalised cultural success, thriving and reinventing itself, becoming a voice for resilience, health and community.

This exploration of the field of Samba scholarship identifies that Samba's pedagogy potentially addresses the global callout to respond to the crises we are collectively facing, with new ways of Education for Sustainability, particularly core, yet poorly understood Indigenous and traditional knowledge-keeping and social and emotional learning components of sustainability.

Aims: This mixed methods study explores the cultural practices of 'Brazilian' Samba in Australia, emphasizing its educational and therapeutic benefits while also examining the role of Samba's pioneers. By mapping the history of Samba, through interviews with Australian Samba leaders and a demographic survey of the practitioner community, the research creates a unique narrative that highlights the significance of Samba within both local and global contexts, particularly in relation to 'sustainability' pedagogy, health and cultural knowledge keeping.

Method: The study investigates how the tradition has been transmitted across generations and continents, revealing its pedagogical implications and offering a potential decolonizing framework for integrating diverse cultural knowledge systems. Findings contribute to broader discussions on sustainability, transcultural dynamics, health and the critical distinctions between cultural appropriation and appreciation. An unexpected discovery links Samba practice to the origins of performative Aboriginal Dance in Australia, underscoring the interconnectedness of cultural expressions and the role of culture in personal and community health.

Conclusion: This research emphasizes the necessity for critical reflection on knowledge production and power dynamics in research. By analysing the narratives of Australian Samba leaders and incorporating demographic insights, the study aims to challenge colonial structures within academic practices and propose innovative pathways for engaging with traditional knowledge systems, ultimately promoting health, sustainability, women's and indigenous rights, and the transformative power of culture and community.

References

1. Beserra, Bernadete. 2012. "Samba in Chicago: Escaping Hegemonic Multiculturalist Boundaries." *Latin American Perspectives* 39 (3): 106-119.
2. Frangella, Simone. 2013. "Afro-Brazilian Culture in London: Images and Discourses in Transnational Movements." *Portuguese Studies* 29 (1): 78-93.
3. La Fevers, C. J. 2018. "Embodying Brazilianness: performing race and place in Austin, Texas." Doctorate, Music, University of Texas.
4. Mathews, Rachel A. 2019. "Transcultural improvisations: An investigation of hybridity through a local Australian Samba de Gafieira dance community." Queensland University of Technology.
5. Pravaz, Natasha. 2010. "The Well of Samba: On Playing Percussion and Feeling Good." *Toronto. Canadian Ethnic Studies* 41, no. 3: 207-232.
6. United Nations Education Scientific and Cultural Organisation. 2021a. "Durban Declaration and Programme of Action" – Rhythm is at the center of humanity.
7. William, Rodney. 2019. *Apropriação cultural (Feminismos Plurais)*. Sao Paulo: Pollen Livros.



Improving Health & Wellbeing in the Community

(LT18) Developing best practice approaches to support the economic evaluation of care pathways: A Scoping Review

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Background: Care pathways have been proposed as a way of providing guidance on best evidence care and reducing unnecessary variation by articulating the processes that should be implemented for patients with a particular condition or disease. They delineate goals of care, evidence-based practice, sequencing of activities, communication and coordination among the care team, and resources required. However, care pathways require local development to ensure relevance and can be time-consuming to develop and maintain. There is a need to examine the health economic evaluation of care pathways to inform decision-making about resource allocation. Given the variety of types of economic evaluation techniques, guidance is needed about the most appropriate ways of conducting economic evaluations of care pathways

Aims:

To conduct a scoping review on the evaluation of care pathways to:

1. determine the types of economic evaluation techniques that have been used;
2. explore the reported benefits and limitations of different types of economic analyses;
3. provide recommendation on the optimal method of economic analyses.

Methods: Electronic search of Medline, CINAHL, EMBASE and PsycINFO databases undertaken between January 2000 and October 2024. For the purposes of this review, a care pathway was defined as a complex intervention to guide shared decision making among patients and providers, and to organise care processes for patients. The search strategy was developed in consultation with a group of international subject matter experts and a medical librarian and was performed using a combination of subject headings and text search terms related to care pathways (e.g. care pathway, health pathway), and economic evaluation (e.g. cost-benefit analysis, cost-effectiveness analysis, economic evaluation).

Results: Analysis is underway. Results will be presented at the symposium. This will include a narrative synthesis of findings, including the benefits and limitations identified in the literature of each evaluation type.

Conclusion: Given financial restraints on health systems globally, there is a need to understanding how the costs and benefits of care pathways can be measured. Economic evaluations provide a means to do this, however, given the variety of approaches available, there is need for guidance on best practice. This review will address this need.

POSTERS

Emerging Therapies, Tools & Technologies

(P1) Paediatric Insulin Pump Start-Up Program in a NSW Regional Health District

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Background: Children and adolescents with diabetes and their families in regional NSW face logistical challenges when starting insulin pump therapy, requiring local inpatient admission or travel to a metropolitan hospital. In a regional health district, limited opportunities for pump starts were due to scheduling conflicts, NDSS approval delays, pump upgrades, administrative issues or patient readiness. Advancements in hybrid closed-loop pumps and the need for structured education⁽¹⁾, led the paediatric diabetes service to adopt a more integrated approach.

Aim: The team aimed to provide an outpatient paediatric insulin pump start-up program to improve accessibility, informed decision-making, education, continuity of care, and address the complexities of the new technology.

Methods: A review of the service was conducted, involving key stakeholders including the diabetes team, dietitian, consumers, and guidance from a major metropolitan tertiary hospital. In 2022, the outpatient paediatric insulin pump start-up program commenced at Gosford Hospital. The program begins with a 2-hour virtual information session for families considering insulin pump therapy, covering program details, pump options, and therapy expectations. Those wishing to pursue insulin pump therapy receive a training schedule and undergo pre-pump education, which includes two consecutive weekly sessions. These sessions, led by a Credentialed Diabetes Educator and a Senior Diabetes Paediatric Dietitian, focus on pump management, healthy eating, and carbohydrate counting. Pump start occurs in an outpatient setting, followed by a face-to-face follow-up two days later for adjustments and ongoing support. Additional follow-ups via phone or in-person happen twice weekly for two weeks and a clinic review one-month post-start. Inpatient starts are provided for children under five or those with complex needs.

Results: The program runs seven times a year, each accommodating 2-3 families. The structured and comprehensive approach has enhanced accessibility to pump therapy, providing families with essential information and support. Feedback from families indicates high satisfaction with the continuity of care, the thoroughness of the educational sessions, and reduced travel burden.

Conclusion: The revisions to the insulin pump start-up program have made pump therapy more accessible and streamlined. The program now provides comprehensive education and reduces wait times, contributing to better diabetes management for children and adolescents in the region.

References

1. Desrochers, H. R., et al. (2020). Use of diabetes technology in children: role of structured education for young people with diabetes and families. *Endocrinology and Metabolism Clinics* 49(1): 19-35.

Emerging Therapies, Tools & Technologies

(P2) Good night, sleep tight. Targeting Insomnia with Virtual Reality Mindfulness

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Introduction: Insomnia is associated with substantial societal burden. Available treatments, show effectiveness but are not always available or suitable^[1-3]. Virtual Reality (VR) is an increasingly affordable, accessible, and scalable tool. Therapeutic VR is being evaluated as a treatment delivery tool for a range of disorders but has not been evaluated directly for the treatment of chronic insomnia^[4-6].

Objective:

This research aims to:

1. Assess initial attitudes and opinions of clinicians and those with insomnia towards the acceptability of VR delivered mindfulness and
2. Identify practical barriers and steps for the use of VR technology in this context

Methods and Results: A mixed methods approach including self-report survey data on familiarity with digital health technologies, including VR and a single 2-hour in-person focus group on the acceptability, appropriateness, and feasibility of VR delivered mindfulness for the treatment of chronic insomnia. Recorded discussions using group-specific topics for a total of 15 focus groups attended by average of 2.2 participants. Lack of familiarity with technology is a known barrier to the adoption. To evaluate the impact of exposure to VR mindfulness on attitudes and opinions, participants rated their level of confidence in VR mindfulness as an effective and useful tool for insomnia before and after participants individually explored 4 VR mindfulness apps. Interacting with VR mindfulness appears to positively change the attitudes and opinions of clinicians and individuals with chronic insomnia towards the potential effectiveness and usefulness of VR as a tool to deliver insomnia treatment. Thematic analysis of the barriers to clinical implementation and user adoption of VR mindfulness for the treatment of insomnia showed usability, cost, and accessibility were key barriers to adoption and clinical integration of VR mindfulness.

Conclusions: These results suggest an evaluation of the feasibility of VR mindfulness to deliver treatment for chronic insomnia is warranted.

References

1. Ma et al. The effectiveness of immersive virtual reality (VR) based mindfulness training on improvement mental health in adults: A narrative systematic review. *Explore*. 2023
2. Failla et al. Mediating mindfulness-based interventions with virtual reality in non-clinical populations: the state-of-the-art. *InHealthcare* 2022
3. Olasz et al.. The Effects of Virtual Reality-Based Mindfulness Exercises on the Perception of Time, Psychological and Physiological States of Young People. A randomised controlled trial of mindfulness. 2024
4. Poetar et al. Immersive VR or computerised mindfulness meditation for improving mood? Preliminary efficacy from a pilot randomised trial. *Frontiers in Psychology*. 2023
5. Cawley et al. Brief VR Mindfulness is More Effective than Audio Mindfulness and Colouring in Reducing Stress in University Students. *Mindfulness*. 2024
6. Kabat-Zinn, J. An outpatient program in behavioural medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General Hospital Psychiatry*. 1982

Emerging Therapies, Tools & Technologies

(P3) Psychotherapy for depression and anxiety: A comparison between a new technique and standard psychotherapy techniques

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Background: Depression and anxiety are prevalent mental health conditions with considerable personal, social and economic impacts, affecting 9% of Australians⁽¹⁾. Cognitive Behavioural Therapy (CBT) and pharmacotherapy have been the mainstay treatments, however, may not be appropriate or effective for every patient^(2,3). This study explores a novel psychotherapeutic technique-combining walking, listening to music, singing and dancing (WLSA) for 30 minutes, 5 times a week –against traditional methods such as CBT and medication.

Objective: To compare the efficacy of WLSA treatment with the established standard technique of CBT and medications in managing depression and anxiety using standardised testing methods such as the DASS-21 and SF-36.

Methods: This study will prospectively compare the efficacy of the two psychotherapeutic techniques for managing depression and anxiety. Thirty medical centres in Central Coast, NSW, will be randomly selected and randomised. Patients diagnosed with depression and/or anxiety according to the DSM and DASS-21 and aged 18 and above will be included. Patients with other psychiatric comorbidities such as schizophrenia and bipolar disorder and under the age of 18 will be excluded. A sample size of 780 patients will be randomised and divided equally into two groups, each receiving either the standard psychotherapeutic intervention (CBT and medication) or the new psychotherapeutic intervention (WLSA treatment). Progress will be monitored monthly using the DASS-21 and SF-36 scales.

Results: This study will be completed in 2025. We will study a sample of 780 patients and analyse the DASS-21 scores for each patient periodically during the intervention period. We will record the following outcomes: SF-36 scores, frequency of therapy visits, medication usage or participation and amount of social interaction. We will also complete a multivariate analysis on the impact of age, gender, employment and ethnic background on the outcome of these techniques.

Conclusion: By comparing, this study aims to advance the understanding of how alternative therapies can be incorporated into mainstream treatments for depression and anxiety and help achieve better results.

References

1. Australian Bureau of Statistics [online] Mental health [updated 2017-2018; cited 20/07/2024]. Available from: <https://www.abs.gov.au/statistics/health/mental-health/mental-health/latest-release>
2. Karroui R, Hammani Z, Benjelloun R, Otheman Y. Major depressive disorder: Validated treatments and future challenges. *World J Clin Cases*. 2021;9(31):9350-67. doi: 10.12998/wjcc.v9.i31.9350
3. Cuijpers P, Karyotaki E, Weitz E, Andersson G, Hollon SD, van Straten A. The effects of psychotherapies for major depression in adults on remission, recovery and improvement: a meta-analysis. *J Affect Disord*. 2014;159:118-26. DOI: 10.1016/j.jad.2014.02.026.

Quality & Effectiveness of Safe Patient Care

(P4) Enhancing Professional Growth and Patient Safety: The Impact of Reflective Practice in New graduate nurses

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Introduction: This project investigates the role of monthly Reflective Practice sessions in enhancing critical thinking, ensuring safety and quality in care delivery, and fostering professional development among new graduate nurses. The Central Coast Local Health District (CCLHD) has implemented these sessions as part of a structured framework to integrate reflective practice into the ongoing professional growth of its staff.

Aim: By leveraging resources such as the Clinical Excellence Commission's reflective practice workbook and the Health Education and Training Institute (HETI) template, this initiative aims to help nurses critically evaluate their clinical experiences, acknowledge successes, and identify areas for improvement.

Methods: The study utilises both quantitative surveys and qualitative feedback to assess the multifaceted impacts of these sessions. Quantitative data focuses on measurable improvements in participants' critical thinking abilities, safety awareness, and clinical decision-making. Qualitative insights are gathered through feedback on how these sessions influence nurses' ability to cope with workplace challenges, build resilience, and continuously improve their practice. Key objectives include examining how reflective practice contributes to professional growth, fosters a culture of accountability, and enhances patient safety and care quality.

Conclusion: Reflective practice encourages healthcare professionals to engage in self-assessment, fostering a deeper understanding of their actions, decisions, and the outcomes of their care. By creating structured opportunities for reflection, these sessions also serve as a support mechanism, promoting personal resilience and well-being among participants. Additionally, reflective practice helps healthcare professionals identify patterns and root causes of errors, fostering a proactive approach to preventing future lapses in care.

References

1. Artioli, G., Foà, C., Taffurelli, C., Cavuto, S., & Ghirrotto, L. (2021). Using reflective practice in interprofessional education and practice: A realist review of its functions, processes, and outcomes. *Journal of Interprofessional Care*, 35(2), 199-210.
2. Barbagallo, M. S. (2021). Reflective practice in nursing: A critical component in maintaining professionalism. *Journal of Nursing Practice*, 5(3), 102-108.
3. Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Oxford: Oxford Polytechnic, Further Education Unit.
4. Koshy, K., Limb, C., Gundogan, B., Whitehurst, K., & Jafree, D. J. (2017). Reflective practice in health care and how to reflect effectively. *British Journal of Hospital Medicine*, 78(11), 627-630.
5. Mann, K., Gordon, J., & MacLeod, A. (2009). Reflection and reflective practice in health professions education: A systematic review. *Advances in Health Sciences Education*, 14(4), 595-621.
6. Schön, D. A. (2017). *The reflective practitioner: How professionals think in action*. Routledge.

Quality & Effectiveness of Safe Patient Care

(P5) Behavioural insights: how discounting risk can influence decision-making practices

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Background: Behavioural insights focus on understanding human thinking, behaviour, and decision-making.

It recognises that people do not always act rationally, as we are all influenced by our environment and the behaviour of others.

Adopting a behavioural insights approach to pressure injury prevention may result in a different finding (or insight) that can help mitigate the frequency of pressure injury development in the hospital setting. An intervention that does not create more work for nurses but reduces the likelihood of pressure injury development is where a measure of success may lie.

Method: Pressure Injury example using the EAST Framework Matrix - Easy, Attractive, Social, Timely

Results: Disrupting the usual chain of events with a default intervention that reduces the likelihood of a pressure injury developing, with no additional task-based input from nurses is an easy, attractive and simple approach that could be pursued. Ensuring all high-risk areas have pressure-relieving mattresses (PRM) for every bed would result in a measurable reduction in the number of hospital-acquired pressure injuries. This default intervention removes the barrier of trying to access a PRM, of which a large proportion of patients in high-risk areas will need regardless. Hospital costs related to pressure injury treatment typically range from \$2,700 (for a grade one pressure injury) up to \$22,000 (grade four). If each PRM prevents a single grade two pressure injury (which can cost a hospital \$10,000 to treat) each year, the net saving over a four-year period is in the region of \$30,000. In 2015 a systematic review concluded that patients at high risk of developing pressure injuries should, where possible not be cared for on standard hospital mattresses. In 2020, it was estimated that the total cost for all hospital-acquired pressure injuries in public hospitals across Australia was \$9.11 billion.

Conclusion: There is often a gap between theory (the ideal world) and practice (the real world). Behavioural insights is about understanding this gap and offering potential solutions. This example illustrates how a simple change has the potential to have a big impact at a system level.

References

1. Service, O., Hallsworth, M., Halpern, D., Algate, F., Gallagher, R., Nguyen, S., Sanders, M. (2014). EAST: Four simple ways to apply behavioural insights
2. Whitty, J. A., McInnes, E., Bucknall, T., Webster, J., Gillespie, B. M., Banks, M., Chaboyer, W. (2017). The cost-effectiveness of a patient centred pressure ulcer prevention care bundle: Findings from the INTACT cluster randomised trial. *Int J Nurs Stud* 75, 35-42.
3. Nguyen, K. H., Chaboyer, W., & Whitty, J. A. (2015). Pressure injury in Australian public hospitals: a cost-of-illness study. *Aust Health Rev*, 39(3), 329-336.
4. Nghiem S, Campbell J, Walker RM, Byrnes J, Chaboyer W. (2022) Pressure injuries in Australian public hospitals: A cost of illness study. *Int J Nurs* 130:104191.

Quality & Effectiveness of Safe Patient Care

(P6) The Hospital-Acquired Pneumonia PrEveNtion (HAPPEN) study

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Background: Hospital-acquired pneumonia (HAP) is one of the most common complications in Australian public hospitals. HAP affects over 50,000 patients in Australian public hospitals annually. Patients typically acquire HAP due to aspiration of their own oropharyngeal material –yet oral care in hospitals is suboptimal or neglected altogether. To address this gap, a robust clinical trial that informs clinical practice, policy, and education is needed.

Aim: The HAPPEN study is a multi-centre clinical trial aiming to evaluate if improving the frequency and quality of oral care can reduce the incidence of HAP.

Methods: We are conducting a multi-centre stepped-wedge cluster randomised trial in three Australian hospitals over 52-weeks. Three wards from each hospital begin in the control period and commence the intervention, randomized in 12-week blocks. The intervention consists of improving oral care, including cleaning of the teeth/dentures, tongue, moisturising the lips, appropriate toothbrush choice and the use of a sodium bicarbonate-containing toothpaste. Face-to-face education and resources are provided to nursing staff during the intervention phase. Monthly feedback on HAP cases and compliance with the intervention will be given to nursing staff, integrated into ongoing feedback, education, and training sessions.

Results: The HAPPEN study is currently underway, with results predicted to be available in 2025.

Conclusion: This study will generate new evidence and knowledge that will aid in allocating scarce healthcare resources through cost-effectiveness analysis and the development of resources for widespread translation.

Quality & Effectiveness of Safe Patient Care

(P7) CCLHD Information Brochure for Separated Families

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Background: Parents from Separated Families often have specific questions about accessing CCLHD community health services for their child or adolescent. The referring parent may seek information including the other parent's access to the clinician seeing the child, the other parent's eligibility to attend appointments, the other parent's access to clinical information recorded and the removal of the other parent's contact information from the child's or adolescent's Health Care Record. Currently there is no CCLHD or NSW Health Brochure to answer these frequently asked questions. CCLHD staff feedback identified that such a resource would be beneficial as staff reported occasions where challenging situations had arisen whilst working with Separated Families.

Aim: Develop a CCLHD Brochure to provide information to parents from Separated Families to be issued either prior to attending or at their first appointment with the community health team.

Method: A group of Subject Matter Experts (SMEs) from multiple divisions across CCLHD was formed to guide the development of the brochure content for Separated Families. The SME group developed a consumer survey and staff survey to seek feedback on the content for the proposed brochure. These surveys are currently open for feedback. The SME group will review the survey results to develop a draft brochure. Feedback will then be sought from both consumers and staff on the draft content. Once the SME group finalises the brochure content feedback will be sought from the CCLHD Health Literacy Committee. Production of the brochure will then occur. All community health teams working with children and adolescents will have access to the new brochure.

Quality & Effectiveness of Safe Patient Care

(P8) Can you escape Sepsis?

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Introduction: Sepsis is a common diagnosis made within Wyong Emergency Department (ED) and education of the Clinical Excellence Commission (CEC) Sepsis KILLS program remains one of our department's key education priorities as a part of meeting national Standard 8: Recognising and Responding to Acute Deterioration.

Increased workloads, increased burnout and decreased engagement in education were all subjective observations of the education team, therefore developing new and innovative ways to deliver education was identified as a priority.

Project: An interactive escape room style lesson plan was developed that blended the format of an escape room with clinical learning objectives of an education session. Learning objectives included clinical knowledge such as 'Identify red flags for increased risk of sepsis' and 'Demonstrate ability to escalate and activate the sepsis pathway'. They also included soft skill learning objectives such as teamwork, communication and development of relationships between the multidisciplinary staff. The room was set up for 1 week and groups were facilitated through the session by a Clinical Nurse Educator. A total of 92 multidisciplinary staff, mainly nursing staff, but some medical and pharmacy staff, completed the session. Engagement in this style of education was significantly higher than other education delivery styles offered within Wyong Emergency.

Results: 100% of participants evaluated that the session improved their knowledge of identifying the signs and symptoms of sepsis, improved their knowledge on the Sepsis Pathway and the treatment of Sepsis. Audits were attended pre and post education delivery. Time to antibiotic charting improved by 13% and time to antibiotic administration improved by 22%.

Conclusion: The escape room style education was an overwhelming success both in improving the data on antibiotic charting and administration times but in subjective evaluations on education engagement, enjoyment, enthusiasm and teamwork that staff demonstrated through their participation.

References

1. Alejandre C, Corniero P, Claret G, Alaez C, Esteban E, Jordan I. New resident training strategy based on gamification techniques: an escape room on sepsis in children. *Children*. 2022 Sep 30;9(10):1503.
2. Gabriel PM, Lieb CL, Holland S, Ballinghoff J, Cacchione PZ, McPeake L. Teaching evidence-based sepsis care: A sepsis escape room. *The Journal of continuing education in nursing*. 2021 May 1;52(5):217-25.

Quality & Effectiveness of Safe Patient Care

(P9) Evaluation of the effectiveness of Behavioural and Psychological Symptoms of Dementia (BPSD) App in supporting medical officers in managing patients on the ward

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Introduction: Previous quantitative audits at Wyong Hospital, showed that often BPSD guidelines which were on the CCLHD intranet were not adhered to and that medical officers need ready access to local guidelines. Interviews with staff who were participating in Clinical Aggression Response Team (CART) calls found that medical staff were not confident in when to and what to prescribe and what was the most appropriate management.

Thus, a BPSD app was developed making evidenced based recommendations and local guidelines available at the bedside using a mobile device.

Objective: Evaluate medical officers' opinion to the usability, effectiveness, barriers and facilitators in managing BPSD using the App.

Methods: All junior doctors working at Wyong hospital were invited to participate in a survey to evaluate of the effectiveness of the BPSD App in supporting doctors in their role in managing patients on the ward via their work email. The survey has been developed using the CEC'S Quality Audit Reporting System (QARS) platform and most questions were tick box options. Site authorisation was obtained from the CCLHD Research Office.

Results: There were 21 respondents. 80% of participants were likely to recommend the App to their colleagues and 95% found the App easy to use. One third used the app weekly, one third monthly and one third less frequently. 72% were satisfied that the App was able to assist them in managing BPSD on the ward and 74% found the App helpful. The main barriers to using the App was that the App required a work email and password prior to download as well as knowledge that it exists despite the App being available on Junior Medical Officers (JMO) intranet site and posters of the App available on the wards.

Conclusion: BPSD App allows ease of access to concise evidenced based information and supports doctors in their role in managing BPSD. We aim to improve knowledge of the App by introducing the App to all new doctors in both Wyong and Gosford hospitals during their orientation day and also print information about the App in their orientation book.

Quality & Effectiveness of Safe Patient Care

(P10) From Data to Action: Reducing Falls in a Neurology/Stroke/General Medicine Unit

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Background: Inpatient falls represent the most frequently reported safety events in healthcare settings resulting to serious injury⁽¹⁾. This led the Wyong leadership team from Neurology/Stroke/General Medicine Unit (H4A) to partner with the Clinical Excellence Commission (CEC) from 2022-2024 to enhance care for older persons and reduce falls by 50%. H4A initially opened in 2021 with 22 beds, the ward expanded to 28 beds in March 2023. The facility includes a monitored Acute Stroke Unit (ASU) and features a long corridor with limited visibility, housing 16 single rooms and 4 double rooms.

Aim: To minimise and sustain a reduction in falls and related injuries of Harm Scores (HS) 1 and 2 on H4A for the older person in the acute hospital setting.

Methodology: To address patient falls on H4A, we employed iterative PDSA (Plan-Do-Study-Act) cycles. Monthly data collection through the Incident Management System (IMS+) helped us identify patterns and emerging themes. We conducted structured brainstorming sessions to investigate root causes and develop targeted interventions. Fortnightly multidisciplinary team meetings ensured continuous monitoring, adherence to planned actions, and timely adjustments to the implementation process.

Results: We developed and tested a 'Patient Safety Plan' and updated the clinical handover form to improve communication of fall risk factors at the bedside. Staff became more aware of patients' fall risks, focusing on mobility, required assistance, and equipment. To support increased bed capacity, the nursing allocation model changed from two to three teams. We included a 6am rostered shift and a dedicated ward PSA commenced to support toileting and mobilising. Modifications to district admission packs highlighted potential fall risks, resulting in an improved experience for older persons and a reduction of 26 falls from 2023-2024.

Conclusion: Enhanced teamwork and communication among staff led to a downward trend in falls and falls without harm, improving patient experience in the acute setting. Staff now understand why patients fall on their ward and have prioritised change ideas and initiatives to improve care and experience for patients on H4A. The H4A team plan to sustain these changes through regular audits, consumer feedback, and incident theming.

References

1. Heikkila, A, Lehtonen, L and Junttila, K. Consequences of inpatient falls in Acute Care: A retrospective Register Study. Journal of Patient Safety 20(5);p 340-344, August 2024.

Quality & Effectiveness of Safe Patient Care

(P11) Evaluating the Wyong Transition to Acute Medicine Programme (TAMP): Enhancing Recruitment, Education, and Support for Returning Nurses

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Background: Wyong Hospital's Medicine Services expanded after a 2021 redevelopment but faced staffing challenges due to a shortage of experienced applicants. To address this, a 12-month Transition to Acute Medicine Programme (TAMP) was created to support registered nurses without recent acute care experience ^{1,2}.

Aim: This study aimed to investigate the challenges, support, integration, and job satisfaction experienced by nurses during their transition back to acute care practice.

Methods: A working group consisting of ONM, NUM, CNC, and CNE representatives planned to fill 7.4 full-time equivalent (FTE) positions and 9 temporary roles across four inpatient units. Recruitment occurred during a Nursing Open Day at Wyong Hospital on July 23, 2023, specifically created for the program. The TAMP commenced on September 18, with funding allocated for a temporary Clinical Nurse Educator (CNE) with the 1FTE. The TAMP aimed to develop eight Registered Nurses (RNs) through rotations in Cardiology, Gastroenterology, Neurology, and Respiratory services.

The programme included orientation, monthly clinical supervision, and four study days over 12 months. Data was collected at six months (T1) and 11-12 months (T2), covering nursing skills, satisfaction, and intention to leave ^{1,2}. Two focus groups were conducted: one with TAMP participants and one for Wyong Medicine staff.

Results: Ten participants were recruited, with eight joining the TAMP. Participants reported 100% satisfaction and completed 67 clinical skill assessments over 11 months, showing a 30% improvement in self-assessed patient assessment, medication knowledge, and confidence. There was also a 37.5% improvement in seeking help from other nurses and having positive role models. Feedback highlighted the positive influence of the Clinical Nurse Educator's role. Most participants completed the program and intended to continue in acute care.

Conclusion: The study demonstrated significant improvements in nursing skills, program satisfaction, and intention to continue in acute care. Positive changes were observed in clinical supervision and eMR system use, enhancing the work environment and efficiency. It is recommended to expand the TAMP program to further invest in and support nursing staff, which will enhance recruitment, retention, and job satisfaction among nurses.

References

1. Aggar, C., Gordon, C.J., Thomas, T.H., Wadsworth, L. and Bloomfield, J., 2018. Evaluation of a community transition to professional practice program for graduate registered nurses in Australia. *Nurse Education in Practice*, 32, pp.101-107.
2. Casey, K. and Fink, R.M., 2021. Revisions to the Casey-Fink graduate nurse experience survey reflect current healthcare trends. *JONA: The Journal of Nursing Administration*, 51(5), pp.233-234.

Quality & Effectiveness of Safe Patient Care

(P12) Enhancing Patient and Staff Safety through Critical Thinking and Simulation-Based Education.

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Introduction: Comprehensive health care that meets individual patient needs is essential for enhancing overall health and safety. Patient and clinician safety is a priority, as it can affect outcomes, and the quality of care delivered. The leadership team identified that an education program that could aim to enhance clinicians' critical thinking and situational awareness within a short period of time could increase overall patient and clinician health and well-being.

Methods: We designed and implemented a simulation education session that could incorporate active learning, gamification and adult learning theory into an interactive room^(1,2). A literature review^(3,4) undertaken focused on interactive simulation-based sessions that could focus on extrinsic factors that can affect comprehensive care. The simulation room posed forty-five clinical, safety and environmental hazards that can affect patient and clinicians' health and outcomes.

Results: On hundred and twenty-two (122) nursing clinicians participated in the simulation room. Participants included 82% Registered Nurses (RN), 11% Enrolled Nurses (EN), 7% nursing students and 1% Assistant in Nursing (AIN). Average confidence in detecting clinical risks increased from 3.45 average rating (on a scale of 1 to 5) pre simulation room to 4.7% average rating post simulation room. 99.2% of participants indicated that the education session will be useful in their work practice.

Further ongoing analysis is currently being undertaken to provide an understanding of the effectiveness and the impact on patient and clinician safety and well-being. Recommendations will be formulated that will help to assist and develop further simulation-based education sessions.

References

1. Koukourikos K, Tsaloglidou A, Kourkouta L, Papathanasiou IV, Iliadis C, Fratzana A, et al. Simulation in Clinical Nursing Education. Acta informatica medica : AIM : journal of the Society for Medical Informatics of Bosnia & Herzegovina : casopis Društva za medicinsku informatiku BiH. 2021 Mar;29(1):15–20.
2. Horntvedt MET, Nordsteien A, Fermann T, Severinsson E. Strategies for teaching evidence-based practice in nursing education: a thematic literature review. BMC Medical Education. 2018 Jul 28;18(1):1–11.
3. Gallione C, Barisone M, Molon A, Pavani M, Torgano C, Bassi E, et al. Extrinsic and intrinsic factors acting as barriers or facilitators in nurses' implementation of clinical practice guidelines: a mixed-method systematic review. Acta bio-medical : Atenei Parmensis. 2022 Jul 1;93(3):e2022252.
4. Kadaei M. Ambula Healthcare. 2024. Which of the following are internal factors that affect patient safety. Available from: <https://www.ambula.io/which-of-the-following-are-internal-factors-that-affect-patient-safety/>

Quality & Effectiveness of Safe Patient Care

(P13) Culturally appropriate palliative care for people of Chinese ethnicity with dementia in residential aged care: a model of care

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Aim: To co-design and implement a culturally appropriate model of palliative care for people of Chinese ethnicity living with dementia in a residential aged care facility (RACF).

Background: Older people of Chinese ethnicity with a diagnosis of dementia are among the users of residential aged care services in western countries including Australia. However, what constitutes culturally appropriate care to this culturally diverse group remains a grey area due to literature gaps.

Methods: This study comprises two phases: Phase 1, co-design of the model and Phase 2, pilot implementation of the model. During Phase 1, a Stakeholder Group made up of staff, residents of Chinese ethnicity, and their family was established with residential aged care collaborators. Findings from the literature reviews ^(1,2) and pilot projects undertaken by the team was presented to the Stakeholder Group. A draft of the model will be developed and refined until a final version is achieved through consensus. During Phase 2, the model of care will be implemented over a 6-month period guided by the i-PARIHS (integrated Promoting Action on Research Implementation in Health Services) implementation framework

Results: Initial focus group was conducted for Phase 1 of the project in October 2024. Participants include staff (n=3), family members (n=2), residents (n=5) from two residential aged care facilities in NSW providing care to people of Chinese ethnicity. Participants regarded the aspects of day-to-day care as highly valuable especially traditional food and culture-specific activities. There were minimal insights in relation to advance care planning and end of life.

Conclusion: Consistent with the consensus-based definition of palliative care ⁽³⁾, preliminary findings from Phase 1 of the study show that residential aged care stakeholders perceive the utmost importance of approaches to care that focus on supporting the resident to live as fully as possible. There is a need to explore a culturally sensitive approach in discussing the aspects of palliative care related to advance care planning and end of life care.

References

1. Gaviola MA, Omura M, Inder KJ, Johnson A. Caring for people with dementia from culturally and linguistically diverse backgrounds in nursing homes: A scoping review. *International Journal of Nursing Studies*. 2024;151:104674.
2. He FX, Geng X, Johnson A. The experience of palliative care among older Chinese people in nursing homes: A scoping review. *International Journal of Nursing Studies*. 2021;117:103878.
3. Radbruch L, De Lima L, Knäul F, Wenk R, Ali Z, Bhatnagar S, et al. Redefining palliative care — A new consensus-based definition. *Journal of pain and symptom management*. 2020;60(4):754-64.



Improving Health & Wellbeing in the Community

(P14) Multidisciplinary Primary Care Outreach for Women and their Children Experiencing Domestic and Family Violence and/or Homelessness: A Rapid Evidence Review

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Background: Women and children experiencing domestic and family violence (DFV) have complex health and social care needs¹ while also facing barriers to accessing health and social care². They are also at increased risk of homelessness³. The integration of outreach primary health care delivered by a multidisciplinary team (MDT) into shelters offers the opportunity to address these issues.

Aims: This rapid review sought to identify and describe outreach programs for women and children affected by DFV and/or homelessness.

Methods: Seven electronic databases were searched in March 2024. Included studies: described a primary care MDT outreach program; were delivered in shelters, refuges, mobile clinics or drop-in centres; were written in English; and reported results separately for women.

Results: Twelve studies were included in the review. The main services provided by outreach programs were: physical and mental health assessments; treatment of minor illnesses and injuries; provision of medications; preventive care such as health screening; referral to, and coordination with, other health, social or legal services; psychosocial care; and practical help such as assistance with appointments. The review identified four staffing models:

1. nurse-led MDT;
2. nurse-led MDT with physician available remotely;
3. MDT with on-site physician; and
4. student-led.

The staffing model comprising MDT with on-site physician offered, on average, twice as many services as the student-led model. With the exception of two quasi-experimental evaluations, the study designs lacked a control group; two studies provided qualitative evaluations; two services were not evaluated at all. Examined outcomes included: service acceptability, health care use, health outcomes and cost-benefit analysis. All studies reported benefits to outreach service clients for one or more of these outcomes.

Conclusion: Few studies rigorously evaluate primary care MDT outreach programs. The small volume of research may be due to challenges of conducting research with this vulnerable population. Despite this, the studies identified in this review indicate benefits attributed to outreach programs for women and children experiencing DFV and/or homelessness. Funding for research to identify the most effective ways to meet the primary care needs of women and children affected by DFV is urgently needed.

References

1. Potter, L. C., Morris, R., Hegarty, K., García-Moreno, C., Feder, G. Categories and health impacts of intimate partner violence in the World Health Organization multi-country study on women's health and domestic violence. *International Journal of Epidemiology*. 2021; 50(2): 652-662. <https://doi.org/10.1093/ije/dyaa220>
2. Hollingdrake, O., Saadi, N., Alban Cruz, A., Currie, J. Qualitative study of the perspectives of women with lived experience of domestic and family violence on accessing healthcare. *Journal of Advanced Nursing*. 2023; 79(4): 1353-1366. <https://doi.org/https://doi.org/10.1111/jan.15316>
3. Australian Institute of Health and Welfare. Family, domestic and sexual violence: economic and financial impacts [Internet]. Canberra: Australian Institute of Health and Welfare; 2024. Available from <https://www.aihw.gov.au/family-domestic-and-sexual-violence/responses-and-outcomes/economic-financial-impacts>

Improving Health & Wellbeing in the Community

(P15) Holistic Care for People Living with Chronic Musculoskeletal Pain: The Relevance and Importance of Sexual Function

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Background: Sexual dysfunction and negative impacts on intimate relationships commonly impact people with chronic musculoskeletal pain conditions. However, in healthcare these issues are rarely addressed despite the profound impact they can have on quality of life.

Aim: To develop health care practitioners' knowledge and skills in assessing and managing sexual dysfunction within routine care for people with chronic musculoskeletal conditions.

Approach: In this presentation (from an experienced Women's, Men's and Pelvic Health Physiotherapist), strategies to support health care practitioners more confidently address sexual dysfunction within musculoskeletal care will be discussed. These include consideration of Annon's PLISSIT (Permission, Limited Information, Specific Suggestions, and Intense Therapy) model and how health care practitioners may apply this in clinical practice. While each stage of this model requires greater knowledge, counselling skills and confidence to apply, the first two stages are extremely useful for all health care practitioners seeking to better support their patients with sexual dysfunction. Options for identifying and assessing sexual dysfunction using validated questionnaires (including male and female-specific measures) will be reviewed.

Furthermore, the management of sexual dysfunction will be discussed, with application to common chronic musculoskeletal conditions. Suggested care pathways and potential referral options for specialised management will be covered.

Key Practice Points:

1. Given a lack of specific training, health care practitioners may be understandably reluctant or embarrassed to raise the concept of sexual function with patients who have chronic musculoskeletal conditions
2. Knowledge of available assessment tools, strategies and referral pathways that can be used to address sexual function will improve health care practitioners' confidence and enable the provision of more holistic care



Improving Health & Wellbeing in the Community

(P16) Men who have sex with men (MSM) at public and commercial sex environments (PSE & CSE) and their perceived risk for acquiring Sexually Transmissible Infections (STIs) and HIV: Does their perception increase their risk of acquiring an STI or HIV?

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Background: Despite significant advancements in prevention and treatment, Men Who Have Sex with Men (MSM) continue to face an increased risk (IR) of contracting Human Immunodeficiency Virus (HIV) and Sexually Transmissible Infections (STIs) (Health Equality Matters [HEM], 2023).

MSM who do not identify as gay, or bisexual are more likely to be engaging in high-risk sexual behaviours at both PSEs and CSEs. It has been noted by Woodley, (2022) in recent times new HIV diagnoses in heterosexual men who do not identify as gay or bisexual; there has been a 27% increase.

Aim and Purpose: The aim of IR regarding MSM who have sex at PSEs and CSEs and their perceived risk for HIV and STI transmission is to examine and synthesis existing research and knowledge in this area. The purpose is to gain a deeper understanding of behaviours, attitudes, and perceptions of these men particularly in relation to their perceived risk of HIV and STI transmission. This IR will assist identify trends, patterns, gaps in knowledge and inform future research, prevention strategies and public health interventions.

Methods: This IR used three main databases to search for literature relating to the subject.

Results: The analysis of the research identified five main themes that were present across the studies, which aimed to further the understanding of the associations between individuals who engage in PSEs and CSEs and their perceived risk for HIV and STI transmission.

Conclusion: This study highlights the significance of PSEs and CSEs as possible areas of high HIV and STI transmission rates, emphasising the importance of targeting these locations for effective HIV and STI prevention strategies. Based on the documented prevalence of high-risk behaviours, it becomes apparent that implementing focused interventions within PSEs and CSEs has the potential to exert a substantial influence on the rates of HIV and STI transmission among MSM. The research has also shown that not all men identify as gay or bisexual, and targeted HIV and STI prevention campaigns need to address these men with great urgency.

References

1. EBSCO. (2022). CINAHL Database | EBSCO. EBSCO Information Services, Inc. | www.ebsco.com; EBSCO. <https://www.ebsco.com/products/research-databases/cinahl-database>
2. Grulich, A. (2021). Agenda 2025 ENDING HIV TRANSMISSION IN AUSTRALIA. In Health Equality Matters (pp. 1-18). Health Equality Matters. <https://healthequitymatters.org.au/wp-content/uploads/2021/06/Agenda-25-Technical-Paper.pdf> Grulich, A. (2021).
3. Woodley, M. (Ed.). (2022, August 30). Australia records lowest ever HIV numbers. RACGP. RACGP - Australia records lowest ever HIV number

Improving Health & Wellbeing in the Community

(P17) Prevalence and presentation of lower limb neurovascular complications in children with diabetes

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Background: Diabetes is a group of metabolic disorders characterised by hyperglycaemia due to changes in the synthesis, secretion, and/or incapacity of the insulin to function⁽¹⁾. Annually, there are 22.9 cases of type 1 diabetes per 100,000 persons under 15, with a 3-4% increase each year⁽²⁾. The incidence of type 2 diabetes in children has also risen over the past 20 years, averaging a 2.3% annual increase⁽³⁻⁵⁾. Type 2 diabetes in youth is concerning as it tends to be more aggressive, leading to complications earlier than in type 1⁽⁵⁾.

Lower limb disorders, such as neuropathy and vasculopathy, are common in individuals with diabetes, resulting in significant long-term complications^(4,6). Approximately 387 million people worldwide are affected with diabetes related lower-limb complications^(7,8). Most current evidence regarding these complications in children relies on sub-clinical assessments, such as nerve conduction studies, which, despite being the gold standard for detecting nerve health disturbances, are rarely used in paediatric settings due to their painful nature^(9,10). Paediatric endocrinologists will therefore opt for painless and more accessible clinical assessments such as those conducted by podiatrists to screen for lower limb complications.

Podiatrists play an essential role in the screening of neurovascular lower limb in the prevention and management of complications of diabetes⁽¹¹⁾. The International Working Group on the Diabetic Foot and Diabetes Australia recommends that adults with diabetes undergo annual neurovascular screening to identify at-risk feet, however, do not provide explicit information on frequency of assessments for children with diabetes (12-14). Early and accurate diagnosis is crucial for effective education and management, aiming to mitigate costly long-term health issues⁽⁶⁾.

Methods: A collaborative research project with the University of Newcastle and the Paediatric Endocrinology team at Gosford Hospital is underway to provide more evidence on the prevalence and presentation of lower limb neurovascular complications in children with diabetes.

Aim: The project aims to recruit over 30 patients with juvenile diabetes in the CCLHD and conduct essential neurovascular assessments, including monofilament, vibration perception, reflex testing, Doppler ultrasound, and toe-brachial index pressure testing.

Improving Health & Wellbeing in the Community

(P18) CCLHD's New Menopause Service

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Aim: To discuss the implementation of CCLHD's Menopause Service under the ACI's Statewide Menopause Initiative (NSW Menopause Initiative: Monitoring and Evaluation Plan Final Draft, 2024).

Design: A pilot study was conducted by performing a six-month (July 2024 till January 2025) retrospective clinical documentation audit. Descriptive statistics were utilised to summarise outcomes.

Methods: Health pathways were established for GPs and an internal referral form was developed for referrals. Eligibility criteria was developed to identify patients presenting with severe menopause symptoms and/or requiring complex management. If eligible, patients were reviewed by the Menopause Service Clinical Coordinator or Women's Health Nurse to assess symptom severity, the impact on quality of life (QoL), work and exercise participation, past medical history, current medications, mental health, sleep, medical work up and management offered to date. Outcome measures included the MenQOL and DASS21. Diabetes, Osteoporosis and Cardiovascular disease risk calculators identified risk factors during menopause. Objective measures included: Body Mass Index, waist circumference, As Many Rounds as Possible Sit to Stand 60 seconds, step test and grip strength. Patients also accessed the Women's Health Physiotherapist for exercise prescription (cardiovascular, resistance and balance training), sexual dysfunction management, pelvic floor muscle and bladder retraining. A referral pathway was developed to offer further specialised care through the RNSH Multidisciplinary Menopause Hub.

Results: Parameters reported on included: the number of referrals received; the number of referrals eligible to access the service; average wait times to access care; menopause symptom severity (MenQOL scores); mental health status (DASS21 scores); the number of patients referred onto Women's Health Physiotherapist; and the number of patients referred onto the RNSH Multidisciplinary Menopause Hub.

Conclusions: This new model of care is expected to streamline care pathways, support local GPs, provide more timely evidence-based treatment and improve patient experience for people experiencing severe and complex symptoms of menopause.

Key Practice Points:

1. One in four women experience severe and complex menopause symptoms, which can significantly impact health and wellbeing.
2. Providing access to multidisciplinary management may significantly reduce the impact menopause has on QoL (MenQOL scores), mental health (DASS21 scores), diabetes, osteoporosis and cardiovascular disease risk.

References

1. Agency for Clinical Innovation. (2024). NSW Menopause Initiative: Monitoring and Evaluation Plan Final Draft. 1-20. www.health.nsw.gov.au

Improving Health & Wellbeing in the Community

(P19) Experiences of nurse preceptors in a continuity-aligned dedicated education unit

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Background: A dedicated education unit is a collaboration between educational institutions and affiliated clinical providers^[1]. A continuity-aligned education unit is strongly focused on teaching and learning where students return to complete subsequent professional experience placements on the same unit. Nurse preceptors report personal and professional satisfaction by students undertaking placement within a dedicated education unit^[3]. However, information concerning nurse preceptor experiences within a continuity-aligned education unit are unknown.

Aim: This study aimed to explore the experiences of nurse preceptors who mentor students in a continuity-aligned education unit.

Methods: RNs employed for >six months within the continuity-aligned education unit, with 12-months experience as a registered nurse participated in a 30-minute audio recorded interview either face-to-face or via zoom. Interviews were transcribed verbatim. Data analysis was undertaken using thematic analysis guided by Braun and Clark^[3].

Results:

A total of N=9 participants were recruited. Four themes emerge:

1. the structured nature of the continuity-aligned education unit enhanced students' confidence and professionalism,
2. the presence of dedicated preceptors/facilitators on the ward provided constant and immediate support for students,
3. improved demonstration of current evidence-based practice, and
4. staffing challenges negatively impacted student learning opportunities.

Conclusion: A continuity-aligned dedicated education unit is beneficial for students' learning and nurse preceptors' professional development, despite occasional challenges with staffing. Studies to test the efficacy in varying fields of nursing are now needed.

References

1. Pedregosa, S., Fabrellas, N., Risco, E., Pereira, M., Stefaniak, M., Senuzun, F., Martin, S., & Zabalegui, A. (2021). implementing dedicated education units in 6 European undergraduate nursing and midwifery students clinical placements. *BMC Nursing*, 20(1), 61.
2. Henderson, A., Twentymann, M., Heel, A., & Boyd, B. (2006). Students' perception of the psycho-social clinical learning environment: an evaluation of placement models. *Nurse Edu Today*, 26(7), 564-571.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

Improving Health & Wellbeing in the Community

(P20) Anxiety increases the risk of osteoporosis and fracture in Australian women: Results from the Australian Longitudinal Study on Women's Health.

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Background: Previous studies found an association between anxiety and osteoporosis/fracture in adults (1-4); however, the relationship is under-researched globally.

Aim: This longitudinal study examined osteoporosis and fracture risk in middle-aged Australian women with anxiety.

Methods: We analysed the survey and linked the Pharmaceutical Benefits Scheme (PBS) data of 11,226 women from the Australian Longitudinal Study on Women's Health (ALSWH) born from 1946 to 1951 and followed up from 2001 to 2021. Anxiety was measured by affirmative answers to the survey question – "In past three years, have you been diagnosed or treated for: Anxiety/nervous disorder?" Osteoporosis was measured by the first prescription date of any antiosteoporosis medications from PBS. Fracture was measured by the affirmative answers to the survey question – "In the last 12 months, have you: Broken or fractured any bone/s?" The Fine and Gray competing risk regression model was used with death as a competing risk to examine osteoporosis and fracture risk among women with anxiety. Directed Acyclic Graphs were used to select potentially confounding variables.

Results: 745 women (6.7%) reported anxiety at baseline. Women reporting a diagnosis or treatment of osteoporosis before baseline were excluded from the analyses. Both unadjusted (SHR: 1.1; 95% CI: 1.03-1.17; $p = 0.003$) and adjusted (SHR: 1.1; 95% CI: 1.03-1.16; $p = 0.004$) models showed increased osteoporosis events among women with anxiety than women without anxiety. Both unadjusted (SHR: 1.42; 95% CI: 1.33-1.51; $p < 0.001$) and adjusted (SHR: 1.41; 95% CI: 1.33-1.50; $p < 0.001$) models also showed increased fracture events among women with anxiety than women without anxiety.

Conclusion: We concluded that among the middle-aged women of the ALSWH 1946-1951 birth cohort, anxiety increased the risk of osteoporosis and fracture in twenty years. The results highlight the importance of regular bone health screening among women living with anxiety to prevent fracture-related morbidity and mortality in the community.

References

1. Roebuck G, Mazzolini M, Mohebvi M, Pasco JA, Stuart AL, Forbes M, Berk M, Williams L. Anxiety disorders are associated with reduced bone mineral density in men: Findings from the Geelong Osteoporosis Study. *Acta Psychiatrica Scandinavica*. 2023 Jul;148(1):47-59.
2. Catalano A, Martino G, Bellone F, Gaudio A, Lasco C, Langher V, Lasco A, Morabito N. Anxiety levels predict fracture risk in postmenopausal women assessed for osteoporosis. *Menopause*. 2018 Oct 1;25(10):1110-5.
3. Hong-Jhe C, Chin-Yuan K, Ming-Shium T, Fu-Wei W, Ru-Yih C, Kuang-Chieh H, Hsiang-Ju P, Ming-Yueh C, Pan-Ming C, Chih-Chuan P. The incidence and risk of osteoporosis in patients with anxiety disorder: a population-based retrospective cohort study. *Medicine*. 2016 Sep 1;95(38):e4912.
4. Erez HB, Weller A, Vaisman N, Kreitler S. The relationship of depression, anxiety and stress with low bone mineral density in post-menopausal women. *Archives of osteoporosis*. 2012 Dec;7:247-55.

Improving Health & Wellbeing in the Community

(P21) Interobserver Agreement of Ankle Fracture Classification Among Emergency Physicians

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Background: The Danis-Weber system was developed to classify ankle fractures anatomically. Assessing inter-observer agreement between physicians utilising this system is essential to ensure optimal patient outcomes. This has not yet been investigated amongst emergency physicians, who are the first point of care for patients with ankle fractures and the first to see their radiographs.

Aim: The current study fills this gap in research by assessing the inter-observer agreement between emergency physicians' classification of ankle fractures using the Danis Weber system.

Method: 7 emergency physicians from Gosford Hospital and Wyong Hospital NSW were asked to classify 100 ankle radiographs on two occasions, four weeks apart, and were emailed an educational presentation on Danis-Weber classification between the two tests.

Results: Tests 1 and 2 produced moderate ($\kappa = 0.51$, $p < 0.00001$) and substantial ($\kappa = 0.61$, $p < 0.00001$) levels of agreement, which did not show a significant level of improvement ($p = 0.63$). Physicians scored 83% and 88% in the two tests, which did not show significant improvement ($p = 0.63$).

Conclusion: Levels of inter-observer agreement however are comparable with orthopaedic surgeons and trauma surgeons worldwide, meaning that emergency physicians at Gosford and Wyong hospitals display a high level of consistency using the Danis-Weber system to classify ankle fractures, but that providing educational material via email is not an effective training method.



Improving Health & Wellbeing in the Community

(P22) A model providing preventive care in community mental health services: client perspectives and engagement

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Background: People with mental health conditions have high rates of chronic diseases^{1,2}, often attributed to engagement in lifestyle risk factors (smoking, nutrition, alcohol, & physical activity)³. There is need to develop effective and acceptable models for providing preventive care to address such risk factors in community mental health services^{4,5}. A cluster-RCT recently trialled a model of care (MoC), implemented in 6 NSW Community Mental Health Services across 3 LHDs (CC, HNE, & MNC).

The MoC encompassed 3 components:

1. all clients to be offered an appointment with a dedicated clinician (AAR and goal setting),
2. appointment information to integrate into client care plans, and
3. ongoing care provided by usual clinicians.

Aims:

1. To quantitatively measure model of care implementation, considering delivery and client awareness, update and acceptability, and
2. To qualitatively explore perspectives and experiences of client's who received the appointment component of the model of care.

Methods: Data for this study encompasses: telephone survey of randomly sampled clients of the participating services (n = 248), electronic template completed by coaches during the appointment (n = 249), client qualitative interviews (n = 17), and project log data collected throughout the intervention.

Results: Survey data shows low levels of client awareness of the coach (29%) and appointment offers (23%). However, for client's attending the appointment, it was deemed acceptable (AIM score =4.17/5), with generally high levels of AAR provision for those at risk (>85%). However, results regarding ongoing care were mixed with 37% of participants having their care plan updated, 67% indicated that they received ongoing support. Preliminary qualitative analysis indicates overall positive perspectives for participants engaged in the appointment, with successful behaviour change outcomes for some clients that is ongoing. There is considerable variability in expectations and views of the MoC.

Conclusions: Preliminary results indicate positive perceptions of the MoC by clients, including overall acceptability and fit within their usual mental health care. They also provide insight into areas in need of further development (e.g., appointment offer and advertising). A further mixed methods aim will be explored, to better understand the factors influencing client's interaction with the model of care.

References

1. Australian Institute of Health and Welfare. (2020). Australia's Health 2020: in brief. Australia's health series no. 17 Cat. No. AUS 232. Canberra: AIHW.
2. Walker, E. R., et al. (2015). Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis. *JAMA Psychiatry*, 72(4), 334–341.
3. Firth, J., et al. (2019). The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. *The Lancet Psychiatry*, 6(8), 675–712.
4. Bailey, J. M., et al. (2019). Systematic review and meta-analysis of the provision of preventive care for modifiable chronic disease risk behaviours by mental health services. *Preventive Medicine Reports*, 16, 100969.
5. Fehily, C., et al. (2020). The effectiveness of interventions to increase preventive care provision for chronic disease risk behaviours in mental health settings: A systematic review and meta-analysis. *Preventive medicine reports*, 19, 101108.

Improving Health & Wellbeing in the Community

(P23) Dementia risk reduction in young adults: What do they know? What are they doing about it?*Sarah Haskard, Jennifer Bowman, Sharon Savage*

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Background: Dementia poses a significant global challenge, affecting millions of individuals worldwide. Although a cure has not yet been discovered, evidence suggests that up to 45% of dementia cases could potentially be prevented through various risk reduction strategies. Despite this potential, research indicates that the general public remains largely unaware of these strategies, with minimal improvement in awareness over the past decade. It is crucial to maximize efforts in dementia risk reduction and to intervene early, particularly among younger populations.

Aim: This study aims to assess the levels of knowledge and engagement in risk reduction behaviours among young to midlife adults.

Methods: An online survey of 616 Australian adults aged 18-44 years was conducted to assess participants knowledge of dementia risk reduction, engagement with behaviours that either increase or decrease risk, and intentions to change behaviour to reduce risk. Knowledge was assessed via true/false questions, with risk reduction engagement captured by asking participants “Y/N” style questions around their frequency of participation. Additionally, participants indicated intentions to change by selecting on a scale of, ‘no intention’ to ‘in 10+ years’.

Results: Participants demonstrated an overall accuracy of only 45% on knowledge statements. Despite low knowledge, of the 10 risk reduction behaviours screened, the majority (70%) of participants were engaging in at least 5 of these. With respect to risk reducing behaviours, 90% reported avoiding smoking, however, protective behaviours such as regularly checking cholesterol levels were of the least engaged with (18%). For participants who were not engaging in risk reduction behaviours, willingness to change was high, with 96% of those participants indicating intentions to improve their physical activity. Additionally, when asked about whether they would regularly check blood pressure, 83% of participants indicated the intention to change.

Conclusion: Knowledge of risk reduction remains poor among young-midlife adults, however their engagement in risk-reducing behaviours is generally high. Encouragingly, participants expressed a strong willingness to change behaviours in order to reduce their dementia risk. This suggests that targeted behaviour change interventions for younger-middle-aged adults could significantly enhance risk reduction efforts and reduce the future burden of dementia.

Improving Health & Wellbeing in the Community

(P24) Understanding the death literacy of Central Coast allied health clinicians: A cross-sectional survey.

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7. Calvary Mater Newcastle Hospital, Newcastle, Australia
8. Hunter New England Primary Health Network, Gosford, Australia

Background: Demand for palliative and end-of-life care is increasing.¹ Central Coast allied health professionals are essential in providing palliative and end-of-life care to the Central Coast community. Providing high-quality palliative and end-of-life care to the Central Coast community requires allied health staff to have high levels of 'death literacy'. Previous scoping research at the Central Coast Local Health District found that allied health clinicians have limited confidence in discussing and identifying end-of-life.

Aim: To understand Central Coast allied health professionals' and assistants' collective death literacy levels.

Methods: The study sample includes allied health clinicians and allied health assistants practising on the NSW Central Coast, per the Allied Health Portfolio of the Workforce Planning and Development Branch defined by the NSW Treasury Codes.² Participants will be required to answer an anonymous cross-sectional survey. The online survey includes the Death Literacy Index Revised. The DLI-R is a 29-question survey used to measure a group or community's death literacy. The index consists of four scales of measurement: Factual knowledge, Learning from Experience, Practical knowing, and Community capacity. Practical knowing has two subscales: Talking support and Hands-on care. Community Capacity has two subscales: Community support groups and Accessing help. Example questions include: Please rate your level of agreement with the following statements (1 strongly disagree to 5 strongly agree): I know how to navigate the health care system to support a dying person to receive care. The DLI-R has been validated with the Australian general population.³ The survey also includes demographic questions used in the 2023 Australian study on Death literacy. Therefore, this will enable comparisons with population data and assessment of participants' role characteristics, including allied health discipline, location of practice (public, private, both), number of years in the profession, age, and religiosity. Once the data is collected, the descriptive statistics for the DLI-R overall and subscale scores will be calculated. Participants will be recruited through various forms, including direct emails and advertisements.

Results: The study's preliminary results are forthcoming and will be presented once collated.

References

1. Australian Government Department of Health & Aging National Palliative Care Strategy 2018.
2. NSW Health. Allied health professions in NSW Health 2023 [Available from: <https://www.health.nsw.gov.au/workforce/alliedhealth/Pages/professions.aspx>.
3. Noonan K, Grindrod A, Shrestha S, Lee S, Leonard R, Johansson T. Progressing the Death Literacy Index: the development of a revised version (DLI-R) and a short format (DLI-9). *Palliat Care Soc Pract*. 2024;18:26323524241274806.



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