



**Wellbeing
Journey Together**

Health Research Symposium 2023

Wednesday 20 September

Program & Book of Abstracts



BACKGROUND

This hybrid event aims to inform, highlight, and showcase local, national, and international research being conducted by researchers at the University of Notre Dame Australia across its three campuses of Broome, Fremantle and Sydney.

Our theme is '**Wellbeing: Journey together**' based on the University pillar of '*Transformative research*' and the Catholic theme of the year '*Journeying together*'.

The 2023 Inaugural Health Symposium, hosted by the Faculty of Medicine, Nursing and Midwifery and Health Sciences, aims to showcase significant and impactful research and/or research that demonstrates engagement and reach into the communities we serve. Together, presentations will showcase a dynamic and eclectic mix of research by researchers across career stages and across each of our campuses. The symposium will also provide opportunities for our early career researchers and higher degree students to showcase their research.

EVENT DETAILS

The symposium is a one stream full day event. It is running concurrently across each campus with a mix of live and live-streamed presentations. The concurrent catered breaks provide an opportunity for in-person networking on each respective campus. This includes the poster presentations which provide you with an opportunity to explore the wide array of research being undertaken at your campus and meet with the researchers involved.

ORGANISING COMMITTEE

Symposium Chair	Prof Gerard Hoyne, Acting PVCR / Associate Dean of Research
Symposium Committee Chair	A/Prof Paola Chivers, Deputy Director Institute for Health Research
Broome Committee members	A/Prof James Debenham, Director Majorlin Prof Sandra Woollorton, Nulungu Research Institute Uweinna Albert, Nulungu Research Institute
Fremantle Committee members	Dr Kate Buchanan, School of Nursing and Midwifery Dr Sheena McChlery, School of Nursing and Midwifery
Sydney Committee members	Prof Vasiliki Betihavas, School of Nursing and Midwifery, Edi Biasutti, Office of the PVCR Sami Korell, IT Service and Support

PROGRAM OVERVIEW

9:00 am (WST) 11:00 am (EST)	Welcome	<p>Welcome Symposium Chair Prof Gerard Hoyne (F)</p> <p>Acknowledgement of Country Todd Phillips (S)</p> <p>University Prayer Tom Gannon (B)</p> <p>Opening Address Vice Chancellor Prof Francis Campbell (F)</p>
9:25 am (WST) 11:25 am (EST)	Keynote	<p>Prof Lisa Wood Leave no one behind. How rapid real-world research can have life-changing impact and reduce health inequalities. (F)</p>
9:55 am (WST) 11:55 pm (EST)	Session 1	<p>Jess Nolan* Lateropulsion resolution up to one year post stroke: A prospective, longitudinal cohort study. (F)</p> <p>Shannen Vallesi* The Compass Outreach Program: Navigating the gap between possibility and opportunity for young people experiencing homelessness. (F)</p> <p>Elizabeth Kent* Supporting and promoting Kimberley educator wellbeing. (F)</p> <p>Venessa Poelina & colleagues Feed the Little Children Program: An impact evaluation - somebody cares. (B)</p> <p>Nikki Hulse* "Isn't it just a chat?" A qualitative exploration of students' experience of structured clinical supervision in rural allied health placements. (B)</p> <p>Tom Gannon Well-being education for health students, preparation for workplace and a lifetime of developing better understandings of human dignity. (B)</p>
10:55 am (WST) 12:55 pm (EST)		<p><i>Fremantle/Broome - Tea break and Poster exhibition</i></p> <p><i>Sydney - Lunch</i></p>
11:35 am (WST) 1:35 pm (EST)	Keynote	<p>Prof Rathan Subramaniam Building Health Research Programs & Partnerships. (S)</p>
12:05 pm (WST) 2:05 pm (EST)	Session 2	<p>Dr Nameer van Oosterom* Driving quality in delirium care within palliative care: the MODEL-PC study. (S)</p> <p>Dr Fiona Orr & Dr Kate Gill 'I want people to see us as a whole person': A co-produced study of living with Functional Neurological Disorder. (S)</p> <p>Dr Rikki Priest* "No one prepared me for this." Introducing a new postpartum support planning framework. (F)</p> <p>Dr Douglas Gordon* "Ice in the family": Exploring the experiences of close family members of people using methamphetamine. A longitudinal qualitative study. (F)</p> <p>A/Prof Ben Piggott* Life in a time of COVID: between physical activity and mental well-being in Western Australians during and after lockdown. (F)</p>

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<p>12:55 pm (WST) 2:55 pm (EST)</p>	<p><i>Fremantle/Broome - Lunch</i> <i>Sydney - Tea and Poster exhibition</i></p>	
<p>1:35 pm (WST) 3:35 pm (EST)</p>	<p>Keynote</p>	<p>A/Prof Stephen Kinnane Strong culture, strong place, strong families: cultural impact framework for cultural, social and emotional wellbeing. (F)</p>
<p>2:05 pm (WST) 4:05 pm (EST)</p>	<p>Session 3</p>	<p>Dr Kathryn Thorburn* Locking down in town, getting back to country: Aboriginal responses to the threat of COVID-19 in the Kimberley. (B)</p> <hr/> <p>Dr Gisselle Gallego Using photovoice to explore Bolivian children's experiences of COVID-19. (S)</p> <hr/> <p>Prof Geoff Strange Artificial Intelligence improves the detection of severe aortic stenosis at the point of investigation. (S)</p> <hr/> <p>A/Prof Katrina Spilsbury Can a common heart drug help women live longer after surgery for ovarian cancer? (F)</p> <hr/> <p>Prof Donna Mak* Hybrid physical and virtual rural area health placements in Western Australia to enhance community engagement. (F)</p>
<p>3:05 pm (WST) 5:05 pm (EST)</p>	<p>Panel Discussion Q&A</p>	<p>Growing transformative research at Notre Dame</p> <p>Broome Panel A/Prof James Debenham, A/Prof Melissa Marshall</p> <p>Fremantle Panel Prof Gerard Hoyne, Kathryn Stewart, Prof Jim Codde, Prof Gervase Chaney, A/Prof Ryan Anderton</p> <p>Sydney Panel Prof Aron Murphy, Prof Rathan Subramaniam, Prof Vasiliki Betihavas</p>
<p>3:50 pm (WST) 5:50 pm (EST)</p>	<p>Prize announcements & Symposium Close</p>	

Note. (B) denotes Broome campus presentation; (F) denotes Fremantle campus presentation, (S) denotes Sydney campus presentation.
*nominated to be considered for an award.

SATELLITE EVENT Health Sciences Honours 2023 Final Presentations

Thursday 21 September 1030 – 1600 WST ND46/209 Fremantle Campus

<https://researchonline.nd.edu.au/healthresearchsymposium/2023/Satellite/>

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PROGRAM OF EVENTS

Time	Opening Session
9:00 am (WST) 11:00 am (EST)	<p>SYMPOSIUM WELCOME & FORMALITIES</p> <p>Prof Gerard Hoyne via Fremantle campus</p>
9:05 am (WST) 11:05 am (EST)	<p>ACKNOWLEDGEMENT OF COUNTRY</p> <p>Todd Phillips via Sydney campus</p> <p>Acknowledgement of Country <i>'Aboriginal and Torres Strait Islander people, as the first peoples of this nation, are the holders of ancestral knowledge, law and wisdom. We acknowledge First Nations people from across Australia, particularly the Yawuru people of Broome, the Whadjuk people of the Noongar nation in Fremantle and the Gadigal people of the Eora nation in Sydney where our University has campuses. We pay respects to Elders past and present across these nations, with whom we live and work closely, and extend that respect to all First Nations people who we collaborate with nationally.'</i></p>
9:10 am (WST) 11:10 am (EST)	<p>UNIVERSITY PRAYER</p> <p>Tom Gannon via Broome campus</p>
9:15 am (WST) 11:15 am (EST)	<p>SYMPOSIUM OPENING ADDRESS</p> <p>Vice Chancellor Prof Francis Campbell via Fremantle campus</p>

Time	Opening Session
9:25 am (WST) 11:25 am (EST)	<p data-bbox="512 320 1082 353">KEYNOTE PROFESSOR LISA WOOD</p> <p data-bbox="512 405 1382 488">Leave no one behind. How rapid real-world research can have life-changing impact and reduce health inequalities.</p> <p data-bbox="512 506 799 533">via Fremantle campus</p>



Lisa is a tireless advocate for research being relevant and useful to the real world, and the need for academia to go beyond the ‘ivory tower’. She is passionate in both her professional and personal commitment to preventing and reducing health disparities, particularly among some of the most vulnerable people in our society. Across Lisa’s two-decade academic career, she has led a broad range of research, spanning tobacco control, family and domestic violence prevention, the benefits of pets on connecting communities, and closing the Aboriginal health gap.

For the past eight years Lisa has been a national leader in the homelessness and health field. Her research in this space has not only led to extensive media coverage and being called as a witness in front of two Senate Committee Hearings, but has directly contributed to policy change, funding of much needed services, and has transformed the lives of many people experiencing homelessness.

SESSION CHAIRS

Broome: Dr James Debenham & Gillian Kennedy

Fremantle: A/Prof Paola Chivers & Dr Raoul Oehmen

Sydney: Prof Vasiliki Betihavas & Dr Craig Smith

Time

SESSION 1 – ORAL PRESENTATIONS

Oral presentations are eight (8) minutes with two (2) minutes for questions.

9:55 am (WST) 11:55 pm (EST)	Jess Nolan* Lateropulsion resolution up to one year post stroke: A prospective, longitudinal Cohort study. (F)
	Shannen Vallesi* The Compass Outreach Program: Navigating the gap between possibility and opportunity for young people experiencing homelessness. (F)
	Elizabeth Kent* Supporting and promoting Kimberley educator wellbeing. (F)
	Venessa Poelina & colleagues Feed the Little Children Program: An impact evaluation - somebody cares. (B)
	Nikki Hulse* “Isn’t it just a chat?” A qualitative exploration of students’ experience of structured clinical supervision in rural allied health placements. (B)
	Tom Gannon Well-being education for health students, preparation for workplace and a lifetime of developing better understandings of human dignity. (B)
10:55 am (WST) 12:55 pm (EST)	Fremantle/Broome - Tea break and Poster exhibition¹ Sydney - Lunch

Note. (B) denotes Broome campus presentation; (F) denotes Fremantle campus presentation, (S) denotes Sydney campus presentation.

*nominated to be considered for prize.

Oral presentation abstracts for this session appear overleaf in presentation order.

Poster abstracts appear after the program of events in surname alphabetical order.

¹Poster presenters are encouraged to grab a bite to eat and drink and then stand at their posters to answer questions from our research community.

NOLAN JESS *

Co-authors: Angela Jacques; A/Prof Erin Godecke; Prof Barby Singer

Physiotherapy Fremantle

Oral Presentation**Lateropulsion Resolution Up To One Year Post Stroke: A Prospective, Longitudinal Cohort Study**

Background Post-stroke lateropulsion affects approximately half of stroke survivors and is associated with poor rehabilitation outcomes and reduced functional independence. Data regarding long-term persistence of post-stroke lateropulsion are lacking. This study explored long-term resolution of lateropulsion up to twelve months post-stroke.

Methods This prospective, longitudinal cohort study conformed to the STROBE Statement for observational studies. Consecutive admissions to an inpatient Stroke Rehabilitation Unit (SRU) (n=150) were recruited. Lateropulsion severity assessments (Four Point Pusher Score – 4PPS) were conducted at SRU admission and discharge, then at three, six, nine, and twelve months poststroke. Participation in rehabilitation physiotherapy was recorded at each assessment.

Results Evidence of lateropulsion (4PPS \geq 1) was recorded in 81 participants (54%) on SRU admission (median 4PPS=3). Fifty-seven (70%) of those with lateropulsion on admission showed persistent lateropulsion on discharge (mean 57.26 days post-stroke). Odds of 4PPS=0 (complete lateropulsion resolution) increased significantly over time among participants who received rehabilitation physiotherapy (odds ratio (OR): 9.7, 28.1, 43.1, 81.3 (p<0.001) at three, six, nine and twelve months post-stroke, respectively). Among participants who did not receive rehabilitation physiotherapy, odds of lateropulsion resolution were not significant (p>0.05) between discharge and nine months, but odds of complete resolution at twelve months post-stroke were significantly greater than at discharge (OR: 8.0, p=0.010).

Conclusions This novel study found that a higher proportion of participants who received rehabilitation physiotherapy showed complete lateropulsion resolution earlier than those who did not receive rehabilitation physiotherapy. Findings have implications for the long-term resource and rehabilitation needs of people with post-stroke lateropulsion.

VALLESI SHANNEN **IHR Fremantle***Oral Presentation****The Compass Outreach Program: Navigating the gap between possibility and opportunity for young people experiencing homelessness**

The Compass Outreach Program is an innovative new service run by Passages Youth Engagement Hub in Perth and Peel. Compass supports young people who have experienced significant and persistent disadvantage due to complex trauma, homelessness, entrenched poverty, poor mental health, justice system involvement, and social exclusion, to navigate and overcome the persistent, systematic barriers faced. The program incorporates outreach and community engagement to provide opportunities for young people to engage in education, training, volunteering, or employment; areas they have frequently been excluded from. The model is led by the young person, with the youth navigator walking alongside to support them achieve their goals. To date, the majority (60%) of people supported, remain homeless/at risk of homelessness. Despite this, in the first 6 months of operation Compass has supported 25 young people to achieve nearly 150 goals (66% of goals set). Including obtaining ID, paying fines, gaining employment, finding stable accommodation, obtaining drivers licenses, and commencing or completing studies/training. The gap between possibility and opportunity for this cohort is insurmountable, with an average age of first homelessness experience of 14.6 years and with the majority (80%) of young people supported having experienced different types of traumatic events in their lives already. The Compass program empowering young people to make their goals a reality.

KENT ELIZABETH*Nulungu Fremantle***Oral Presentation****Supporting and Promoting Kimberley Educator Wellbeing**

Supporting and promoting Educator wellbeing is particularly important within the Australian rural and remote school context due to multiple challenges and potential stressors faced by Educators, such as professional and personal isolation, culture shock, and exposure to vicarious trauma. These challenges and stressors can compromise the wellbeing and mental health of Educators, which over time can lead to burnout and attrition and impact teaching quality, Educator-student relationships, as well as student learning and wellbeing. A phenomenological methodological framework was used to understand Educators experiences as well as school psychologists' perspectives of how to support and promote the wellbeing of Educators from the Kimberley region, in the north of Western Australia. Focus groups and semi structured interviews with Educators from five schools and school psychologists throughout the Kimberley region focused on the individual, group and whole of school setting factors which impact Kimberley Educator wellbeing. A First Nations cultural advisory group guided the direction of the study to promote cultural responsiveness as a proportion of Kimberley Educators are of First Nations background. Data was analysed using Interpretative Phenomenological Analysis, highlighting a range of factors influencing Kimberley Educator wellbeing including: cultural components of wellbeing; Educator emotional intelligence; and consideration of a multi-tiered system of support to promote Kimberley Educator wellbeing. Barriers to Educator wellbeing specific to the rural and remote school context were also explored. The findings from the Kimberley Educator Wellbeing project outline a practical framework, including a continuum of supports to prevent harm and promote thriving for Kimberley Educators.

POELINA VENNESSA

Co-authors: Ian Perdrisat, Prof Anne Poelina, Prof Sandra Wooltorton

Nulungu Broome

Oral Presentation**Feed the Little Children Program: An Impact Evaluation - Somebody Cares -.**

Operating since January 2012, the goal of Feed the Little Children (FTLC) is to provide emergency food relief to children in Broome at risk of food insecurity. This research project investigated the social, cultural and health impacts of FTLC's bi-weekly food relief program on Broome's young people. Researchers took an Indigenist research approach, meaning that Aboriginal knowledge, values, and goals support research implementation. The research methodology included a literature review, and data collection via conversations and interviews with FTLC families and long-term Broome residents. The researchers then conducted a thematic analysis and produced a synthesis for findings and recommendations. Throughout Australia's colonial history, governments used policies to separate children from parents, and families from Country. These policies served agricultural, pastoral, and mining interests on Aboriginal land while reducing Aboriginal food security. Literature shows that despite a traumatic past, young Aboriginal people in Broome have durable cultural connections, in the sense that they know their family, language affiliation and relationships. Literature supports the finding of a strong association between Aboriginal children's wellbeing and cultural connection. Over the past 150 years, governments and others have continued to ignore these cultural foundations which would assist in the delivery of supportive social programs for young people. In this presentation, researchers will briefly review the findings and recommendations, and the methodological issues. Culturally based research of this type reveals the lived experience of people subject to rigid intergenerational government policies, as well as the community based networks of care and love that continue over time.

HULSE NIKKI *

Co-authors: Allison Angell, Kylie Hopkins, Negin Loh, Kylie Matthews, Dr James Debenham

Majarilin Broome

Oral Presentation**“Isn’t it just a chat?” A qualitative exploration of students’ experience of structured clinical supervision in rural Allied Health placements**

Clinical supervision is an essential component of Allied Health (AH) student placements, enhancing learning, patient safety and clinical outcomes. Whilst best practice in supervision is well-documented, limited research exists regarding students’ knowledge and experiences. In this study, we explored supervision in the context of AH placements in the Kimberley, Western Australia. Sixty AH students undertaking rural placements were surveyed via the Modified Maastricht Teaching Questionnaire, which explored students’ understanding of supervision and how structured supervision impacted their placement. Thematic analysis revealed that prior to placement, most students’ understanding of supervision was basic and inconsistent, described using simple terms such as ‘support’, ‘advice’, and ‘guidance’. Following placement, commentary was more accurate, detailed, and reflective of agreed definitions. Students articulated positive experiences of supervision, including ‘value of demonstrations’, ‘supervisor empathy’, ‘varied supervision structure (group vs individual)’, ‘clear feedback’, ‘collaborative learning’, and ‘focus on learning objectives’. Negative experiences were reported when students felt they had ‘received inconsistent feedback’, or their supervisor was perceived to ‘not model behaviour’. Whilst most commentary was positive, the following independent factors negatively impacted students’ perspectives:

- 1) having multiple supervisors,
- 2) performing poorly or
- 3) being part of larger student cohorts.

Our study informs practice in several ways. Given supervision is effective but AH students have sub-optimal understanding, clinical educators might implement defined and structured supervision to increase understanding and positively impact placement outcomes. Educators should note that at times, students may be critical of supervision if not implemented comprehensively, and students may conflate poor performance with poor supervision.

GANNON TOM*Majarlin Broome***Oral Presentation****Well Being Education for health students, preparation for work place and a lifetime of developing better understandings of Human Dignity**

Royal Perth Hospital following the COVID years 2020-2022 saw a dramatic increase in employee burnout and depression. Through wellbeing education Junior Doctors have seen these conditions decrease. Currently Royal Perth is rolling out this training for graduate nurses. My question is about providing this training alongside their practicum experiences. Does this training make them better students while in our courses and does this improve their employability in the work place, with regard to teach ability, and their understanding of human dignity as it pertains to individuals (patients, their families, staff members) and to systems.

Time	Session 2
11:35 am (WST) 1:35 pm (EST)	<p data-bbox="509 389 1267 427">KEYNOTE PROFESSOR RATHAN SUBRAMANIAM</p> <p data-bbox="509 474 1187 512">Building Health Research Programs & Partnerships.</p> <p data-bbox="509 526 767 560">via Sydney campus</p>



Rathan Subramaniam's academic focus is oncologic imaging and therapy with radiopharmaceuticals and cancer care disparities. His medical education interest is teaching anatomy and clinical medicine through imaging and molecular therapies. He has published over 270 peer reviewed articles, 9 books, and 15 book chapters and delivered more than 150 CME lectures and over twenty visiting professorships and named lectures. He co-chairs multiple multicenter international cancer clinical trials sponsored by the National Cancer Institute/NIH and

Canadian Institute of Health Research.

Rathan's international committee experiences include a consultant to international atomic energy agency (IAEA), Chair of WHO committee, a member of the medical school accreditation committee of the Australian Medical Council, a member of the National Cancer Institute/NIH steering committee on Head and Neck cancer, President of the PET Center of Excellence of the Society of Nuclear Medicine and Molecular Imaging, and a past President of the American College of Nuclear Medicine.

Rathan has received numerous international awards, including a Fulbright travel award to the United States, Leadership and Innovation award from the Radiology Research Alliance, Honored Educator Award from the Radiological Society of North America and Lifetime Achievement Award from the American College of Nuclear Medicine. He is the Executive Dean, Faculty of Medicine, Nursing, Midwifery and Health Sciences at the University of Notre Dame Australia, Professor of Radiology and Nuclear Medicine and a consultant radiologist and nuclear medicine physician. He is also the immediate past Dean of the University of Otago Medical School, New Zealand.

Time

SESSION 2 – ORAL PRESENTATIONS

Oral presentations are eight (8) minutes with two (2) minutes for questions.

12:05 pm (WST) 2:05 pm (EST)	Dr Nameer van Oosterom* Driving quality in delirium care within palliative care: the MODEL-PC study. (S)
	Dr Fiona Orr & Dr Kate Gill 'I want people to see us as a whole person': A co-produced study of living with Functional Neurological Disorder. (S)
	Dr Rikki Priest* "No one prepared me for this." Introducing a new postpartum support planning framework. (F)
	Dr Douglas Gordon* "Ice in the family": Exploring the experiences of close family members of people using methamphetamine. A longitudinal qualitative study. (F)
	A/Prof Ben Piggott* Life in a time of COVID: between physical activity and mental well-being in Western Australians during and after lockdown. (F)
12:55 pm (WST) 2:55 pm (EST)	Fremantle/Broome - Lunch Sydney – Tea break and Poster exhibition¹

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VAN OOSTEROM NAMEER *

Co-authors: A/Prof Annmarie Hosie, The MODEL-PC Investigative Team

Nursing & Midwifery Sydney

Oral Presentation**Driving quality in delirium care within palliative care: the MODEL-PC study**

Background Delirium is a distressing acute neurocognitive condition experienced by one-third of patients in inpatient palliative care units (PCUs). Proactive systems for evidence-based delirium care are missing and innovation is needed.

Aim To develop a patient-centred delirium monitoring system in PCUs to improve delirium prevention, detection, root cause treatment, and clinical responses to patients' distress by integrating Palliative Care Outcomes Collaboration (PCOC) and the Delirium Clinical Care Standard.

Methods The 'MODEL-PC study' is an exploratory sequential mixed methods project (2022-23). Through consultation with patients, family carers, staff of four Australian PCUs and other stakeholders, a new delirium monitoring system will be developed (stage 1) and then piloted (stage 2). Data collection incorporates process mapping, clinical audits, semi-structured interviews, and case report forms aligned with PCOC methods. Implementation, process, and patient outcomes will be analysed, including the systemic utility of the new system for wider testing.

Results Preliminary stage 1 results include 120 baseline audits of discharged patients' medical records (48 (40%) female, mean (\pm SD) age 75.9 (\pm 13.2) years, 19.2% preferred language not English). Three-quarters (73.3%) died during admission and 30.8% experienced delirium. Of the eight Delirium Standard quality statements, only two standards were achieved. Preventive strategies (9.2%), patient-centred information and support (21.6%), and avoidance of antipsychotics (37.8%) and benzodiazepines (21.6%) for delirium were rarely demonstrated.

Conclusion Preliminary results confirm the need for quality improvement in PCU's delirium care and the importance of obtaining patients' perspectives about care. Complete stage 1 results will be presented at the symposium.

ORR FIONA & GILL KATHERINE

Co-authors: Dr Katherine Gill, A/Prof Jo River, Scarlett Franks, Dr Mark Goodhew,
Choe Sinclair

Nursing & Midwifery Sydney

Oral Presentation**‘I want people to see us as a whole person’: A co-produced study of living with Functional Neurological Disorder.**

Functional disorders result from problems with the functioning and connectivity of the nervous system without structural damage to the nervous system [1]. People with Functional Neurological Disorder (FND) face multiple disadvantages in accessing support services [1], often falling between neurological and psychiatric services [2, 3]. They also experience stigma in health services and the community due to having a mental health diagnosis and neurological disability and the ongoing perception that people with FND are emotionally manipulative and malingering [4], creating ‘surplus suffering’ for this population [5]. Research exploring lived experience is vital to ensure health professionals and health services are responsive to the needs of people with FND. However, existing research has been criticized for being deficit-based and exacerbating negative perceptions of people with FND [1]. In response to this, this project is a partnership between Lived Experience and Conventional academic researchers, who are using co-production to examine the experiences of 17 people living with FND. It utilises a strengths-based approach to qualitative inquiry, exploring the challenges of daily life and navigating health services, including intersectional experiences related to disability and mental health diagnosis. Preliminary findings from a thematic analysis of interview data will be presented to identify the challenges faced, and strategies used, by people in their daily life to assist others early on their FND journey and inform the education of health professionals to enhance their knowledge and practice.

PRIEST RIKKI*

Co-authors: A/Prof Lucy Gilkes, Prof Caroline Bulsara, A/Prof Diane Arnold-Reed

Medicine Fremantle

Oral Presentation**"No one Prepared Me for This." Introducing a New Postpartum Support Planning Template.**

Becoming a mother, a transition known as matrescence, is a monumental time in a woman's life. It is a time that is crowded with new learning, identity shifts, uncertainty, brain and body changes, cognitive changes, and relationship changes. Access to support is the cornerstone to the health and wellbeing of mothers during the first three months after birth, a time known as the fourth trimester. Mothers commonly reflect that they felt inadequately prepared for the postpartum period, and many wish that they had spent more time planning for support beyond birth. So how can we construct better support for mothers beyond birth? This project used the Delphi method to obtain consensus from a diverse group of professional and lived experience experts on the priority areas for postpartum support planning. These priority areas were used to develop a postpartum support planning framework for General Practitioners (GPs) to use with their patients. This framework will be presented for the first time. The next step for this project will be outlined, which involves interviews with GPs about what they think about the framework and the feasibility of integrating it into their practice. This presentation will include a description of the project and narrative story telling of the researchers' own personal journey that led to this project idea. It will highlight how the Delphi method can be used to create a community of practice which includes consumers and explore how our own personal challenges can be a powerful motivator for our research work.

GORDON DOUGLAS

Co-authors: Prof Kylie Russell, Dr Tracey Coventry

Medicine Fremantle

Poster Presentation

“Ice in the Family”: Exploring the experiences of close family members of people using methamphetamine. A longitudinal qualitative study.

Objective: To explore the experiences of close family members when another family member is using methamphetamine and how they respond over time. Background: Methamphetamine use has widespread implications and harms for both people who use the drug and those that live with them. There is significant representation in the literature relating to family members of people who use drugs or alcohol, but limited studies specifically considering family members experience of methamphetamine use. Study Design and Methods: Multiple semi-structured qualitative interviews were conducted with 11 families (17 individual participants) from Bunbury and Perth in the state of Western Australia over a 12-month period. Interpretative Phenomenological Analysis was used in data collection and analysis. Results: Four main themes were identified: 1. the New Lifeguard describes family members’ observation of changing presentations of the methamphetamine user. 2. Hit by the Wave demonstrates their experience of repeated damaging impact on their lives. 3. Life in the Ocean describes perceived changes to goals and family structure. 4. Learning to Surf illuminates strategies to prosper in a protracted journey. Discussion: The study highlighted both the specific and unique aspects of methamphetamine use and the effects on family members, including parents, siblings and grandchildren. Conclusion: This study provided important distinction with other literature both in its longitudinal methodology and focus on methamphetamine only. Implications for Practice: Understanding the complex journey of families has a broad range of implications (and opportunities) for a variety of areas such as criminal justice, family support and child protection.

PIGGOTT BEN *

Co-authors: A/Prof Paola Chivers, Kiira Karoliina Sarasjärvi, Dr Ranila Bhoyroo,
Dr Michelle Lambert, Dr Lynne Millar, Prof Caroline Bulsara, Prof Jim Codde

Health Science Fremantle

Oral Presentation**Life in a time of COVID: between physical activity and mental well-being in Western Australians during and after lockdown.**

Background The aim of this study was to examine physical activity and sedentary behaviours during Western Australia's COVID-19 lockdown and their association with mental well-being. Participants completed activity related questions approximately two months after a three-month lockdown (which formed part of a larger cross-sectional study from August to October 2020) as part of a 25-minute questionnaire adapted from the Western Australia Health and Well-being Surveillance system. Open-ended questions explored key issues relating to physical activity behaviours. Results showed that lockdown was associated with lower physical activity, higher non-work-related screen time and more sitting time compared to post lockdown which also reported higher body mass index. Lower levels of mental well-being were associated with lower physical activity levels during lockdown. Given the known positive affect of physical activity on mental well-being and obesity, and the detrimental associations shown in this study, a key public health message should be considered in an attempt to maintain healthy activity behaviours in future lockdowns and similar emergency situations to promote and maintain positive well-being.

Time	Session 3
1:35 pm (WST) 3:35 pm (EST)	<p data-bbox="509 389 1206 427">KEYNOTE A/PROFESSOR STEVEN KINNANE</p> <p data-bbox="509 472 1286 607">Strong culture, strong place, strong families: cultural impact framework for cultural, social and emotional wellbeing. (B) via Broome campus</p>



Steve has been an active researcher and writer for more than 20 years as well as lecturing and working on community cultural heritage and development projects. His interests are diverse encompassing Aboriginal history, creative documentary (both visual and literary), and tensions surrounding the ideals of sustainability

and the relationships between individuality, community, country, economy and human development. Steve is a Marda Marda from Mirrowoong country in the East Kimberley.

Steve co-wrote and produced *The Coolbaroo Club* (1996) an ABC TV documentary, awarded the Human Rights and Equal Opportunity Commission Human Rights Award for the Arts, and collaborated with Lauren Marsh and Alice Nannup on the completion of *When the Pelican Laughed*, (1992) the story of Mrs Alice Nannup (Fremantle Arts Centre Press). His book, *Shadow Lines* was awarded the WA Premier's Award for Non-Fiction 2004, the Federation of Australian Writer's Award for Non-Fiction 2004, The Stanner Award 2004, and was short-listed for the Queensland, South Australian Premier's Awards. Recent publications include the chapter 'Indigenous Australia' (in collaboration with Anna Haebich) for the Cambridge History of Australia, the chapter 'Blood History' for the First Australians book accompanying the First Australians Television Series, and reports and chapters examining sustainable livelihoods and how communities are changing the future by confronting systemic impediments, addressing priorities and developing regionally relevant solutions.

Time

SESSION 3 – ORAL PRESENTATIONS

Oral presentations are ten (10) minutes with two (2) minutes for questions.

2:05 pm (WST)	Dr Kathryn Thorburn* Locking down in town, getting back to country: Aboriginal responses to the threat of COVID-19 in the Kimberley. (B)
4:05 pm (EST)	Dr Gisselle Gallego Using photovoice to explore Bolivian children's experiences of COVID-19. (S)
	Prof Geoff Strange Artificial Intelligence improves the detection of severe aortic stenosis at the point of investigation. (S)
	A/Prof Katrina Spilsbury Can a common heart drug help women live longer after surgery for ovarian cancer? (F)
	Prof Donna Mak* Hybrid physical and virtual rural area health placements in Western Australia to enhance community engagement. (F)

Note. (B) denotes Broome campus presentation; (F) denotes Fremantle campus presentation, (S) denotes Sydney campus presentation.

*nominated to be considered for prize.

Oral presentation abstracts for this session appear overleaf in presentation order.

Poster abstracts appear after the program of events in surname alphabetical order.

THORBURN KATHRYN *

Co-author: Catherine Ridley

Nulungu Broome

Oral Presentation**Locking down in town, getting back to country: Aboriginal responses to the threat of COVID-19 in the Kimberley**

In 2020, a team of Aboriginal and non-Aboriginal researchers talked to people across the remote Kimberley region, WA about how they confronted the threat of COVID-19 in the first half of 2020. What we discovered was that people consistently strove to return to Country during this time, even where there was very little infrastructure, or where food security and water quality might not have been assured. Despite these kinds of challenges, those people who could access Country consistently reported an elevated sense of community and cultural wellbeing at this time. Some even referred to that period of the first COVID lockdown as a reprieve, a time of healing, of increased income and therefore increased capacity to care for others; a time of cultural renaissance as various generations returned to places together and stayed there, in some instances for months at a time. The flipside of this narrative was the hardship experienced by people who were stuck in town, either because they lacked a vehicle or because their country was not accessible.

GALLEGO GISSELLE

Co-authors: Dr Beatriz Cardona, Dr Brett Scholz

Medicine Sydney

Oral Presentation**Using photovoice to explore Bolivian children's experiences of COVID-19**

Our capacity to facilitate the empowerment of children is dependent on our ability to understand their values and experiences. This study aimed to explore Bolivian children's experiences of COVID-19. This study used a participatory action research method, photovoice, which involved focus groups, individual interviews and the use of cameras by participants to capture their reality and express their ideas through photographs. Ten participants aged 12–15 years were recruited from a school in the municipality of Mecapaca in Bolivia. Thematic analysis was used to identify and report response patterns. Four themes were developed through analysis: (i) sadness and fear of getting sick, (ii) the challenges of online learning, (iii) the tension between traditional knowledge and modern medicine, and (iv) the role of nature and culture in supporting well-being—natural and cultural capital. The narratives and choice of images by the children illustrate some issues and experiences. These findings also highlighted the importance of considering and exploring how children's experiences and interactions with their habitat, nature and their physical environment impacts on their health and well-being.

STRANGE GEOFF

Co-authors: Prof Michael Feneley, A/ Prof David Prior, Prof David Muller, Dr Prasanna Venkataraman, Dr Yiling Situ, Prof Simon Stewart, Prof David Playford, on behalf of the NEDA Investigators & St Vincent's Health

IHR Fremantle

Oral Presentation

Artificial Intelligence improves the detection of severe aortic stenosis at the point of investigation

Background: Severe aortic stenosis (AS) is a prevalent and deadly condition affecting thousands of Australia. However, in many individuals, it remains undetected and treated. We evaluated the potential value of an artificial intelligence automated alert system (AI-AAS) at the point of echocardiographic assessment of the aortic valve.

Methods: Of 21,749 adults being investigated with echocardiography at St Vincent's Hospital in Sydney and Melbourne, 4,057 women (aged 61.6±18.1 years) and 5,132 men (60.8±17.5 years) with native aortic valves were screened with the AIAAS alert. The pattern of clinical management in all cases was then compared after the AI-AAS recategorized the presence/absence of AS.

Results: Originally, 218/9 189 (2.4%) cases of severe AS were diagnosed. The AI-AAS then detected 158 (1.7%) more cases. Women were far less likely to be originally diagnosed with severe AS (adjusted OR 0.34, 95% CI 0.17-0.66) or considered for surgical intervention (adjusted OR 0.49, 95% 0.28- 0.88). Surgical correction of the aortic valve occurred in 40/169 (23.7%) women versus 60/207 (28.9%) men with severe AS (adjusted OR 3.93, 95% CI 1.36-11.34 in those originally diagnosed). Overall, the AI-AAS had potential to redirect 2.1-fold more women (from 29.8% to 62.1%) and 1.6-fold more men (44.9% to 73.5%) with guideline-defined severe AS towards more definitive management.

Conclusions: When routinely applied to echocardiographic reports, an AI-AAS has strong potential to firstly augment those diagnosed with severe AS and, consequently, minimise unconscious bias (particularly for women) in respect to the application of more definitive, life-saving management. A prospective trial is now planned.

SPILSBURY KATRINA

Co-authors: Dr K Tuesley, Prof S Pearson, Dr M Coory, Dr P Donovan, Dr C Steer,
Dr L Stewart, Dr N Pandeya, A/Prof S Jordan

IHR Fremantle

Oral Presentation

Can a common heart drug help women live longer after surgery for ovarian cancer?

Background Ovarian cancer is often diagnosed late and requires major surgery. The physical and mental stress of surgery is thought to activate the body's natural stress-inflammatory pathways – leading to increased production of adrenalin hormones. However, these hormones are thought to stimulate growth and spread of some cancers. Beta blockers, a class of heart drugs, have been shown in the laboratory to inhibit these hormones, effectively “blocking” their ability to stimulate cancer growth and spread. Aim and method. Our aim was to investigate whether safe existing drugs can be repurposed to treat ovarian cancer. Under strict anonymity regulations, we accessed Medicare, PBS, cancer registry, death registry and hospital data from NSW, Victoria, and WA. We looked at the health records of thousands of women with ovarian cancer to see if women who took beta-blockers at the time of their surgery lived longer compared to women who did not take beta-blockers. Findings We identified 3,844 Australian women diagnosed with ovarian cancer from 2002 to 2014 who underwent surgery and who also had heart disease. We followed these women to see how long they lived after surgery to treat their ovarian cancer. We found that the 67 women who were prescribed non-selective beta-blockers during the month they had surgery, on average, lived longer than women not using these drugs did. What this means While clinical trials are needed to confirm our findings, the use of this safe and well-understood heart drug may improve survival following surgery in women with ovarian cancer.

MAK DONNA

Co-Authors: Mia Zic¹, Lauren Bloomfield¹, Elizabeth Brunt¹, Luke Librizzi¹, Kylie Russell¹, Roger Strasser³, Daniel Vujcich²,

1. School of Medicine, University of Notre Dame Australia, Fremantle

2. Faculty of Health Science, Curtin University

3. Te Huataki Waiora School of Health, The University of Waikato, New Zealand

*Medicine Fremantle***Oral Presentation****Hybrid physical and virtual rural area health placements in Western Australia to enhance community engagement**

Billeting medical students with rural Wheatbelt and Kimberley families is a key educational strategy for Notre Dame medical students to learn firsthand about the social and environmental determinants of health for rural Australians, enabling graduates to be responsive to the needs of rural patients. In 2020, the Kimberley placement was delivered virtually due to COVID-19 and found to be effective in enabling students to achieve the intended learning outcomes. In 2022, virtual student-host interactions were supplemented with short fieldtrips. The aim of this research was to investigate the strengths and opportunities of this hybrid model for enhancing virtual placements. Data were collected with an initial survey followed by interviews. The mixed method convergent design incorporated independent collection and analysis of both survey and interview data. Findings were compared to arrive at corroborating themes. Eighty-three (44%) of students contributed survey data, 20 interviews of students, hosts and staff were conducted. Emerging themes include an increased awareness of rural life, connection, and an appreciation of the social determinants of health.

In 2022, 84% of students surveyed regarding the Kimberley placement agreed they had developed a better understanding of health issues of people living in remote areas. Eighty six percent of hosts found the hybrid placement to be worthwhile. The hybrid model supplemented the virtual placements, enabling rural health education to be more accessible, and at lower financial and environmental cost. It is a valuable alternative to fully in person delivery and offers students an opportunity to engage meaningfully with rural communities.

Time

PANEL DISCUSSION Q & A

3:05 pm (WST)

5:05 pm (EST)

Growing transformative research at Notre Dame

Broome Panel Dr James Debenham, A/Prof Melissa Marshall

Fremantle Panel Prof Gerard Hoyne, Kathryn Stewart, Jim Codde, Prof Gervase Chaney, A/Prof Ryan Anderton

Sydney Panel Prof Aron Murphy, Rathana Subramaniam, Prof Vasiliki Betihavas



Kathryn Stewart
Consumer & Community
Involvement Coordinator



Prof Aron Murphy
PVC



Prof Rathana Subramaniam
Executive Dean



Prof Gerard Hoyne
Associate Dean Research



Prof Jim Codde
Director IHR



Prof Gervase Chaney
NHS Medicine



A/Prof Melissa Marshall
Director Nulungu



A/Prof Ryan Anderton
DHS Health Sciences



Professor Vasiliki Betihavas
NDHS Nursing & Midwifery



Dr James Debenham
Director Majorlin

3:50 pm (WST)

5:50 pm (EST)

Prize announcements & Symposium Close

POSTER PRESENTER INDEX

BARR LAYLA ¹

Co-Authors: Dona Jayakody ². Nahal Mavaddat³

1 School of Health Sciences, The University of Notre Dame Australia Fremantle Australia

2 Ear Science Institute Australia Subiaco WA Australia

3 University of Western Australia Crawley WA Australia

*Health Science Fremantle***Poster Presentation****General Practitioners: Their Knowledge, Attitudes, and Practices Towards Treating Hearing Loss & Dementia**

Background: Age-related hearing loss (ARHL) is the most significant modifiable risk factor for dementia. Although their exact relationship is unknown, research has focused on improving treatment outcomes for patients with comorbid ARHL and dementia by identifying gaps in healthcare delivery. The Australian general practitioner (GP) is often the first healthcare professional this patient group interacts with and is responsible for referring patients onward for specialist assessment and treatment. Objectives: This project aims to survey Australian GPs' knowledge, attitudes, and practices (KAP) when treating older adults at risk of or experiencing comorbid ARHL and dementia. Methods and Analysis: A cross-sectional self-report online KAP survey will be used, comprising four sections: demographic information, knowledge, attitude, and practice, and statements where respondents will answer using a Likert-like five-scale rating. A GP focus group will be used to ensure appropriate speciality content. The questionnaire will be released via the Qualtrics survey platform (Qualtrics, Provo, UT) and advertised through social media and email promotion for members of the Australian College of General Practitioners (RACGP), the West Australian Practice-based Research Network (WA PBRN), and Western Australian General Practice Education and Training (WAGPET). Binary logistic regression using IBM SPSS Statistics (Version 26.0) will determine differences in odds of agreement/disagreement with each Likert-like item. Discussion: This project aims to improve our understanding of how GPs treat this patient group and assist in the future development of GP-specific training programs designed to improve treatment outcomes for this cohort.

COVENTRY MOLLY

Co-authors: Dr Myles Murphy, Dr Mervyn Travers, Dr Amanda Timler, Dr Andrea Mosler,
Prof Kylie Russell

Nursing & Midwifery Fremantle

Poster Presentation

“I Lied a Little Bit.” A Qualitative Study Exploring the Perspectives of Elite Australian Athletes on Self-Reported Data.

Athlete-reported information is one of the many forms of data collected in a high-performance environment to help monitor athlete response to training load and their wellbeing. This study aimed to explore the perceptions and experiences of elite Australian athletes' engagement with reporting data in surveillance systems. 13 elite athletes competing at a national or international level who were entering data into the national surveillance system: the Athlete Management System, in the previous 12 months were recruited. Online semi-structured interviews were conducted between January and April 2022 via Zoom Cloud Meetings. Audio recordings were transcribed using DeScript, checked for errors and imported into QSR NVIVO. Thematic analysis uncovered four key themes: 'the paradox of reporting', 'data for data's sake', 'eyes on reporting' and 'athlete friendly reporting'. Athletes perceived reporting as a burden and the athlete management system presented numerous technological difficulties which led athletes to backfill data entries and compromise data accuracy. Athletes had little knowledge on how their data was used and managed, and often received minimal feedback from staff accessing the data. Many athletes were unaware of who has access to their data, which is of concern as sensitive information may be collected and athletes may be underage. As a result, several athletes chose to report dishonest data to avoid their performance being questioned. This research highlights the importance of building a relationship based on communication and trust between the athletes and their support staff for accurate reported data.

GEORGOUSOPOULOU EKAVI

Co-authors: Ashleigh Habkoug, Elena George, Sze-Yen Tan

Medicine Sydney

Poster Presentation**The association between n-3 and n-6 ratio and Non Alcoholic Fatty Liver Disease presence in NHANES study,**

Introduction: the role of diet in NAFLD is well established, however it remains unknown whether the balance between n-3 and n-6 fatty acids intake is associated with higher odds of NAFLD presence. Methods: the NHANES dataset (6 waves) was used to explore the aim of the study. NAFLD presence was measured using Fatty Liver Index and the two 24h dietary recalls provided the dietary data. Multi variable analysis was used to explore the association. Results: n-3 and n-6 fatty acids intake ratio was associated with higher odds of NAFLD presence ($p < 0.001$), but the association was partially confounded by the overall Healthy Eating Index. For subjects with better overall diet quality, an added benefit or healthier n3 and n-6 ratio was observed (all $p < 0.05$). Conclusion: overall healthy diet is more detrimental for NAFLD presence, however, under a healthy dietary pattern the balance between fatty acids could be of added benefit.

GOODHEW MARK

Co-authors: Karen Klarnett, A/Prof Jo River

Nursing & Midwifery Sydney

Poster Presentation

Developing a Mental Health Consumer Action Group via Participatory Action Research

Lived experience participation in mental health services involves consumers of mental health services (consumers) meaningfully engaging in decisions about health care service planning, design, delivery, and evaluation. Commitment to consumer participation came from the efforts of consumer movements, which campaigned for self-determination in the 60s and 70s, as well as recognition of human rights violations against people with lived experience. Although consumer participation has occurred in mental health services for the past 40 years, it is often tokenistic, with consumers consulted but having little power in decision-making processes. This presentation discusses a peer-led participatory action research process that aimed to design and establish a consumer action group (CAG) for a large urban mental health hospital. A working group of peer workers, clinicians and academics determined that participatory action research was best suited to establishing a CAG as consumers would be coresearchers and co-deciders from the outset - involved in all decisions about the CAG design, implementation and evaluation. This presentation will discuss the formation of the working group and participatory action research processes and plan to design and pilot a CAG to empower mental health consumers.

GORECKI ANASTAZJA *

Co-authors: Dr Varsha Singh, Dr. Subhash Kulkarni

Health Science Fremantle

Poster Presentation **α -synuclein is present in epithelial cells of the gut.**

Growing evidence implicates gut inflammation in a bottom-up spread of Parkinson's disease (PD), and gut dysfunction is an increasingly recognised prodromal symptom. Complex protein aggregates (Lewy bodies) are a major histopathological hallmark of PD which are associated with neuroinflammation, neurodegeneration and the consequent development of various PD symptoms. Lewy bodies are largely composed of α -synuclein, a protein with immense conformational flexibility and a proclivity to misfolding depending on the protein structure (shaped by genetic factors) and surrounding microcellular environment (e.g., pH and intracellular Ca^{2+} levels). People with PD show increased α -synuclein aggregation in their intestinal samples, however the mechanisms that cause its over-production and accumulation remain unclear. PD has been associated with gut inflammation and a disruption to the gut microbiome, but the presence of α -synuclein in the gut is still poorly characterised, particularly in nonneuronal cells. This pilot study used human intestinal enteroids differentiated into an epithelial monolayer model to investigate α -synuclein presence in the gut epithelium. Using immunocytochemistry and confocal microscopy, we report α -synuclein staining in enteroendocrine cells and goblet cells, the latter being a novel result. The apical side of the human epithelial monolayers was stimulated with faecal proteins, to assess the influence of gut luminal contents on α -synuclein expression levels. A non-significant trend for increased, insoluble α -synuclein was observed, suggesting that exposure to the gut contents can alter the levels of α -synuclein in the gut epithelium. Further studies should validate these novel findings, which add to evidence concerning the role of the gut in PD.

GRAF AMANDA

Co-authors: Dr Esther Adama, Dr Ebenezer Afrifa-Yamoah, Dr Kwadwo Adusei

Nursing & Midwifery Fremantle

Poster Presentation**Perceived nexus between non-invigilated summative assessment and mental health difficulties**

The COVID-19 pandemic rapidly led to changes in the mode of teaching, learning and assessments in most tertiary institutions worldwide. Notably non-invigilated summative assessments became predominant. These changes heightened anxiety and depression, especially among individuals with less resilient coping mechanism. We explored the perceptions and experiences of mental health difficulties of students in tertiary education regarding non-invigilated alternative assessments in comparison to invigilated assessments. A pragmatic, mixed method cross sectional design was conducted online via Qualtrics. Thematic analysis of text was carried out using NVivo 12. In the quantitative analysis, univariable and multivariable ordinal logistic models were used to examine the potential factors for preference among students in higher education. A total of 380 Nursing and Social Science students responded to the survey. Approximately 77% of students perceived non-invigilated assessments to be less stressful compared to invigilated exams. Age, course of study, stage of studies, number of units enrolled per semester were identified as significant drivers for students' perceived preference for non-invigilated assessments. There was an inverse relationship between the perception of stress associated with invigilated exams and the age of students. Students aged between 18-24 were 5 times more likely to prefer non-invigilated exams compared to those aged 55 or more. Comparatively, students in early stages of studies had higher preference for non-invigilated assessments. However, there was a preference reversal for students enrolled in 2 or less units per semester. Social sciences students were two times more likely to prefer non-invigilated examinations to invigilated examinations compared to nursing students.

HAYDOCK CHRIS

Co-authors: Dr Amanda Timler, Dr Khaya Morris-Binelli, Prof Gerard Hoyne

Health Science Fremantle

Poster Presentation

Is Knowledge Enough? Exploring Mental Health Literacy and Other Factors of Help-Seeking in Urban and Rural Emerging-Adult Males

Background and Aim: There is strong evidence that mental health concerns become most prevalent among emerging adult males (EAM; 18-25 years) due to reluctance to seek-help. Mental Health Literacy (MHL) comprises knowledge, beliefs, and attitudes towards mental health with some evidence suggesting it enhances help-seeking. However, research has reported that rural inhabitants are less likely to seek help than urban, despite similarities in MHL. Other factors reported to impact help-seeking are access to care, self-stigma towards mental illness, masculinity, and wellbeing. Despite this, there is scant research investigating the influence of MHL in unison with these factors on help-seeking in urban and rural EAM. Therefore, the aim of this study was to investigate the individual and collective influence these factors have on help-seeking in urban and rural EAM.

Methods: An online questionnaire comprising validated measures of help-seeking factors was distributed through community organisations, universities, TAFEs, and sporting clubs. A total of 118 rural and urban Western Australian EAM completed the survey. **Data analysis:** General linear models were used to determine whether rurality (i.e., urban or rural) influenced factors of help-seeking.

Results: MHL and self-stigma significantly predicted help-seeking in urban, but not rural participants. In contrast, no significant predictions were observed between masculine norms or wellbeing and help-seeking for either group. Perceived access to care (e.g., psychologist) significantly predicted help-seeking with urban participants perceiving greater access than rural.

Conclusion: Perceived access to care seems to be a more powerful predictor of help-seeking than MHL and self-stigma in rural EAM.

HIRD KATHRYN

Co-authors: Prof Merrilee Needham, Dr Judith Pugh, Dr Kathy McCoy, yko Kirsner,
Dr Catherine Ashton

Medicine Fremantle

Poster Presentation

Impact of Telehealth for Neurological Patients, their Doctors and Care Providers: Possibilities for post-pandemic models of care

The impact of the transition to telehealth in the context of neurological care was investigated to determine whether there were any differences in the satisfaction and usability of telehealth between the hospital neurologists, neurological nurses, and their patients in both metropolitan and regional WA. Patients and clinicians completed the Telehealth Usability Questionnaire (TUQ). It comprises questions categorised into, system usefulness, ease of use, effectiveness, reliability, and user satisfaction. In subsequent interviews and focus groups, participants were asked to describe the advantages and disadvantages of telehealth in care for neurological disorders, with view to summarising potential avenues to improve virtual neurological care in the future. It was hypothesised that telehealth would be less acceptable to neurologists in comparison to patients, due to the restrictions on physical observation and examination of the patient through the telehealth medium. The results supported the hypothesis, but it also revealed that neurologists were less satisfied with the use of telehealth than the NCWA nurses. Results of the TUQ revealed that the major limitation of telehealth is its reliability with all four groups rating these questions in the negative range. The combination of unreliable internet connection and a suboptimal interface would be sufficient to impair communication and interaction between the neurologist and the patient resulting in less efficiency and increased cognitive load. Other causes for dissatisfaction and subsequent abandonment of telehealth are discussed. All groups acknowledged that the beneficiary of telehealth is the patient with improved access and convenience, and less travel and time costs.

KACHILA HOPE

Co-authors: Brad Farrant, Alice Johnson, Carol Michie, Charmaine Pell, Caroline Bulsara

Nursing & Midwifery Fremantle

Poster Presentation**Health Outcomes of Children Living In Out-Of-Home Care In Metropolitan Western Australia: a Sequential Mixed Methods Study**

The research protocol described aims to examine and establish the health outcomes of children and young people living in out-of-home care (OOHC) in Perth, Western Australia (WA), from the perspective of the care recipients and service providers. A Study Advisory Panel (SAP) will be established comprised of Aboriginal Elders (because of the over-representation of Aboriginal children in OOHC), health professionals and other relevant stakeholders to help co-design all study phases. Mixed methods will be used in data collection and analysis. In the quantitative phase, it is proposed to collect retrospective data from the WA Department of Communities (DOC). The data proposed to be collected includes the number of children who received initial and annual health assessments, the health needs identified, and interventions put in place to address these needs. The qualitative phase will consist of interviews with service recipients (young people who have exited OOHC and Carers), health service providers (Community Nurses, School Nurses, General Practitioners and Paediatricians) and OOHC Case Workers. The research will provide an overview of the current health needs of children and young people in OOHC in WA and the perspectives of these young people, their Carers, and service providers on current processes for accessing healthcare. The study is anticipated to provide valuable evidence for quality improvement in health service delivery to better meet the health needs of children and young people in OOHC.

KING CHENAE *

Co-authors: Dr James Debenham; Dr Amanda Timler; Janelle Gill; Jessica Nolan; Negin Loh; Maria Morgan; Robyn Sturdy

*Physiotherapy Fremantle***Poster Presentation****This is why we stayed: Job satisfaction among Physiotherapists in the Kimberley Region of Western Australia.**

Background: The Kimberley is situated in the most northern region of Western Australia and comprises one sixth of the total state landmass. This area is very remote, lead to limited services and higher rates of chronic conditions. Physiotherapists play an important role in the management and prevention of these diseases although less than 1% of physiotherapists work remotely and remain in the region for an average of 3-years.

Methods: This study used a case study approach. Eleven (9 females and 2 males) physiotherapists completed a demographic survey via Qualtrics prior to taking part in a one-on-one interview that lasted for approximately 60 minutes. These interviews were analysed thematically and entered into NVivo (version Release 1.7.1) for data storage and management.

Results: Two overarching themes including personal and workplace factors relating to job satisfaction and retention emerged from the data. These included sense of belonging to the community, workplace culture and training.

Discussion: Studies have previously considered the role of allied health professionals but not specifically in the Kimberley. What we know is factors affecting allied health professionals' retention need to consider both workplace and personal factors. The participants in this study were drawn to the Kimberley not only for the lifestyle but also the reward of working with a complex patient demographic that is severely under serviced.

Implications: The implications of this study include providing further understanding of job satisfaction in a remote setting and how this enables Physiotherapists to make informed decisions about their work choices to optimise retention

MANNING GEORGIA *

Co-authors: Jessica Nolan, Ellie Green, Dr Sarah D'Souza, Alison Kirkman,
A/Prof Paola Chivers

Physiotherapy Fremantle

Poster Presentation**Inpatient stroke rehabilitation activity: barriers, enablers, and behaviour change**

Background and Aims: The Stroke Foundation Guidelines recommend participation in at least three hours of physical and occupational therapy daily during stroke rehabilitation. This study aimed to explore the effectiveness of activity diaries in increasing activity during stroke inpatient rehabilitation, and to identify rehabilitation staff-perceived barriers and facilitators to guideline adherence. Methods: This mixed-methods, longitudinal embedded design study conformed to the STROBE statement for observational studies. Two participant cohorts were recruited to address both aims. Behaviour mapping pre- and post-intervention evaluated inpatient activity levels on an inpatient Stroke Rehabilitation Unit. A staff survey (Qualtrics) assessed pre- and post-intervention enablers and barriers to guideline adherence. Results: Twelve people undergoing inpatient rehabilitation were included in cohort one. Sixteen health-care professionals comprised cohort two, 14 pre-implementation and nine post-implementation surveys completed. The proportion of active observed time was greater post-implementation (19.3% active post-implementation versus 14.4% active pre-implementation, $p=0.04$). The average time participants spent in bed significantly decreased from 26.0% to 23.8% ($p=0.011$) during the post-implementation period. The main themes identified as staff-perceived barriers and facilitators to guideline adherence included; activity diaries improved care, activity: a diminished priority, resource limitations, implementation optimisation, stroke-related and intrinsic health-professional barriers. Conclusions: Despite significant increase in activity after diary implementation, Guidelines were not met. Adherence to Guidelines to ensure best practice and optimal patient outcomes requires change from organisational bodies, and the implementation of context-specific behaviour change strategies. A need for further implementation studies exists to confirm generalisability of results and resolve the gap between recommendations and clinical practice.

MURPHY MYLES*

Co-authors: A/Prof Richard Newsham-West, Prof Jill Cook, A/Prof Ruth L. Chimenti, A/Prof Robert-Jan de Vos, Prof Nicola Maffulli, Prof Peter Malliaras, Dr Nonhlanhla Mkumbuzi, Prof Craig Purdam, Dr J.Turner Vosseller, Dr Ebonie K. Rio

*Physiotherapy Fremantle***Poster Presentation****TENDINopathy Severity Assessment – Achilles Tendon (TENDINS-AT): Development and Content Validity Assessment of a New Patient-Reported Outcome Measure for Achilles Tendinopathy.**

Objectives: Develop a new patient reported outcome measure to assess TENDINopathy Severity of the Achilles Tendon (TENDINS-AT) and assess its content validity. Design: Mixed-methods, modified Delphi.

Methods: We performed one round of semi-structured, one-on-one interview responses with professionals and patients, for initial item generation. This was followed by one round of survey responses for professionals and a final round of semi-structured, one-on-one interviews with patients. Thus, this study has developed a PROM to quantify Achilles tendinopathy severity under the ICON tendinopathy core health domain of disability. Participants identified three sub-domains contributing to the severity of disability of Achilles tendinopathy: pain, symptoms, and functional capacity.

Results: All eight patient participants invited to participate were enrolled. Forty professional participants (50% women, six different continents) were invited to participate and 30 were enrolled (75% response rate). Therefore, a total of 30 professionals and eight patients were included within this study. Following three rounds of qualitative or quantitative feedback, this study has established the content validity of the TENDINS-AT (good relevance, comprehensibility and comprehensiveness) as a new PROM to assess the severity of Achilles tendinopathy, which assesses aspects of pain, symptoms and functional capacity.

Conclusion: The TENDINS-AT should now be encouraged for use in clinical and research populations, in conjunction with existing tools, given its established content validity. However, caution should be taken in the interpretation of results from the TENDINS-AT until further testing to establish the most appropriate scoring scale, reliability, construct validity, criterion validity and responsiveness of the TENDINS-AT has been established.

MURPHY MYLES*

Co-authors: Dr Nonhlanhla Mkumbuzi, Mr Jordan Keightley, A/Prof William Gibson,
Dr Patrick Vallance, Dr Henrik Riel, Dr Melanie Plinsinga, Dr Ebonie K Rio

*Physiotherapy Fremantle***Poster Presentation****Central sensitisation is not a feature of lower-limb tendinopathy: a systematic review and meta-analysis of individual participant data.**

Objective: Determine if people with lower-limb tendinopathy have reduced relative conditioned pain modulation (CPM) when compared to apparently healthy, non-tendinopathy controls.

Design: Individual participant data (IPD) systematic review and meta-analysis. Literature Search: Eight databases were searched until 29/08/2022. Study Selection Criteria: Case-control cross-sectional studies comparing the magnitude of the CPM effect in people with lower-limb tendinopathy to apparently healthy, non-tendinopathy controls.

Data Synthesis: Included studies provided IPD, which was reported using descriptive statistics. Generalised estimating equations (GEE) were performed within SPSS statistics to determine between group differences in the relative CPM effect, when adjusting for co-variables. Study quality was assessed using a Joanna Briggs Institute checklist and certainty of the evidence was assessed using the Grading of Recommendations, Assessment, Development, and Evaluations.

Results: Five records were included, IPD provided for four studies (n=219 tendinopathy, and n=226 controls). The principal GEE demonstrated no significant relative CPM effects for tendinopathy versus controls (B=-1.73, p=0.481), sex (B=4.11, p=0.160), age (B=-0.20, p=0.109) or body mass index (B=0.28, p=0.442); however, the Achilles region had a reduced CPM effect (B=-22.01, p=0.009). In model two, when adjusting for temperature; temperature (B=-2.86, p=0.035) and female sex (B=21.01, p=0.047) were significant. All studies were low-quality, and the certainty of the evidence was moderate.

Conclusion: We demonstrated no between-group differences in the magnitude of the CPM effect. Participant sex, conditioning stimulus temperature and tendon region appear to influence the magnitude of the CPM effect. Based on the 'moderate' certainty evidence, future studies are unlikely to substantially change these findings.

NARAYAN NITASHA *

Co-authors: A/Prof Ainslie Robinson, Dr Benjamin Hay

Nursing & Midwifery Fremantle

Poster Presentation**Transformative learning: Nursing students' (r)evolution**

Background/Introduction: This presentation arises from a qualitative PhD study, focusing on nursing students' clinical placement experience in residential aged care in Western Australia. Educators were uniquely placed to confirm and contextualise claims of transformation as perceived by the students and could situate transformative learning on a continuum that in turn will inform future student nurse preparation.

Objectives/Aims: This presentation aims to outline the extent to which aged care clinical experience altered first year nursing students' perceptions and demonstrated transformative learning post-placement.

Methods/Intervention/Activity: Data was collected in two phases. Phase 1 included an open-ended questionnaire, focusing on nursing students' preconceptions about aged care prior to clinical placement. Phase 2 involved data collection in three parts: a, b and c. Part 2a involved face-to-face, one-on-one, semi-structured interviews with nursing students following their clinical placement in aged care. Part 2b involved face-to-face, one-on-one, semi-structured interviews with clinical facilitators. Part 2c involved face-to-face, one-on-one, semi-structured interviews with the professional practice team. Lastly, Phase 1 and Phase 2 findings were compared using Mezirow's Theory of Transformative Learning.

Results/Outcome: Both nursing students and educators identified a positive change in nursing students' attitudes as a result of undertaking the clinical placement. There was growth in clinical skills and knowledge. Critical reflection, the centrality of experience, and rational discourse facilitated the transformative learning of these nursing students.

Discussion/Conclusion: Structured mentorship, supportive clinical facilitators and university-based preparation are vital for students throughout clinical placement in aged care to promote transformative learning.

NOLAN JESS *

Co-authors: Angela Jacques, A/Prof Erin Godecke, Dr Hiroaki Abe, A/Prof Suzanne Babyar, Dr Jeannine Bergmann, Dr Melissa Birnbaum, Dr Shenhao Dai, Cynthia Danells, Prof Taiza Edwards, Prof Marialuisa Gandolfi, Prof Klaus Jahn, Dr Ryan Koter, A/Prof Avril Mansfield, Dr Junji Nakamura, Dr Vicky Pardo, Prof Dominic Perennou, Dr Celine Piscicelli, Dr David Punt, Dr Devra Romick-Sheldon, Prof Wim Saeys, Prof Nicola Smania, Dr Nathalie Vaes, Dr Abigail Whitt, Prof Barby Singer

*Physiotherapy Fremantle***Poster Presentation****Pushing for Recommendations for Management of Post-Stroke Lateropulsion: Best Practice Rehabilitation According to a Panel of Experts**

Background and aims People with post-stroke lateropulsion actively push their body across the midline to the more affected side and/or resist weight shift toward the less affected side. Post-stroke lateropulsion is prevalent and associated with poor rehabilitation outcomes, but no clinical practice guidelines for its rehabilitation currently exist. The study aimed to develop consensus-based clinical practice recommendations for managing poststroke lateropulsion.

Methods This Delphi Panel Process conformed with the Guidance on Conducting and Reporting Delphi Studies (CREDES) recommendations. Panel members had demonstrated clinical and/or scientific background in rehabilitation of people with post-stroke lateropulsion. The process consisted of four electronic survey rounds. Round One consisted of open questions, developed in consultation with two people with lived experience of post-stroke lateropulsion. Subsequent rounds ascertained levels of agreement with statements derived from Round One. Consensus was defined a priori as $\geq 75\%$ agreement (agree or strongly agree), or $\geq 70\%$ agreement with 'unsure' responses excluded.

Results Twenty international experts completed all four rounds. A total of 49 consensus-based recommendations were compiled regarding elements of optimal rehabilitation (29 statements) and considerations for management of lateropulsion, informed by severity of lateropulsion, the person's awareness of their lateropulsion, and individual stroke and person-related factors (20 statements).

Conclusions In the absence of evidence-based clinical guidelines, these recommendations present the best available expert opinion for lateropulsion management, building on existing evidence to guide selection of interventions for post-stroke lateropulsion. Future research is required to elaborate specific rehabilitation strategies, particularly considering the influence of additional cognitive and perceptual impairment.

PLAYFORD DAVID

Co-authors: Prof David Playford, Prof Simon Stewart, Dr Sarah Ann Harris, Dr Yih-Kai Chan, Prof Geoff Strange on behalf of the NEDA Investigators

IHR Fremantle

Poster Presentation**Pattern and prognostic impact of ventricular wall motion abnormalities: Insights from the National Echo Database of Australia.**

Background: There is a paucity of contemporary data describing the pattern and prognostic impact of regional wall motion abnormalities (WMA) following an acute myocardial infarction.

Methods: Applying natural language processing to the reports captured by the National Echo Database of Australia (2000-2019), we identified normal wall motion (NWM) versus specific WMA among 492,338 individuals aged 61.9 ± 17.9 years. We then examined the pattern of actual 1- and 5-year mortality, plus adjusted risk of long-term mortality according to WMA status in this cohort.

Results: Overall, 39,346/255,697 men (15.4%) and 17,834/236,641 women (7.5%) had a WMA. Inferior WMA was the most common in both men (8.0%) and women (3.3%), and anterior the least common (2.5% and 1.1%, respectively). Hypokinesis was the most common defect reported. Compared to the absence of a WMA, any WMA increased 5-year mortality from 17.5% to 29.7% in men and 14.9% to 30.8% in women (with sex-specific differences evident). On an adjusted basis, those with a documented myocardial infarction (HR 0.86, 95% CI 0.80-0.93) and/or revascularization (HR 0.87, 95% CI 0.82-0.92) had a better prognosis, whilst men (1.22-fold increase) and those with greater systolic and diastolic dysfunction had an adverse prognosis. Independent of these factors, among those with any WMA, apical (HR 1.08, 95% CI 1.02-1.13) and/or inferior (HR 1.09, 95% CI 1.04- 1.15) akinesis, dyskinesis or aneurysm conveyed the worst prognosis.

Conclusions: Within NEDA, we found a diverse pattern of prognostically important WMA (affecting 1 in 10 overall) that has implications for clinical management on a sex-specific basis.

PLAYFORD DAVID

Co-authors: Prof Geoff Strange, Dr Majo Joseph, Dr Rebecca Perry, Dr Yih-Kai Chan, Dr Sarah Ann Harris, Prof Simon Stewart, Prof Joseph Selvanayagam on behalf of the NEDA Investigators

IHR Fremantle

Poster Presentation**Establishing new sex-specific thresholds of risk associated with increased mass of the left ventricle: Insights from NEDA.**

Background: Although the sex-specific threshold at which increased left ventricular mass index (LVMI) indicative of left ventricular hypertrophy (LVH) is well-established, the threshold at which mortality increases as LVMI rises above normal remains ill-defined.

Methods: Echocardiographic and linked mortality data were extracted from the National Echocardiography Database of Australia. Mild-to-severe LVH cases were identified within 155,668 men (aged 61.3±17.3 years) and 147,880 women (61.8±18.3 years) applying American Society of Echocardiography (ASE) criteria. We then examined the pattern of 5-year mortality based on LVH status and LVMI increments on a sex-specific basis.

Results: Overall, 36,198 men (23.3%) and 38,898 women (26.3%) had LVH. Actual 5-year mortality rose from 16.9%-38.3% and 11.9%-31.2% in men and women with no versus LVH, respectively. The statistical threshold at which LVMI was associated with increased mortality was lower in both men ($\geq 88 \text{g/m}^2$ versus LVH $\geq 115 \text{g/m}^2$) and women ($\geq 82 \text{g/m}^2$ versus $\geq 95 \text{g/m}^2$) than ASE LVH criteria. For men, the fully adjusted risk of 5-year mortality (versus normal-risk LVMI) was 23% (95%CI 1.07-1.40) and 38% higher (95%CI 1.20-1.58) when LVMI levels reached 116 to <140 and $\geq 140 \text{g/m}^2$, respectively. In women, the equivalent LVMI thresholds of 112 to <140 and $\geq 140 \text{g/m}^2$ were associated with a 33% (95%CI 1.17-1.51), and 53% higher (95%CI 1.32-1.78) risk of 5-year mortality.

Conclusions: A high proportion of men and women being investigated with echocardiography have LVMI levels associated with elevated mortality risk that are below the thresholds used to diagnose/manage LVH. Such individuals may benefit from more proactive recognition and clinical management.

PRATT SIMON *

Co-authors: Prof Ben Wand, Dr Dana Hince, Dr Mervyn Travers, Lee Schneider,
Sara Kelly, A/Prof William Gibson

Physiotherapy Fremantle

Poster Presentation**The Characteristics of the Implicit Body Model of the Trunk**

ABSTRACT Objective: Knowing where the body is in space requires reference to a stored model of the size and shape of body parts, which has been termed the body model. This study sought to investigate the characteristics of the implicit body model of the trunk by assessing the position sense of midline and lateral landmarks. Approach: Sixty-nine healthy participants localised midline and lateral landmarks on their thorax, waist and hips, with perceived positions of these landmarks compared to actual positions. Main Results: This study demonstrates evidence of a significant distortion of the implicit body model of the trunk, presenting as a squatter trunk, wider at the waist and hips. We found a significant difference between perceived and actual location in the horizontal (x) and vertical (y) directions for the majority of trunk landmarks. Evidence of a rightward bias was noted in the perception of six of the nine landmarks in the horizontal (x) direction, including all midline levels. In the vertical (y) direction, a substantial inferior bias was evident at the thorax and waist. Significance: The implicit body model of the trunk is shown to be distorted, with the lumbar spine (waist-to-hip region) held to be shorter and wider than reality. Key Words: Body Model; Body Representation; Midline Perception; Width Perception; Height Perception.

RAEBURN TOBY

Co-authors: Dr Paul Saunders, Prof Aunty Kerrie Doyle

Nursing & Midwifery Sydney

Poster Presentation**Boorong of the Burramattagal, Australia's first female Aboriginal intermediary.**

Drawing heavily on the writing of early colonial diarists, this paper describes the life of Boorong (aka Booron, Abbarroo and Abaroo), who, after falling ill during the smallpox epidemic of 1789, became the first Aboriginal female to spend time living in the British colony of NSW. Like her white female colonial contemporaries, however, Boorong's life has previously been overshadowed by accounts describing her male Aboriginal compatriots such as Bennelong and Colebee. In contrast to most historical scholarship, this paper uncovers relationships Boorong engaged in, events she witnessed and roles she played as an intermediary, linguist and friend in colonial NSW. Far from being a passive recipient of British care or an irrelevant adolescent female coincidentally mentioned on the historical stage, when colonial accounts are knit together, they reveal Boorong as a woman who introduced colonists to her family, took an active interest in British customs, shared Aboriginal approaches to spirituality and healthcare, and acted as an influential intermediary between her people and the British. At the same time, she bore witness to British brutality and was maligned by British newspapers back in England. This biography challenges modern-day Australia to remember and more fairly memorialise Boorong as Australia's first female Aboriginal intermediary, rather than continuing to allow her life to be obscured by the males who lived around her.

SARASJAERVI KIIRA *

Co-authors: A/Prof Paola Chivers; Dr Ranila Bhoyroo; Prof Jim Codde

IHR Fremantle

Poster Presentation**Bouncing back from COVID-19 in Western Australia: A Retrospective Study**

The study explores the behavioural profiles of Western Australians during and after the COVID-19 lockdown. A total of 313 participants (76% female, Age: M=50.1, SD=15.7 years) completed a health questionnaire approximately two months after a 3-month lockdown in October 2020, using retrospective recall. Latent transition analysis (LTA) was used to identify behavioural profiles during and after lockdown. Qualitative open-ended questions were used to describe these profiles. Changes in physical activity, screen time, alcohol intake, psychological distress, and loneliness were detected and used to form LTA. The results supported five latent class model. Two of these classes were described as inactive and three as active, with most remaining lonely after lockdown. The classes differed in resilience, sense of control, and social relations, as well as mental health symptoms and socio-demographic (e.g., age and education). Washing hands and social distancing were the most effective health campaigns, yet people who experienced most challenges during COVID-19 were the most unattainable. Overall, while most participants recovered relatively well after the lockdown, LTA identified subgroups experiencing more difficulties than others. These results provide important insights for future public health campaigns of the importance of diversified public health messaging. Further LTA identifies population-based behaviour that many other COVID studies are lacking, and hence may be more useful for plan and execute targeted strategies for the future health campaigns. The present study has been submitted to *Frontiers in Public Health*, section Public Health Policy, and it is currently waiting for an approval from the editor.

SIMILLION ISABELLE *

Co-authors: Nadia Norrish, Jessica Nolan, Anu Lokuge, Charlotte Hosking,
Dr Amanda Timler

*Physiotherapy Fremantle***Poster Presentation****Preparing for birth: Expectant mothers' perception of physiotherapy-led antenatal education and physical activity classes delivered via Telehealth compared to in-person.**

Introduction: Antenatal education and exercise classes moved from face-to-face to online delivery in 2022 with the introduction of COVID-19 restrictions. This study aimed to compare the experiences of people who participated in both modes of class delivery. Methods: This study used a mixed methods design. Participants included those who participated in antenatal classes at two public hospitals in Perth, Western Australia. An online Qualtrics survey, gathered demographics and participants' experiences in the classes. Results: Surveys were sent via email to 202 participants in antenatal education and/or exercise class in 2022. Forty-one participants completed the survey. Overall, participants were more satisfied with the face-to-face exercise class, with 59% preferring face to face and 41% preferring a hybrid model of face to face and telehealth attendance. Positive trends towards face-to face-attendance was preferred as a myriad of issues with the telehealth classes including technical issues and a lack of connection with other mothers. Conclusion: These results demonstrate that although there are benefits to telehealth attendance, the majority of participants preferred the face-to-face classes. A hybrid model of class delivery seems to be liked by participants and this mode of delivery could be introduced into public hospitals to help facilitate the needs of more participants. Having an online class option could improve access for non-metro participants and prove a useful alternative of class delivery if restrictions were placed on hospitals in the future.

STEWART SIMON

Co-authors: Prof Simon Stewart, Dr Yih-Kai Chan, Prof David Playford, Prof Geoffrey A. Strange on behalf of the NEDA Investigators

IHR Sydney

Poster Presentation**Natural history of pulmonary hypertension: Insights from the National Echo Database of Australia**

Background: We addressed the paucity of data describing the characteristics and natural history of incident pulmonary hypertension (PHT).

Methods: Adults (n=13 448) undergoing routine echocardiography without initial evidence of PHT (estimated right ventricular systolic pressure, eRVSP <30.0 mmHg) or left heart disease (LHD) were studied. Incident PHT (eRVSP ≥30.0 mmHg) was detected on repeat echocardiogram a median of 4.1 years apart. Mortality was examined according to increasing eRVSP levels (30.0–39.9, 40.0–49.9 and >50.0 mmHg) indicative of mild to-severe PHT.

Results: A total of 6169 men (45.9%, aged 61.4±16.7 years) and 7279 women (60.8±16.9 years) without evidence of PHT were identified (first echo). Subsequently, 5412 (40.2%) developed evidence of PHT, comprising 4125 (30.7%), 928 (6.9%), and 359 (2.7%) cases with an eRVSP of 30.0–39.9 mmHg, 40.0–49.9 mmHg, and >50.0 mmHg, respectively (incidence being 94.0 and 90.9 cases per 1000 men and women/year). Median eRVSP increased by +0.0 (IQR -2.27 to +2.67) mmHg and +30.68 (+26.03 to +37.31) mmHg among those with eRVSP <30.0 mmHg versus >50.0 mmHg. During median 8.1 years follow-up, 2776 (20.6%) died from all-causes. Compared to those with eRVSP <30.0mmHg, the adjusted risk of all-cause mortality was 1.50-fold higher in 30.0–39.9 mmHg, 2.65-fold higher in 40.0–49.9 mmHg and 4.36-fold higher in >50.0 mmHg groups (all p<0.001).

Conclusions: New onset PHT, as indicated by elevated eRVSP, is a common finding among older patients without LHD followed-up with echocardiography. This phenomenon is associated with an increased mortality risk even among those with mildly elevated eRVSP.

TAN JOCELYN *

Co-authors: A/Prof Paola Chivers ,A/Prof Nicolas Hart, Dr Timo Rantalainen

Health Science Fremantle

Poster Presentation**An Exploration of Physical Activity Impact on Bone Health Development in Childhood and Adolescence: Models for Improving Well-Being**

Background Fracture incidence in children and adolescents is steadily increasing in Western Australia relative to population size (Jenkins, 2018). This is indicative of a decline in bone health which has implications for lifetime wellbeing due to the relationship between osteoporosis onset and bone health in adolescence.

Methods To identify if this decrease in bone health is related to physical activity levels, a comprehensive approach was taken, utilizing a life course health development framework. Research findings from multiple studies were synthesized to show how physical activity levels change from childhood through adolescence into adulthood. Typically developing individuals were contrasted with individuals with Developmental Coordination Disorder (DCD) to show physical activity effects. The group with DCD was classified as the low activity group in contrast to the typical activity group.

Results Analysis of Western Australian population data, specifically the Raine Cohort Study, revealed a bone deficit seen in males in the low activity group only. For females, both activity groups had low bone health compared to population norms. Examination of physical activity data from other studies involving childhood, adolescent, and adult groups indicated that a decline in physical activity during adolescence likely contributed to the poor bone health seen in females.

Conclusion Based on collated findings we propose life course conceptual models of bone development trajectories, highlight sex-specific differences in physical activity. These models identify critical time points for physical activity interventions and provide valuable information for educational and clinical intervention to impact upon lifelong well-being.

TRUTER PIERS *

Co-authors: A/Prof Dale Edgar, A/Prof David Mountain, Annabel Saggars,
Prof Caroline Bulsara

*Physiotherapy Fremantle***Poster Presentation****'I just need to find out if I had broken something or not.' A qualitative descriptive study**

Objective To investigate what factors contribute to a working age adult with a simple fracture seeking care in an Australian metropolitan Emergency Department (ED)

Methods In this Qualitative Descriptive study, we interviewed patients presenting to ED with simple fractures. Simple fractures included 5th metacarpal, 5th metatarsal, toe, radial head and clavicle fractures.

Results We interviewed 30 patients aged 18-65 presenting across the week. Two thirds of the participants were aware that they might not have a serious injury. Many were well informed health consumers and convenience was the most important decision-making factor. Participants focussed on organising imaging, diagnosis and immobilisation. This sequence of care was often perceived as more complex and inefficient in primary care. ED was perceived as trustworthy and preferred to urgent primary care with an unknown doctor. There are a sub-group of patients who default to attending ED without considering alternatives, either due to poor health system knowledge or from escalating anxiety.

Conclusions ED is safe, free and equipped to manage simple and complex injuries. Patients might use a primary care alternative if comprehensive fracture care was easily accessible from a trustworthy clinician. To effectively divert simple fracture presentations from ED, primary care requires co-located imaging, imaging interpretation, orthopaedic expertise, and fracture management resources. Services need to operate 7 days a week and must have accessible 'urgent' appointments.

TRUTER PIERS *

Co-authors: Dr Rob Waller, Luke Bongiascia, Pippa Flanagan

Physiotherapy Fremantle

Poster Presentation

A novel model of advanced physiotherapy practice: Diverting patients from the emergency department directly to an outpatient clinic

Background: The WA Department of Health (DoH) funded a pilot to divert patients with musculoskeletal conditions directly from the emergency department (ED) to a novel outpatient physiotherapy clinic. The clinic is staffed by advanced scope physiotherapists (ASP), supported by senior physiotherapists with outpatient and ED experience. Typical physiotherapy patients as well as fractures (including plastering and thermoplastic splinting) are managed.

Method: Patients aged 8-65 were diverted from February 2022. A REDCap database captures clinical encounter data, tracks return to ED and surveys patients for clinical outcomes and satisfaction. The clinic was piloted by experienced ED ASPs, but after recruitment and training, transitioned to running with clinicians primarily recruited from existing hospital senior staff.

Results: Over 1,500 patients have been diverted to outpatients. Most diverted patient are Australasian triage category 4 (74%), have an average length of ED stay of 75 mins and 98% are satisfied with the care they receive. The clinic connected 71% of patients to ongoing care in orthopaedics, hand surgery or physiotherapy outpatients. Only 1% of patients returned to the ED, as 9% of patients self-initiated follow up care in the clinic. Most additional acute care continuity was by TeleHealth. Independent WA DoH, Health economic analysis demonstrated that this clinic was the dominant treatment model when compared to usual care in the ED.

Discussion: The South Metropolitan Health Service ED musculoskeletal diversion clinic has been permanently funded at Rockingham Hospital because it significantly reduces crowding in the emergency department, provides excellent care and is cost effective.

WARNER TULLY *

Co-authors: Jocelyn Tan, A/Prof Paola Chivers

Physiotherapy Fremantle

Poster Presentation**The Potential of Self-Perception: How Physical Activity Related Beliefs Impact Fitness and Muscle Measurements in Adolescents with Developmental Coordination Disorder**

Background: The common neurodevelopmental condition Developmental Coordination Disorder (DCD) can lead to physical activity withdrawal as adolescents' confidence is decreased by social judgement from peers. Positive physical self-concept may improve physical activity levels. Targeting self-perception improvements may directly influence participation rates for adolescents with DCD. Objectives: Determine the association between changes in participant's fitness measures and their self-reported physical activity related beliefs over a 13-week exercise intervention program.

Methods: Retrospective analysis of 33 participants with DCD who participated in a university-based exercise clinic and had self-concept measured using the Harter Self Perception Profile for Adolescents. Generalized Linear Models assessed the impact of self-concept on fitness outcomes.

Results: Reduced scoring in self-concept subdomains was often associated with increased scores in fitness testing. Physical fitness measures improved after participation in the exercise intervention while all Harter subdomains which included Scholastic Competence, Social Competence, Athletic Competence, Physical Appearance, Job Competence, Romantic Appeal, Behavioural Conduct, Close Friendships and Global Self-Worth decreased. The statistical drop in self-concept contrasts with themes found in qualitative data from parent and trainer comments. Parents reported their children grew in confidence and awareness of the importance for a consistent exercise routine.

Conclusion: Adolescents with DCD experience many physical benefits from exercise participation including the development of fitness routines outside of the program. Exercise engagement however, is also associated with a decrease in their self-concept, potentially due to a new awareness of their physical limitations compared to typically developing peers. Future research should consider this when planning interventions in this population.

SATELLITE EVENT

Health Sciences Honours 2023 Final Presentations.

You are invited to hear our 2023 Biomedical Science and Bachelor of Exercise and Sports Science Honours students present on their research projects. Each presentation is 10 minutes followed by 5 minutes of questions.

When: Thursday 21 September 2023
Time: 10:30am to 16:00pm WST
In person: ND46 Room 209 Fremantle Campus

SATELLITE PROGRAM

TIME	STUDENT	COURSE	PRIMARY SUPERVISOR
10:30	Welcome and Introduction – Jess Nolan		
10:40	Adam O'Neill	BMS	Anastazja Gorecki
10:55	Emma Playford	BMS	Simon Stewart
11:10	Alice Congdon	BESS	Jenny Conlan
11:25	Olivia Comito	BMS	Andrew Dean
11:40	Maddison Duff	BMS	Jade Kenna
11:55	Tyson Zuin	BESS	Ashley Cripps
12:10	Shaun Ho	BMS	Kieran Mulroney
12:25	Taylah Donnelly	BMS	Monika Tschochner / Gerard Hoyne
12:40	Lunch		
13:30	Jonah Musitano	BESS	Jenny Conlan
13:45	Andrea Serrano	BMS	Donna Jayacody
14:00	Charlotte Sofield	BMS	Anastazja Gorecki
14:15	Aman Nasir	BESS	Chris Joyce
14:30	Kysharnie Mosconi	BMS	Anastazja Gorecki
14:45	Layla Barr	BMS	Donna Jayacody
15:00	Hannah Vawser	BESS	Khaya Morris-Binelli
15:15	Hayden Symington	BMS	Donna Jayacody
15:30	Jordan Pearce	BMS	Monika Tschochner / Ryan Anderton
15:45	Close – Jess Nolan		