21st National Conference of Emerging Researchers in Ageing

Courage and Creativity in Ageing Research
28 November 2023
Virtual

ERA
Emerging
Researchers in
Ageing
Australia

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As we gather for this conference physically dispersed and virtually constructed let us take a moment to reflect on the meaning of place and in doing so recognise the various traditional lands on which we meet.

Emerging Researchers in Ageing acknowledges and pays respect to the past, present and future Traditional Custodians and Elders of this nation and the continuation of cultural, spiritual, and educational practices of Aboriginal and Torres Strait Islander peoples.

Conference Proceedings

Emerging Researchers in Ageing: era.edu.au

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Contents

Welcome from the ERA National Convenor

It is with great pleasure that I welcome you to the 21st National Conference of Emerging Researchers in Ageing. In recognition of the ongoing challenges faced by emerging researchers, and following the success of our last two virtual conferences, we felt that a virtual format would again enable us to maximise the participation in the conference.

As a virtual conference, we have worked closely with our conference Chair, Professor Evonne Miller, to provide opportunities to participate throughout the day, as well as make the conference as engaging as possible. This includes:

- Utilising Zoom ‘Breakout Rooms’, so that presenters and the audience can interact with each other (rather than being restricted to simply viewing presentations and communicating by chat text); I encourage all delegates to please turn their cameras on where possible throughout the day to create a visible live audience
- Foregoing the usual morning and afternoon keynote lectures in favour of more interactive sessions, with gaps after sessions for people to continue to talk (Breakout Rooms will remain open during all breaks)
- Including interactive “Ask the ERA Brains Trust” sessions, where participants pose questions to relevant experts and the ERA community

I encourage all conference delegates to take up the opportunity to network during the conference, as the connections you make over the day could end up sustaining you throughout your career in research and possibly beyond.

I would like to thank CEPAR, the primary sponsor of ERA, for their support of all our activities. I would also like to thank the Australian Association of Gerontology and the National Ageing Research Institute (NARI), for their ongoing support.

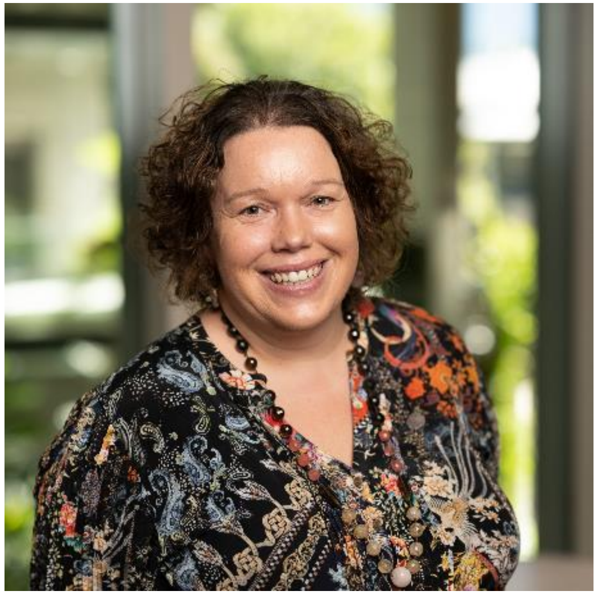
Finally, I would particularly like to acknowledge the efforts of our new ERA coordinator, Tim Campbell, who has stepped into the role following the sad death of our previous coordinator Courtney Hempton last year.

I look forward to ‘seeing’ you all at the conference.

Matthew Carroll

Dr Matthew Carroll
ERA National Convenor

Chair



Professor Evonne Miller

Queensland University of Technology

Evonne Miller is Professor of Design Psychology and Director of the QUT Design Lab at Queensland University of Technology. In addition to chairing ERA 2023, Evonne is chairing the 2023 Australian Association of Gerontology Annual Conference.

Evonne’s research expertise is in participatory co-design for engagement and transformation in health and aged care and she has authored over 100 academic publications, including several books, on these processes. She frequently uses creative-arts and design methods (participatory photography, storytelling, poetry, serious games, virtual reality) to engage and educate. Her most recent book, *Redesigning the Unremarkable*, argues that we must redesign the often-neglected elements and spaces of our built environment to enhance both human and planetary health.

Ambassadors

Prof Kaarin Anstey, University of New South Wales

Prof Elizabeth Beattie, Queensland University of Technology

Prof Henry Brodaty, University of New South Wales

A/Prof Richard Burns, Australian National University

A/Prof Elissa Burton, Curtin University

Prof Laurie Buys, Australian Catholic University

Prof Julie Byles, The University of Newcastle

Prof Nicolas Cherbuin, Australian National University

Prof Anne-Marie Hill, The University of Western Australia

Prof Keith Hill, Monash University

Prof Hannah Keage, University of South Australia

Dr Judy Lowthian, Bolton Clarke Research Institute

Prof Evonne Miller, Queensland University of Technology

Prof Wendy Moyle, Griffith University

Dr Chiara Naseri, The University of Western Australia

A/Prof Joanne Ryan, Monash University

Prof Yvonne Wells, La Trobe University

A/Prof Tim Windsor, Flinders University

Dr Rachel Winterton, La Trobe University

Acknowledgements

Conference Organising Committee

Prof Evonne Miller (Chair), Queensland University of Technology

Dr Matthew Carroll, ERA, Monash University

Mr Tim Campbell, ERA, Monash University

ERA Brains Trust

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ERA Primary Sponsor

CEPAR – the ARC Centre of Excellence in Population Ageing Research – is a unique collaboration bringing together academia, government, and industry to deliver solutions to one of the major economic and social challenges of the twenty first century.

Based at the University of New South Wales with nodes at the Australian National University, Curtin University, University of Melbourne and the University of Sydney, CEPAR produces world-class research and fosters a new generation of researchers with an appreciation of the multidisciplinary nature of population ageing.

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Prizes

Best ERA 2023 Oral Presentation

Supported by the National Ageing Research Institute

Presenting an oral paper at a virtual research conference requires the ability to present a complicated research program in a clear, visually appealing, and engaging manner. The presenter considered by the judging panel to be the best oral presenter will be awarded a prize to the value of $250 and a certificate.

Best ERA 2023 Oral Presentation by a member of the Australian Association of Gerontology

Supported by the Australian Association of Gerontology

Presenting an oral paper at a virtual research conference requires the ability to present a complicated research program in a clear, visually appealing, and engaging manner. The Association of Gerontology Student or Early Career member considered by the judging panel to be the best oral presenter will be awarded a prize to the value of $250 and a certificate.

Helen Bartlett Prize for Innovation in Ageing Research

The Helen Bartlett Prize for Innovation is awarded for the most original and creative research presented at the conference. The prize recognises the outstanding contribution made by Professor Helen Bartlett to the field of ageing research in Australia, particularly as the founder of the ERA initiative. The research considered by the judging panel to be the most innovative will be awarded a prize to the value of $250 and a certificate.

Programme

Tuesday 28 November 2023

ERA is being hosted by Professor Evonne Miller from the Queensland University of Technology, so is following Australian Eastern Standard Time (AEST QLD) – please check your local time on the Time Zone Conversion Chart at the end of the proceedings. The Zoom link will be active from 9.30am for anybody wanting to join early to test their connection or ask questions.

Zoom-keeping notes:

- Breakout Rooms: concurrent sessions throughout the day are held in '**Breakout Rooms**' – please select which Room number you wish to join using the Breakout Room function; use the same function to move between Rooms during the concurrent sessions (refer Zoom Map).

  Following the conclusion of each session the Breakout Rooms will remain open, so please utilise these spaces to continue the conversation.

- Q&A: if you wish to ask a presenter a question in the Q&A following their presentation, please use the '**Raise Hand**' function – click on the Reactions icon and then click Raise Hand – the Chair will then call on you to ask a question.
- Chat: please utilise the '**Chat'** function to engage with presenters and other delegates throughout the conference.
- Please refer to the separate '**Virtual Conference Instructions**' document provided for further information.

OPENING PLENARY

10am – 10.15am	ACKNOWLEDGEMENT OF COUNTRY OPENING ADDRESS **Professor Evonne Miller**, ERA 2023 Chair WELCOME 'ZOOM-KEEPING' **Dr Matthew Carroll**, ERA National Convenor

Presentation titles are hyperlinked to the corresponding abstract for your reference

CONCURRENT SESSIONS (A): ORAL PRESENTATIONS

10.15am – 11.15am

Dementia Care	Research Matters	Innovative Methods	Interventions
ROOM 1	ROOM 2	ROOM 3	ROOM 4
Chair: Daria Gutteridge	Chair: Mel Hull	Chair: Matthew Carroll	Chair: Katrina Radford
An exploratory study of in-home respite care for people living with dementia in Australia **Chengjun (Olivia) Liu** (She / Her)	Travelling through your PhD: Sharing an experience of securing an international travel fellowship to learn about Canadian aged care **Karly Bartrim** (She / Her)	Modelling and detecting urinary anomalies in seniors from data obtained by unintrusive sensors **Yueyi Ge**	Prosper and persevere - Enhancing muscle quality and perceived health in older adults: Preliminary results from a high-intensity resistance training intervention **Isabel King**
Ethical considerations for including people living with dementia in voluntary assisted dying research **Adrienne Matthys**	Exploring the Canadian long term care dietitian workforce: Sharing insights and lessons learned from a Nutrition in Aged Care Travel Fellowship opportunity **Karly Bartrim** (She / Her)	Reframing creativity: Photography as an accessible and enjoyable creative pursuit for older adults **Tricia King** (She / Her)	Challenges in adaptation and implementation of volunteer-driven, telephone social support program HOW-R-U? during COVID-19 **Elizabeth Robinson** (She / Her)
Building courage to 'venture out': A program to support participation in nature-based activities following diagnosis of dementia or mild cognitive impairment **Cassandra (Cassie) Thomson** (She / Her)	The unseen hurdle: A closer look at researchers navigating death **Samantha (Sam) Fien**	Between a rock and a hard place: Navigating beneficence and medication refusals in residential aged care **Stephanie (Steph) Garratt**	

BREAK

11.15am – 11.30am

CONCURRENT SESSIONS (B): ORAL PRESENTATIONS

11.30am – 12.30pm

Brain Health, Cognitive Impairment and Memory	**Healthcare Planning**	**Insights From Professionals**	
ROOM 1	ROOM 2	ROOM 3	ROOM 4
Chair: Joanne Ryan	Chair: Keith Hill	Chair: Rachel Winterton	
The cognitive and wellbeing benefits for older adults of engaging in music instrument learning using creative improvisation **Anita Connell** (She / Her)	Towards a global response to unmet care needs of older people **Janine Charnley** (She / Her)	How do aged care staff describe quality communication with people with dementia? **Ashleigh Elford** (She / Her)	
Computers may hold the key for early detection of cognitive impairment **Kaylee Rudd**	Age-related cataract and cataract surgery utilisation among older women in Australia: Findings from the Australian Longitudinal Study on Women's Health **Mitiku Hambisa** (He)	Towards better recognition of health professionals' perspectives on the nature of their role in a geriatric evaluation and management (GEM) unit **Farnaz Khoshmanesh** (She / Her)	
'I haven't got a cue': Investigating the effectiveness of self-generated cues for memory performance in younger and older adults **Minal Tanvir** (She / Her)	Admission over a weekend / holiday and stroke mortality in regional Australia: A ten-year retrospective study **Fan He**	Improve comprehensive care: Insights from care professionals on the Comprehensive Care Standard via a national survey **Beibei Xiong**	

LUNCH BREAK

12.30pm – 1.30pm

CONCURRENT SESSIONS (C): ORAL PRESENTATIONS

1.30pm – 2.50pm

The Dementia Journey	**The Role of Gender and Other Factors**	**Social Aspects of Ageing**	**Healthy Ageing and Medication Use**
ROOM 1	ROOM 2	ROOM 3	ROOM 4
Chair: Maddison Mellow	Chair: Yvonne Wells	Chair: Tim Windsor	Chair: Daria Gutteridge
The complex path to dementia diagnosis **Sarah Carmody**	Age and education associated with awareness of dementia risk reduction in rural older Australians **Laura Dodds** (She / Her)	Social activities and risk of dementia in community-dwelling older people: Gender-specific findings from a prospective cohort study **Htet Lin (Danny) Htun** (He / Him)	Investigating the synergistic effects of hormone replacement therapy, APOE and age on brain health **Ananthan Ambikairajah**
Cast adrift: Experiences after receiving a dementia diagnosis **Sarah Carmody**	Women, care, and dementia: Gendered dynamics of the Aged Care Royal Commission **Kristina Chelberg**	Lonely but not alone: Predictors of loneliness in retirement living communities **Georgina Johnstone** (She / Her)	Knowledge and perceptions about role of antibiograms in aged care settings with exploration of barriers and enablers to its development and implementation: A qualitative study **Dipti Khatri**
Detecting dementia EEG signals using transfer learning networks **Tong (Amelia) Qiu** (She)	Sex differences in the link between DNA methylation-derived biological ageing and health in older individuals **Aung Zaw Zaw Phyo** (He / Him / His)	Aspects of socialisation and risk of cardiovascular disease: A prospective cohort study using machine learning algorithms and a conventional method **Achamyeleh Birhanu Teshale** (He / Him)	Antibiograms for Australian aged care settings: Are they feasible and how do they compare with other resistance data? **Dipti Khatri**
“Being regional you don’t have the same access to things”: A qualitative descriptive study exploring rurality and the experience of dementia diagnosis **Hannah Gulline**	Media portrayals of older women and its relationship to health and well-being: A systematic scoping review **Kathryn Squires** (She / Her)	Humour style predicts level of social engagement and life satisfaction in healthy older adults **Nikki-Anne Wilson** (She / Her)	Ten-year changes in symptomatic and preventive medication use in people with and without Alzheimer’s Disease **Shin Liau**

BREAK

2.50pm – 3.10pm

CONCURRENT SESSIONS (D): ASK THE ERA BRAINS TRUST

3.10pm – 4.10pm

The Ask the ERA Brains Trust format provides participants with the opportunity to ask questions and receive research advice from members of the 'ERA Brains Trust' (relevant experts); each participant will begin with a 5-minute presentation (providing a brief overview of their research and outlining their questions), followed by responses from the ERA Brains Trust, with the final part of each session allocated to audience Q&A.

Research Design Including Mixed Methods	**Planning Ahead**	**Deep Dive Into Data**
ROOM 1	ROOM 2	ROOM 3
Chair: Yvonne Wells	Chair: Evonne Miller	Chair: Tim Windsor
ERA Brains Trust: Sharon Andrew Alison Craswell Xanthe Golenko	ERA Brains Trust: Victoria Bates Kirsty Bennett	ERA Brains Trust: Kim Kiely Gita Mishra Joanne Ryan
Development and validation of an online medication management portal for older people **Temitope (Esther) Afolabi**	Interconnected themes: Ageing and surf lifesaving **Samantha (Sam) Fien**	Genetics, hormones and brain health – The curious case of the null result **Ananthan Ambikairajah**
Improving care of older people in the community through detection of complexity: ImPaCt study **Jennifer (Jenny) Boak**	The Venture Out Living Green Lab: A Proposal **Cassandra (Cassie) Thomson** (She/Her)	Modelling and Detecting Urinary Anomalies in Seniors from Data Obtained by Unintrusive Sensors **Yueyi Ge**

CLOSING PLENARY

4.10pm – 4.30pm

AWARD OF PRIZES

Matthew Carroll, ERA National Convenor

Best ERA 2023 Oral Presentation

Women, care, and dementia: Gendered dynamics of the Aged Care Royal Commission

Kristina Chelberg, Queensland University of Technology

Best ERA 2023 Oral Presentation by a Member of the Australian Association of Gerontology

Investigating the synergistic effects of hormone replacement therapy, APOE and age on brain health

Ananthan Ambikairajah, University of Canberra

Helen Bartlett Prize for Innovation in Ageing Research

Building courage to 'venture out': A program to support participation in nature-based activities following diagnosis of dementia or mild cognitive impairment

Cassandra Thomson, University of Tasmania

Recipients of the ERA 2023 Travel Exchange Program

Shally Zhou, University of New South Wales

Johannes Michaelian, University of Sydney

CONFERENCE CLOSE

Evonne Miller, ERA 2023 Chair

Abstracts (Oral Presentations)

In alphabetical order (by presenting author surname)

Investigating the Synergistic Effects of Hormone Replacement Therapy, APOE and Age on Brain Health

AMBIKAIRAJAH Ananthan[1,2], KHONDOKER Mizanur[3], MORRIS Edward[4], DE LANGE Ann- Marie G.[5,6,7], SALEH Rasha N. M.[3,8], MINIHANE Anne Marie[3,9], HORNBERGER Michael[3]

[1] Discipline of Psychology, Faculty of Health, University of Canberra
[2] National Centre for Epidemiology and Population Health, Australian National University
[3] Norwich Medical School, University of East Anglia (United Kingdom)
[4] Norfolk and Norwich NHS Trust (United Kingdom)
[5] LREN, Department of Clinical Neurosciences, Centre for Research in Neurosciences, Lausanne University Hospital (CHUV) and University of Lausanne (Switzerland)
[6] Department of Psychology, University of Oslo (Norway)
[7] Department of Psychiatry, University of Oxford (United Kingdom)
[8] Department of Clinical and Chemical Pathology, Faculty of Medicine, Alexandria University (Egypt)
[9] Norwich Institute of Healthy Ageing (United Kingdom)

Background: Global prevalence of Alzheimer's Disease has a strong sex bias, with women representing approximately two-thirds of the patients. Yet, the role of sex-specific risk factors during midlife, including hormone replacement therapy (HRT) and their interaction with other major risk factors for Alzheimer's Disease, such as APOE-e4 genotype and age, on brain health remains unclear. **Objective**: This study investigated whether the relationship between HRT (i.e., use, age of initiation, and duration of use) and brain health (i.e., cognition and structural brain volumes, including the hippocampus) depends on APOE status (i.e., e3/e3, e2/e2, e2/e3, e3/e4 and e4/e4) and age of participants. **Methods:** Women from the UK Biobank with no self-reported neurological conditions were included (*N* = 207,595 women, mean age = 56.25 years, standard deviation = 8.01 years). Generalised linear regression models were computed to quantify the cross-sectional association between HRT and brain health, while controlling for age, time since attending centre for completing brain health measure, surgical menopause status, smoking history, body mass index, education, physical activity, alcohol use, ethnicity, socioeconomic status, vascular/heart problems and diabetes diagnosed by doctor. Analyses of structural brain regions further controlled for scanner site. All brain volumes were normalised for head size. Two-way interactions between HRT and APOE status were modelled in addition to three-way interactions including age. **Results:** A consistent significant two-way interaction was detected for women with the APOE e4/e4 genotype who use HRT experiencing 1.82% lower hippocampal, 2.4% lower parahippocampal and 1.24% lower thalamus volumes than those who have the e3/e3 genotype and do not use HRT. However, this interaction was not detected on measures of cognition. No clinically meaningful three-way interaction between APOE, HRT and age was detected. **Conclusion:** In this study, HRT use in women with APOE e4/e4 genotype is associated with poorer brain health, compared with those who have the e3/e3 genotype and do not use HRT, equivalent to approximately 1 to 2 years of hippocampal atrophy observed in typical health ageing trajectories in midlife (i.e. 0.98% to 1.41% per year). However, this effect was not observed on measures of cognition. Future studies should consider whether the findings from this study are consistent longitudinally, particularly when considering other factors relating to HRT use, including composition (i.e., estrogen vs estrogen and progesterone), mode of administration (i.e., oral or transdermal) and dosage.

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Exploring the Canadian Long-Term Care Dietitian Workforce: Sharing Insights and Lessons Learned From a Nutrition in Aged Care Travel Fellowship Opportunity

BARTRIM Karly[1]

[1] Centre for Community Health and Wellbeing and School of Human Movement and Nutrition Sciences, The University of Queensland

Background: Efforts are required to continuously grow the dietitian workforce, improve dietitians' individual practice, and change policy in the aged care sector. Canada has been leading the way in their Long-Term-Care (LTC) dietitian workforce and nutrition provided to older adults. **Objective:** The Nutrition in Aged Care Fellowship aimed to understand the role of a dietitian in LTC, including LTC homes regulations and legislations, especially in relation to food provision and the success of recent workforce initiatives. **Method:** The Fellowship involved travelling to the Provinces of Ontario and British Columbia in Canada. Information was gathered from dietitians, researchers, and advocates through in-person interviews, attending group presentations and workshops, LTC site visits, virtual meetings via Zoom or Microsoft Teams, and email. A skill-enhancement approach was utilised to explore the fellowship aim. **Results:** Three key factors that contribute to the quality of dietitian practice and nutrition delivery in LTC were identified. Firstly, the dietitian's role and integration into LTC is well supported by mandated resident care minutes and best practice guidelines to assist the dietitian with nutrition care delivery. Secondly, the LTC environment and legislation on staffing, LTC care design and resident care reporting supports the delivery of high-quality nutrition care. Lastly, advocacy initiatives such as meetings with the Ministry of Health and instrumental research including the Making the Most of Mealtimes study have supported legislative changes**. Conclusion:** Learnings from the LTC dietitian workforce in Canada highlight opportunities for improvements at practice and policy levels in Australia. Key recommendations include more regular dietitians' visits in aged care to further enhance nutrition delivery, improvement to Residential Aged Care systems, processes, and reporting, strengthening the dietitian workforce, and conducting nutrition research to inform best practice in Residential Aged Care in Australia.

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Travelling Through Your PhD: Sharing an Experience of Securing an International Travel Fellowship to Learn About Canadian Aged Care

BARTRIM Karly[1]

[1] Centre for Community Health and Wellbeing and School of Human Movement and Nutrition Sciences, The University of Queensland

Background: International travel is an exciting prospect for many early career researchers, yet few have the opportunity to undertake travel as part of their research studies. **Objective:** To share the experience of applying for and undertaking an international travel fellowship as part of a doctoral research program. **Method:** Five steps were undertaken: (1) I identified the relevant travel fellowship opportunity; (2) I developed a convincing application with support from supervisors; (3) I was interviewed and subsequently awarded the travel fellowship; (4) I planned and executed the four-week travel; and (5) I prepared a report to share my learnings. **Results:** The travel opportunity has broadened my horizons, enhanced potential career opportunities, strengthened my skills in networking and qualitative interviews. I gained new knowledge and awareness of aged care systems and policies in other countries that subsequently informed my PhD research. **Conclusion:** Travel opportunities provide an opportunity to foster a successful and rewarding research career. Pursing international travel opportunities to further develop skills and knowledge is highly recommended for emerging researchers in ageing.

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Cast Adrift: Experiences After Receiving a Dementia Diagnosis

CARMODY Sarah[1], GULLINE Hannah[1], BEVINS Amelia[1], AYTON Darshini[1]

[1] Health and Social Care Unit, Monash University

Background: Research shows that while the diagnosis path may be long, receiving a dementia diagnosis is often not the end of the complex navigation and help-seeking journey. Clinical guidelines and models of care for the diagnosis of dementia currently have limited attention on post-diagnosis follow-up. **Objective:** To examine post-diagnosis experiences of dementia in Australia and identify facilitators and priorities to enable people with dementia and caregivers to live well and receive the support they need. **Methods:** Thirty-three semi-structured interviews were conducted with 37 people who have experienced the dementia diagnosis process in Australia. Interviews explored diagnosis journeys through the River of Life storytelling activity. The Three Perspectives of Human Malady theory where dementia is conceptualised as a disease, an illness, and a sickness, guided the analysis. **Results:** While the interview schedule focused on going through the dementia diagnosis, the storytelling process resulted in participants describing post-diagnosis experiences at length. Many participants reported post-diagnosis as difficult or even more difficult than the diagnosis. Much of our healthcare system is oriented towards the disease and medical perspectives of dementia. Disease perspectives of dementia include medical appointments, testing, results and getting a diagnosis. However, it was the illness and sickness perspectives of dementia, encompassing how a person feels about themselves and lives within their community, that were described as pivotal to the experience of dementia. Yet, many reported a severe lack of recognition, support and structures to address these social, emotional and wellbeing perspectives of dementia. **Conclusions:** The diagnosis of dementia is not the end of a person’s complex and challenging healthcare journey. As this research shows, it is only the beginning. Understanding the experience of dementia as a disease, illness, and sickness will help tailor models of care to meet patient and caregiver needs.

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The Complex Path to Dementia Diagnosis

CARMODY Sarah[1], GULLINE Hannah[1], BEVINS Amelia[1], AYTON Darshini[1]

[1] Health and Social Care Unit, Monash University

Background: In Australia, 400,000 people are living with one or more types of dementia, and more than 1.5 million people are caring for someone with dementia. Research also shows that many people live with undiagnosed or unreported dementia. Many challenges are associated with dementia diagnosis, including years of symptom progression and navigating complex health and aged care systems. **Objective:** The aim of this research was to explore the experiences of people who have gone through the diagnosis process in Australia. **Methods:** Qualitative research was conducted with 37 people who have experienced the dementia diagnosis process in Australia (in 33 interviews). Interviewees participated in online semi-structured interviews, including a River of Life storytelling activity. The interview guide and instructions for the River of Life asked participants to describe signs and symptoms, health professionals seen, tests and experiences and the challenges encountered. Qualitative thematic and content analysis was conducted. **Results:** A pathway to dementia diagnosis diagram was created reflecting diagnosis experiences, starting with the person experiencing symptoms and signs of dementia, moving to the partner, family and close friends in the community setting, and then through the health system via the general practitioner and specialists. At each phase along the diagnosis pathway, the person may experience barriers that impede their progress to the next phase. The after-diagnosis period was also described as severely lacking support. **Conclusion:** This work highlights various factors, barriers and facilitators along the dementia diagnosis pathway and identifies opportunities for organisational, healthcare system and population-level improvements. These opportunities are being considered in the context of the National Health and Medical Research Council funded Centre of Research Excellence in Enhanced Dementia Diagnosis in partnership with consumers, health professionals and memory clinics, researchers and scientists.

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Towards a Global Response to Unmet Care Needs of Older People

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The measurement, understanding and monitoring of unmet health need is important to the 2030 UN Sustainable Development Goals and the WHO global impact framework. As populations age, health needs shift, and the predominant disease burden is increasingly due to chronic diseases and associated disabilities associated with ageing. Many of these chronic diseases, their risks and consequences, are modifiable and their outcomes can be improved through accessing quality health and social care services. But in many countries, health and social needs of older people are not being met for a portion of the population. The gap represented by unmet need raises issues of equity in service coverage and universality of health care. However, current measures of universal health coverage (UHC) do not assess unmet need, nor do they adequately capture services that older persons require, including social care. The proposed research encompasses various projects aimed at addressing unmet care needs among older individuals, aligned with global policy objectives. Project 1 focuses on Australian unmet needs. It employs quantitative methods through the Sax Institute 45 and Up Study to gauge unmet care needs, explore factors and inequities, establish normative profiles, and model system adjustments to reduce unmet needs. Project 2 conducts an ethnographic review of unmet need drivers, combining literature analysis with key informant interviews. It aims to understand the contextual influences on unmet needs across diverse countries, facilitating evidence-based interventions. Project 3 undertakes a calibration study via vignettes to assess unmet needs globally. By involving experts from various regions, it standardizes the assessment of needs' severity and priority, offering insights into cross-regional variations and determinants. Project 4 delves into system and policy drivers of unmet need through country case studies. Utilizing mixed methods, it investigates contextual factors, policy frameworks, and healthcare systems' role in unmet needs.

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Women, Care, and Dementia: Gendered Dynamics of the Aged Care Royal Commission

CHELBERG, Kristina[1], **STEELE, Linda**[2]

[1] Australian Centre for Health Law Research, School of Law, Faculty of Law and Business, Queensland University of Technology
[2] Faculty of Law, University of Technology Sydney

Argument: This paper invites participants to ‘reimagine’ gendered discourses about women, care, and dementia emergent from the Australian Aged Care Royal Commission (ACRC). **Background**: Dementia is a significant health and social issue for older women in Australian aged care: nearly two-thirds of Australians with dementia are women and by 2025 an estimated 270,302 women will be living with dementia. Dementia is also the leading cause of death in women. At the same time, paid and informal aged care work is feminised and mostly undertaken by women. However, gender remains an under-examined topic in dementia research. Current approaches in dementia policy and practice tend to ignore gender: where identity of persons living with dementia is ‘ungendered’ and subsumed by a diagnosis of dementia. **Objective**: This paper explores gendered constructions of dementia and dementia care work to gain a deeper understanding of how these constructions might inform policy and law reform in new aged care frameworks. **Method**: Building on critical dementia, disability and feminist scholarship, this paper engages in discourse analysis of the Final Report of the ACRC. It examines how care and dementia are understood and represented in the report in relation to women as care partners, paid carers, and people living with dementia. **Findings**: This study uncovers intersecting discourses about gender and ageing that have significance for dementia, women and aged care reforms following the ACRC. **Conclusion:** This research has potential to increase knowledge of the critical role of gender in policy and practice responses to dementia aged care reforms. This knowledge has direct application to improve the lives of older women, as persons living with dementia, informal family carers, or as aged care workers.

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The Cognitive and Wellbeing Benefits for Older Adults of Engaging in Music Instrument Learning Using Creative Improvisation

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Background: With substantial growth predicted in our older-aged population, there is growing need for proactive interventions to support healthy ageing. Research suggests that active participation in music-related activities can positively impact cognitive function among older adults. However, the optimal music-based approach remains unclear due to limited research. Through a two-phase study, we established a music-based cognitive training program to support healthy ageing. **Objective:** This study explored the cognitive and general well-being benefits of music-based activities for older adults, focusing on creative improvisation as the method to support group piano learning. **Method:** The population in both phases consists of healthy older adults (aged 60+ years) who additionally report a subjective cognitive impairment (SCD). In Phase I, a feasibility study, 39 participants engaged in a music learning program with creative piano improvisation as the instructional method. Phase II consisted of a randomised controlled trial, enrolling 111 participants who were assigned to the experimental group (group piano learning with improvisation), an active control group (traditional education group piano learning), or an inactive waitlisted control group. Phase II was conducted entirely online. Data was collected using an explanatory sequential mixed methods design. Quantitative data from a battery of cognitive and general wellbeing tests was collected pre/post experiment on all participants. Qualitative data was collected using an individual, semi-structured post experiment interview. **Results:** Bayesian modelling demonstrated strong evidence of a positive impact of training on the Montreal Cognitive Assessment for participants with SCD indicating positive improvements in global cognition (evidence ratio = 152.85, posterior probability = 0.99, 90% CI [0.51, 2.58]). Strong evidence was also found for spatial working memory from the Cambridge Cognition Online test battery for those with SCD (evidence ratio = 18.14, posterior probability = 0.95, 90% CI [-0.02, 2.22]). A strong result was also found for the measure of Creative Self-Efficacy for the total population (evidence ratio = 31.79, posterior probability = 0.97, 90% CI [0.05, 0.80]). Qualitative results revealed that participants in the experimental group experienced enhancements to their daily life with increased creative confidence and enhanced mood. Design principles for adult learning and creative music-based programs emerged from the qualitative results, emphasising the need to include participant choice, autonomy, and self-directed input in music-based programs. **Conclusion:** This research demonstrates the feasibility and benefits of creative improvisation as a piano learning method to enhance older adults' cognitive health and well-being. It is the first known music-based study to examine older adults who may also be experiencing SCD. Our study highlights the effectiveness of music-based programs as a potential cognitive training program to maintain cognitive health and general well-being as adults age. This program may be an engaging and cost-effective non-pharmacological approach to bolster global cognition and well-being of older adults as they age.

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Age and Education Associated with Awareness of Dementia Risk Reduction in Rural Older Australians

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Background: Research on dementia risk reduction through lifestyle choices is promising. One-third of the Australian population live rurally and these communities are exposed to unique challenges of geographical isolation and reduced health care access, predisposing them to poorer cognitive health. However, awareness of dementia risk reduction and barriers to optimising brain health in rural-dwelling older adults are yet to be explored. **Objective:** We investigated factors associated with awareness of dementia risk reduction and literacy amongst rural older Australians; and ii) identified barriers to adopting a ‘brain healthy’ lifestyle. **Method:** 207 adults >55 years of age living in rural and/or remote Australia completed an online cross-sectional survey between November 2022 and April 2023. Demographic data, dementia awareness and literacy levels, and barriers to implementing a brain healthy lifestyle were collected. Multiple linear regression analysis was implemented to identify factors associated with awareness of dementia risk reduction, which was measured using a 5-point Likert scale where participants rated their belief in the extent to which dementia risk is modifiable. **Results:** Mean age of participants was 68.7 (*SD* = 6.6) years, and the majority were female (68.6%) and living in low socioeconomic areas (61.3%). Average time residing in a rural area was 24.5 years (*SD* = 17.7). Older age ($\beta = .165$, 95% CI [0.098, 0.450], $p = .043$) and <12 years of formal education ($\beta = -.249$, 95% CI [-0.919, -0.247], $p < .001$) were significantly associated with reduced awareness that dementia risk reduction is possible. Six barriers to adopting a brain healthy lifestyle were reported, with poor knowledge of the relationship between lifestyle and brain health (77.3%) and lack of motivation (64.3%) the most frequently reported. **Conclusion:** These findings contribute to better understanding dementia risk reduction awareness and, in particular, the unique barriers to dementia risk reduction encountered in rural and remote areas. Targeted education on modifiable risk as well as potential stimulation and incentivisation to adopt brain healthy lifestyles are required.

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How Do Aged Care Staff Describe Quality Communication With People With Dementia?

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Background: Quality communication between aged care staff and residents with dementia is at the core of client-centred care. When quality communication is prioritised by aged care workers, immediate and long-term positive resident health outcomes ensue. Furthermore, improved communication between aged care staff and residents with dementia contributes to improved staff morale and workplace satisfaction. **Objectives:** This study explored aged care workers attitudes and perceptions regarding the need for ‘better quality’ interactions between aged care staff and residents with dementia. The study also explored the barriers and facilitators faced by aged care workers to achieve quality communication with residents with dementia. **Methods:** A qualitative enquiry approach was used to explore, through interviews, the perceptions of nine aged care workers from a variety of backgrounds and locations across Australia**.** **Results:** Preliminary findings suggest there are many positive and effective communication strategies currently being employed by aged care staff, including personalising the interaction to the resident, keeping language simple, and giving the resident opportunities to talk. However, participants also noted personal, environmental, and structural barriers and challenges, many of which could be addressed through greater personal awareness and participation in communication partner training programs. **Conclusions:** This study’s identification of barriers and facilitators of communication between aged care workers and residents with dementia contributes to better understanding how their interactions with residents can be enhanced. This knowledge could be integrated into current communication training practices to further promote the communication skills of those working in aged care settings and ultimately improve quality of care for people living with dementia.

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The Unseen Hurdle: A Closer Look at Researchers Navigating Death

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Background: Different populations and contexts have delved into the concepts and contemplations surrounding death. In the context of older adults, individuals such as managers, staff, and residents have shared their viewpoints and emphasised the significance of death, but researchers' perspectives remain absent. The literature has overlooked the examination of how the abrupt or unforeseen passing of an older adult, especially one who may have been part of a research study, affects the researcher involved. **Objective:** This study aimed to identify the obstacles encountered, and potential remedies explored, by researchers faced with the unfortunate demise of participants during data collection within the older adult demographic aged 65 years and older and expected to live for more than 6 months. Additionally, it sought to elucidate the strategies adopted by researchers when confronted with the passing of older adult participants during the data collection process. **Method:** A comprehensive scoping review search was conducted across CINAHL, Scopus, PubMed on EBSCOhost, and PsycINFO databases, spanning from their inception to November 2022. The search yielded a total of 4,158 articles, which underwent independent screening by two reviewers. **Results:** Three articles were identified as relevant to the review and subjected to analysis, which encompassed the insights of researchers from Australia, Belgium, and the USA. Predominant challenges identified included emotional distress, ethical dilemmas stemming from boundary-crossing, and deficiencies in skill and training. Notably, proposed solutions centered around bolstering the researcher-participant relationship, prioritizing self-care, and enhancing skills and training. **Conclusion:** The emotional and professional toll on researchers when confronted with the passing of older adult participants is profound. This review sheds light on the challenges and potential solutions for researchers navigating participant mortality during data collection within the older adult demographic. It serves as a valuable resource for researchers encountering these challenges, offering guidance for managing such situations in the context of older adult population data collection.

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Between a Rock and a Hard Place: Navigating Beneficence and Medication Refusals in Residential Aged Care

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Background: Medication administration is a routine clinical activity in Residential Aged Care (RAC), involving interpersonal interaction between staff and residents. As part of decision-making around medication administration and refusals, staff may implicitly draw on ethical principles (for example, ‘do no harm’ / non-maleficence). Ethical principles have a role to play in how ‘ideal’ medication administration in RAC is conceptualized, and what is required to achieve this ideal in practice. **Objective:** This study investigated the tensions, ambiguities, and challenges of medication administration and medication refusal in New Zealand RAC, and identified ethical principles that may influence clinical decision-making. **Method:** Qualitative face-to-face interviews were conducted with RAC managers / clinical leads (*n* = 11) and seven role-specific focus group discussions were held, comprising 32 participants: 6 Registered Nurses, 14 Healthcare Assistants, and 12 RAC residents. Thematic and empirical ethics analysis of qualitative data were undertaken, using western and Tikanga Māori principles. **Results:** Participants emphasized that the relational aspects of medication administration were just as important as its clinical aspects. Primary concerns included the nature of medications being refused, the competence of residents to make a medication-related decision, fear of the outcome of medication omissions, and what to document. These ‘judgement zones’ were dominated by tensions between welfare concerns, relational principles, questions about resident autonomy, and rights. **Conclusion:** Despite more consumer-focused expectations of RAC promoting resident choice/enablement, staff appear to engage primarily with the ethical principle of beneficence (‘do good’ / act in residents’ best interests) during medication administration. This may be to the detriment of respect for residents’ autonomy and relational aspects of care, as residents’ input is overlooked or overridden. Critical reflection in-practice and promotion of the broader range of ethical principles which implicitly or unknowingly influence clinical decision-making in this clinical space are needed.

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Modelling and Detecting Urinary Anomalies in Seniors from Data Obtained by Unintrusive Sensors

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Background: There is considerable potential for in-home monitoring systems to facilitate detection of health concerns. However, older people are typically resistant to wearable devices or cameras and unintrusive sensors may be preferable. Among the spectrum of medical conditions, urinary anomalies are severe health problems that, if left untreated, increase risk of mortality in older adults. **Objective**: The aim of this study was to develop a monitoring system that uses unintrusive in-home sensors to detect abnormal toilet attendance – a potential marker of urinary anomalies. The study also sought to identify and address challenges associated with building a robust dataset of normal and abnormal toilet-attendance behaviour from data collected from older adults. **Method**: Medical information about changes in people's micturition patterns when they contract UTIs was leveraged to build personalised simulated models of abnormal diurnal and nocturnal toilet attendance from data obtained from healthy users. Anomaly detection algorithms were then employed to detect abnormalities in toilet visits in simulated models of (1) healthy users, (2) users with a small increase in toilet visits, and (3) users with a steep increase in toilet visits. The performance of the model developed (One-Class SVM) was compared with a baseline model adapted from the literature. **Results**: One-Class SVM yielded the best results (few false alerts with full coverage of simulated abnormal conditions and no delays in detecting abnormalities). **Conclusion**: This study makes three key practical contributions to in-home monitoring systems for detecting urinary anomalies: (1) a method for pre-processing real-world data obtained with unintrusive sensors, which infers toilet visits from sensor activations and handles missing data; (2) simulated datasets of abnormal toileting behaviours exhibiting slow and fast disease progression, based on data obtained from healthy users; and (3) results of anomaly detection models applied to these datasets.

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“Being Regional You Don’t Have the Same Access to Things”: A Qualitative Descriptive Study Exploring Rurality and the Experience of Dementia Diagnosis

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Background: Dementia is an increasingly prevalent clinical syndrome in Australia. However, the quality of dementia care is inconsistent, with issues afflicting service provision in urban areas even more acute in rural areas. People in rural areas undergoing the dementia diagnosis process or living with the condition can, among other challenges, be impacted by a lack of dementia-specific knowledge and limited access to health specialists and services. **Objective:** This research explored the experiences of people living in rural Australia who have gone through the diagnosis process as a patient or caregiver. **Method:** Eleven online semi-structured interviews were conducted with 12 people from rural residences who had navigated the dementia diagnosis process in Australia. Interviews explored the signs and symptoms of dementia noticed, health professionals consulted, tests conducted, and challenges faced throughout the diagnosis process. Russell’s (2013) seven dimensions of access (*availability*, *geography*, *affordability*, *accommodation*, *timeliness*, *acceptability*, and *awareness)* guided the qualitative analysis. **Results:** Perceived access disparity between rural and urban areas, both during diagnosis and the subsequent dementia journey, emerged as the key theme. Many participants reported struggling with insufficient healthcare and support availability or the quality of care provided. Some rural residents were living great distances from services, burdened with additional costs to access healthcare and faced long appointment wait times. Lack of awareness of available services and fragmentation of the healthcare system also obstructed access. **Conclusion:** This work highlights the challenges associated with experiencing the dementia diagnosis journey in rural Australia and identifies opportunities to bridge the rural-metro divide. In the endeavour to enable fast, accurate, and equitable dementia diagnosis across Australia, these opportunities are being considered in the context of the National Health and Medical Research Council funded Centre of Research Excellence in Enhanced Dementia Diagnosis in partnership with consumers, health professionals and memory clinics, researchers and scientists.

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Age-Related Cataract and Cataract Surgery Utilisation Among Older Women in Australia: Findings From the Australian Longitudinal Study on Women’s Health

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Background: Over 70% of Australians aged 80 years and above have clinically significant cataracts. Although the cataract surgery rate is increasing in Australia, the availability of surgery is outstripped by the increasing number of cataract cases due to population ageing. **Objective**: This research investigated age-related cataract magnitude and factors associated with cataract surgery utilisation in terms of predisposing, enabling, and need factors in Australia. **Methods**: This study used three waves (surveys 4 – 6) of Australian Longitudinal Study on Women’s Health (ALSWH) data of 7,117 women. The study used Survey 4 as a baseline (ages 79–84 years) in 2005 when the cataract and cataract surgery questions were incorporated into the ALSWH survey and Surveys 5 (ages 82–87) in 2008 and 6 (ages 85–90) in 2011 at follow-ups. In each survey, women were asked whether they had been diagnosed with cataracts or had undergone eye surgery including cataracts. Generalised estimating equation modelling was applied to identify factors independently associated with age-related cataract and their surgeries using the Andersen–Newman healthcare utilisation model. **Results**: At baseline, more than half of the participants had either undergone surgery (43.5%) or had unoperated cataracts (7.6%). Hypertension (AOR = 1.13, 95% CI [1.05, 1.21]), skin cancer (AOR = 1.26, 95% CI [1.16, 1.37]), and fall (AOR = 1.12, 95% CI [1.04, 1.22]) were associated with cataracts over six-year follow up. Increasing age (AOR = 1.11, 95% CI [1.07, 1.15]) and being a smoker (AOR = 1.15, 95% CI [1.03, 1.29]) were associated with cataract surgery use (predisposing factors). Women with private health insurance had 27% higher odds of having surgery (AOR = 1.27, 95% CI [1.16, 1.39]) (enabling factor). The need factors of frequent health service use (AOR = 1.16, 95% CI [1.09, 1.25]) and skin cancer (AOR = 1.09, 95% CI [1.01, 1.17]) also increased the odds of cataract surgery. **Conclusion**: Need factors are the drivers of cataract surgery; however, predisposing and enabling factors, including access to private health insurance, also play a role. The results indicate inequitable accessibility to cataract surgery in the Australian setting.

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Admission Over a Weekend / Holiday and Stroke Mortality in Regional Australia: A Ten-Year Retrospective Study

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Background: Stroke disproportionally affects aged populations. The phenomenon that admission over a weekend is associated with poorer clinical outcomes is referred to as the “weekend effect”. However, findings on the “weekend effect” following admission for acute stroke in Australia are inconsistent and populations who reside in regional or remote areas with limited healthcare resources are often underrepresented in the literature. **Objective:** This study investigated the association between admission occurring over a weekend/holiday and mortality following stroke. Mortality was assessed at three days, seven days, 14 days, one month, three months, six months, and 12 months following first acute stroke. **Methods:** The admission records of stroke patients from a major regional hospital were linked to the National Death Index. Parametric survival regressions were used to model the time to death following stroke. The study included 1,669 patients (median age = 76 years). **Results:** In total, 241 (14.4%) patients were admitted with haemorrhagic stroke, 1,223 (73.3%) with ischaemic stroke, and 205 (12.3%) with stroke of unspecified type; 396 (23.7%) of the admissions happened over a weekend/holiday with the remaining 1,273 (76.3%) admitted on a weekday. Following adjustment for age, sex, Charlson Comorbidity Index, stroke type, and country of birth, admission over a weekend/holiday following stroke of any kind was significantly associated with an increased risk of mortality within three days (hazard ratio (HR) = 1.59, 95% CI [1.01, 2.50]). Among patients with haemorrhagic stroke who were admitted on a weekend/holiday, a higher risk of dying was observed at three days (HR = 2.19, 95% CI [1.17, 4.08]), 14 days (HR = 1.73, 95% CI [1.02, 2.93]), and 1 month (HR = 1.82, 95% CI [1.09, 3.03]) compared with those admitted for haemorrhagic stroke on a weekday. A weekend/holiday effect was not detected for ischaemic stroke. **Conclusion:** Significant adverse weekend/holiday effects were found following admission for total stroke, and haemorrhagic stroke. These findings have the potential to inform policy making while considering the effect of weekend/holiday on adverse clinical outcomes among senior population living in regional Australia.

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Social Activities and Risk of Dementia in Community-Dwelling Older People: Gender-Specific Findings From a Prospective Cohort Study

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Background: Previous research has highlighted a reduced dementia risk among older people engaging in social activities. However, uncertainty persists regarding which specific social activities are associated with dementia. **Objective:** We aimed to explore gender-specific associations between a wide range of social activities and dementia risk. **Method:** This prospective cohort study used population-based data from the ASPREE Longitudinal Study of Older Persons (ALSOP) cohort recruiting generally healthy community-dwelling Australians aged ≥70 years without significant cognitive impairment at enrolment. We assessed 25 self-reported social activities during the first year of enrolment, including support from relatives and friends, community participation, social interactions with surroundings, and loneliness. Activities were categorised using a survival data cut-off optimisation tool after assessing nonlinear relationships. Dementia diagnosis followed DSM-IV criteria, adjudicated by an international expert panel. Cox proportional hazards models, adjusted for age, education and baseline cognition, estimated dementia risk through hazard ratios (HR) and 95% confidence intervals (CI). **Results:** Among 9,936 participants (median [IQR] age: 73.4 [71.6-77.1] years; 47.4% men), dementia was diagnosed in 3.8% of men (n = 181/4,705) and 2.6% of women (n = 138/5,231) over a median follow-up of 6.4 years (IQR: 5.3-7.6). Gender-specific relationships emerged: (1) *Interpersonal social support*: men with ≥9 relatives feeling close to call for help (HR = 0.56, 95% CI [0.33, 0.95]; reference <9 relatives) and women reported having ≥5 friends with whom they felt comfortable discussing private matters (HR = 1.66, 95% CI [1.08, 2.55]; reference ≤2 friends); and (2) *Informal caregiving*: caregiving for a person with illness/disability in women (HR = 0.72, 95% CI [0.53, 0.97]), and babysitting/childminding in men (HR = 0.76, 95% CI [0.58, 1.00]) were associated with risk of dementia. **Conclusion:** While further studies are required to understand the mechanisms driving the observed relationships, this study offers evidence that may prove useful when identifying social activities that could modify dementia risk.

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Lonely but Not Alone: Predictors of Loneliness in Retirement Living Communities

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Background: Around 6% of older Australians live in retirement villages, with this population forecast to continue growing. A perceived benefit of retirement village living is the opportunity for increased social connection and sense of community. However, little is known about the prevalence of loneliness in this cohort, despite loneliness being a major public health concern. **Objective:** This study investigated the prevalence and predictors of loneliness among retirement village residents. **Method:** A cross-sectional survey focussed on the physical, cognitive, mental and social wellbeing of residents was distributed to 25 retirement villages throughout Queensland and New South Wales in September 2021. The UCLA-3 Loneliness Scale was used to determine loneliness status (Not Lonely: scoring 3 to 5; Lonely: scoring 6 to 9). Multivariable logistic regression modelling was utilised to determine modifiable resident characteristics that predicted loneliness. **Results:** The sample comprised 1,178 respondents. Almost one-fifth ($n = 229$) were classified as lonely. Significant predictors of loneliness were mood (often feeling sad or depressed: OR = 6.0, p <.001), living alone (OR = 3.96, p <.001), pain (interfering with usual activities: OR = 2.37, p <.001), falls (OR = 1.75, p = .005), and cognitive impairment (OR = 1.67, p = .01). Time residing in the village protected against loneliness, with those living there for a year or longer having almost half the odds of feeling lonely (OR = .52, p = .013) than those living there less than a year. **Conclusion:** Retirement village communities present a unique opportunity to optimise social connection and reduce loneliness. Despite living close to others, the rates of loneliness are similar to that of general community dwelling older people. Findings suggest that both psychological and physical factors impact resident risk of experiencing loneliness. In addition, there may be a transition period on entry to retirement living where individuals may be more susceptible to loneliness. Identification of these risk factors permits co-design and implementation of targeted initiatives to support residents' social wellbeing.

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Antibiograms for Australian Aged Care Settings: Are They Feasible and How Do They Compare With Other Resistance Data?

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Background: Local antibiotic resistance data is not readily available for residential aged care facilities (RACFs). Antibiogram (cumulative-antimicrobial-susceptibility-tests) development in this setting can be time-, labour- and cost-intensive. **Objective:** The aims in this study were to: (1) explore the feasibility of RACF-antibiogram development and (2) compare antibiotic susceptibilities from RACF-antibiograms with alternate readily available resistance data. **Method:** Antimicrobial susceptibility data was collected from seven RACFs for a three-year period. Data WHONET software® was used to analyse data and provide summary susceptibility data. Pathogen-antibiotic pair susceptibility results were compared using univariable analysis between RACF-antibiograms and other available resistance data such as local hospital antibiograms and overall state-wide RACF-antibiogram produced by a private pathology provider. **Results:** Low number of positive pathology culture results were found for individual RACFs which do not provide valid resistance data for the usual antibiogram time period of 12 months. Pragmatic solutions were applied to overcome this issue by extending the time-period of the antibiogram to two-or three-years and by combining the data from RACFs in similar geographical locations to create a ‘pooled’ antibiogram. Comparative analyses indicated that RACF-antibiogram data is in close alignment to local hospital data and private pathology state-wide RACF antibiogram. Similarly, regional hospital data closely matched the ‘pooled’ RACF data. **Conclusion:** By extending the time-period of the antibiograms to over 12 months, pooling antibiogram data from geographically united RACFs, or by using local hospital or published private pathology RACF resistance data, it is feasible to produce and provide valid antibiograms for aged care settings.

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Knowledge and Perceptions About Role of Antibiograms in Aged Care Settings With Exploration of Barriers and Enablers to Its Development and Implementation: A Qualitative Study

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Background: Knowledge of local antibiotic resistance data provided by antibiograms (cumulative-antimicrobial-susceptibility-tests) can assist prescribers to make appropriate empirical antibiotic choices. **Objective:** This study explored the perceptions and knowledge of key stakeholders about the role of antibiograms in Australian residential aged care facilities (RACF) and to understand barriers and enablers of antibiogram development and implementation in this setting. **Method:** Semi-structured interviews were conducted with fifteen aged-care health professionals and five antibiogram content experts. Framework thematic analysis was used to identify themes in the data, which were mapped to the i-PARIHS framework constructs. **Results:** Five major themes emerged: (1) Knowledge about antibiograms amongst aged care health care professionals; (2) Utility of antibiograms in aged care; (3) Challenges and solutions for developing RACF-specific antibiograms; (4) Barriers for antibiogram implementation; and (5) Enablers for antibiogram implementation. **Conclusion:** Findings suggest lack of knowledge about availability, how and when to use antibiograms; however, clinicians recognised its potential role in improving empirical antibiotic prescribing, which they suggest would reduce prescribing ineffective antibiotics and subsequent hospitalisation. Potential insufficient data was the primary issue identified by infectious disease physicians and researchers in relation to feasibility of antibiogram use. Pragmatic solutions included pooling pathology data from facilities in the same geographical location, extending antibiogram data to two- or three-yearly, or utilising local hospital antibiograms. Presenting antibiogram data in a mode and format suiting preferences of individual users would encourage uptake and improve usability. AMS champions and pharmacists were highlighted as drivers of educating and promoting antibiogram use.

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Towards Better Recognition of Health Professionals’ Perspectives on the Nature of Their Role in a Geriatric Evaluation and Management (GEM) Unit

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Background: Health professionals have an integral role in multidisciplinary teams working in Geriatric Evaluation and Management (GEM) units. However, the perspectives of health professionals regarding the nature of their role have yet to be comprehensively described. **Objectives:** This study aimed to address the gap in understanding health professionals’ perspectives on the nature of their role in a GEM unit. **Methods:** Seven health professionals (a geriatrician, two nurses, an occupational therapist, a physiotherapist, a social worker, and an allied health assistant) working in the GEM unit of a metropolitan hospital in Melbourne participated in a semi-structured interview exploring the activities they engage in that make up their practice. Interviews were recorded and transcribed verbatim. Data were analysed using conventional content analysis. **Findings:** The activities of health professionals in GEM units clustered into five major categories: (i) assessment of GEM inpatients’ functional, physical, cognitive, and environmental status; (ii) physical rehabilitation; (iii) environmental modification; (iv) educating patients and carers; and (v) discharge planning. Participants identified inpatients’ cognitive and behavioural needs as issues that cannot easily be managed and addressed in the GEM unit. **Conclusion:** Although health professionals conduct comprehensive geriatric assessments of GEM inpatients, the subsequent focus of their activities is primarily on the physical needs of patients in contrast to their accompanying cognitive / behavioural needs. **Implication:** Our findings highlight that GEM services should be reviewed to better understand and address how to meet the needs of patients admitted with complex multimorbidity. GEM professionals need greater clarity regarding the primary role of the service in providing comprehensive care to GEM patients with cognitive and / or behavioural impairments. Finally, appropriate training is required to build professionals’ capacity to treat and manage the multidimensional needs of GEM patients.

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Prosper and Persevere - Enhancing Muscle Quality and Perceived Health in Older Adults: Preliminary Results From a High-Intensity Resistance Training Intervention

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Introduction: Age-associated declines in muscle mass, strength, and muscle quality (MQ) negatively affect physical function and well-being in older adults. This presentation presents preliminary research findings evidencing improvements in MQ and perceived health among otherwise healthy older adults after six weeks of high-intensity resistance training. **Methods**: Twenty participants (11 females, 9 males, mean age: 73.2 ±5.9 years) completed 36 sessions of a high-intensity resistance training program (thrice weekly for 12 weeks at 80% 1RM intensity). Participants completed an assessment at baseline and at six weeks, which are included in this preliminary analysis. Measurements included leg lean mass (LLM) determined by dual-energy X-ray absorptiometry, echo intensity and muscle thickness (MT) of the rectus femoris using ultrasound, and maximal strength (1RM). Muscle quality was calculated as the ratio of 1RM/LLM on leg press and leg extension exercise. A self-reported outcome questionnaire evaluated participants' perceived enhancements over six weeks, encompassing physical strength, mood, medication reduction, and social interaction. Changes in MQ and ultrasound measures were evaluated using paired samples t-tests. **Results**: Six weeks of high-intensity RT significantly improved leg extension MQ by 39.3% ±19.2% ($p < .001$) and leg press MQ by 39.1% ±25.5% ($p = .01$). Echo intensity improved by 7.58% ±10.8% ($p = .02$), and MT increased by 7% ±12.9% ($p = .01$). Moreover, 94% of participants reported enhanced perceived physical strength, 70% elevated mood and mental clarity, 58% enhanced sleep quality, and 27% reported reduced reliance on medications. **Conclusion**: These preliminary findings indicate that six weeks of high-intensity resistance training enhances muscle strength, quality, and composition, further contributing to improved well-being, heightened mental clarity, and better sleep quality among older people. Accordingly, high-intensity training may promote independence and facilitate healthy aging. Further analysis stemming from this research will explore links between muscle quality improvements, inflammation, myokine expression, and health outcomes.

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Reframing Creativity: Photography as an Accessible and Enjoyable Creative Pursuit for Older Adults

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Research suggests that engaging in creative pursuits confers a variety of benefits for health and wellbeing in older age; however, engaging older people in creative activities is often a challenge. For many older people, the idea of doing a creative activity is daunting and they are often concerned about their lack of artistic talent or the perceived needed technical skills they have not acquired. Similarly, they may lack the tools, space or instruction needed to participate in creative activities. Photography, being a highly accessible medium for creativity and communication, is an activity familiar to almost everyone. With a camera or a smartphone, *anyone can create a photograph*, including older adults of differing physical and cognitive abilities, and this can increase mindfulness, social connection, and wellbeing. This paper reports on three creative practice-based qualitative research projects working with older adults across aged care (*n* = 14) and community-based older adults (*n* = 8) in South-East Queensland. Each project used photography to help participants connect with others and their surroundings in a multisensory way, exploring how photography can play a role in encouraging older adults to be active and creative. Everyday photography affords older people an opportunity to engage in creative thinking in simple but intentional ways and thus inspire new associations and connections to ordinary and everyday movements and spaces. To optimise engagement in creativity for older people, shifting away from a paradigm conceptualising creativity as an “activity” to understanding creativity as embedded in everyday life is needed. Creating photographs fosters an alternative way of connecting to the world and this in turn which allows people to pay attention to the ordinary and take inspiration from everyday things. By focusing on everyday creative photography, older people can achieve a greater sense of purpose and increased wellbeing through their approaches to everyday life.

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Ten-Year Changes in Symptomatic and Preventive Medication Use in People With and Without Alzheimer's Disease

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Background: Goals of care among people with Alzheimer's disease (AD) may shift over time from intensive treatment of chronic diseases to focus on optimising quality of life. **Objective:** To investigate longitudinal changes in symptomatic and preventive medication use among community-dwelling people with and without Alzheimer's disease (AD) five years pre- and post-AD diagnosis. **Method:** Retrospective cohort study involving 58,496 people with AD and 58,496 matched comparators without AD in Finland. Medication dispensing data of people with physician-verified AD diagnoses were obtained from the Finnish Prescription Register. Prevalence of symptomatic and preventive medication use were evaluated every six months from five years before to five years after AD diagnosis. **Results:** During the one year before diagnosis, people with AD had the largest increase in people taking ≥3 symptomatic medications (+4.4% vs +2.2%) and ≥3 preventive medications (+6.4% vs +2.9%) compared to people without AD. Over the five years after diagnosis, the proportion of people taking ≥3 symptomatic medications stabilised around 37.1-39.8% in both cohorts; meanwhile, the proportion of people taking ≥3 preventive medications decreased by 6.0% in people with AD but increased by 6.1% in people without AD. Over the 10 years, people with AD had a large absolute percentage increase in prevalence of antipsychotics (+22.7% vs +1.8%) and antidepressants (+19.1% vs +5.0%) compared to people without AD. During the same period, paracetamol and calcium supplement use increased by 31.1% and 20.4%, respectively. Among people with AD, the largest absolute percentage decrease in prevalence of preventive medications five years after diagnosis were beta-blockers (-9.8%) and statins (-7.0%). **Conclusion:** AD diagnosis is the key timepoint for change in symptomatic and preventive medication use. Medication assessments at the time of and following AD diagnosis appear to coincide with discontinuation of preventive medications with minimal changes in the prevalence of symptomatic medications.

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An Exploratory Study of In-Home Respite Care for People Living With Dementia in Australia

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Background: In-home respite care services aim to enable people living with dementia to stay at home longer and provide a short-term break for families from caring roles. However, the perceived poor quality of care delivered by home care workers (HCWs) is one of main barriers leading to the low uptake of in-home respite services. Little is known about HCWs' perspectives on the elements of quality in-home respite care, and how these perspectives align with the recommendations outlined in contemporary national guidelines and international literature. **Objective:** This study aimed to explore the elements of care contributing to quality in-home respite care for people living with dementia from individual, systemic and international perspectives. **Method:** The Person-centred Practice Framework underpinned this research, synthesising findings across three phases: (1) semi-structured interviews used to explore the perspectives of HCWs (n = 10) and service managers (n = 2); (2) document analysis used to examine Australian aged care guidelines and standards (n = 8); (3) a scoping review of global peer-reviewed literature (n = 11) used to explore international perspectives. **Results:** Three prominent elements of care that contribute to quality in-home respite care for people living with dementia were identified: *HCW Workforce Prerequisites* (HCWs' attitudes, dementia care competence and communication skills); *the Working Environment* (family collaboration, supportive organisational systems, and physical and psychological environment); and *Person-centred Process* (personhood, personalised care, relationship building and flexibility). **Conclusion:** HCWs have insightful perspectives on the elements of quality care, which align with evidence-based findings from global literature. However, HCWs face structural challenges at the organisational level, which were inconsistent with the recommendations from national guidelines and standards. Further development is needed at both practical and systemic levels to support HCWs in contributing their prerequisites and implementing person-centred processes in care delivery.

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Ethical Considerations for Including People Living With Dementia in Voluntary Assisted Dying Research

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As researchers in ageing, we have a responsibility to develop anti-oppressive, rights-based solutions to address the ethical challenges associated with meaningfully involving of people living with dementia in research in heavily contested spaces. One area where barriers to equitable research participation for people living with dementia are evident is voluntary assisted dying (VAD). VAD is an emerging end-of-life care choice in Australia; however, people living with dementia face barriers to equitable access to VAD typically related to decision-making capacity. The inaccessibility of VAD to people living with dementia is further perpetuated by the absence of their voices in the Australian VAD discourse. In the context of VAD reform, there are increasing calls for the voices of people living with dementia to be represented in Australian VAD research. However, their inclusion in this research raises ethical challenges, particularly regarding obtaining informed consent, and attendance to inclusive research design to facilitate active research participation. As such, this presentation provides an overview of how these challenges were addressed within the process of obtaining ethics approval for a doctoral study exploring the needs, preferences, attitudes, and barriers to accessing VAD for Australians living with dementia. Conceptual, methodological, and ethical perspectives, particularly in relation to capacity and capabilities, are critically examined, and an equitable, rights-based approach to research that centres the voices of people living with dementia is described. This approach recognises the experiential expertise of people living with dementia, who are entitled and able to contribute to both the Australian VAD discourse and the development of research-informed policies and practices that attend to their needs.

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Sex Differences in the Link Between DNA Methylation-Derived Biological Ageing and Health in Older Individuals

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Background: DNA methylation (DNAm) derived biological age, also known as epigenetic age, is among the most promising biomarkers of ageing. Females live longer than males and there are sex disparities in physical health and disease incidence. However, sex differences in biological ageing have not been consistently reported and may differ depending on the measure used. **Objectives:** This study aimed to determine how epigenetic age acceleration (AA) measures correlated with (1) system-wide frailty-index (FI) ageing and (2) brain-predicted age difference (brain-PAD) among relatively healthy males and females aged ≥70 years. The extent to which these AA measures associated with clinical measures and chronic conditions was also explored. **Methods:** Epigenetic clocks (HorvathAge, HannumAge, PhenoAge, GrimAge, and DunedinPACE) were estimated in blood from 560 Australians (females, 50.7%) enrolled in the ASPREE study. AA is residual from regressing epigenetic age on chronological age. FI was a deficit accumulation of 67 items including cognition and morbidities. Brain age was estimated from T1-weighted MRI. Pearson's correlation, *t*-test, or one-way ANOVA were used as appropriate. **Results:** Females had significantly lower epigenetic ageing, but higher FI ageing, than males; there was no difference in brain-PAD. FI had the strongest correlation with GrimAA and DunedinPACE (range $r = 0.20$ to 0.24 in both sexes). Brain-PAD was not correlated with any biological ageing measures. Significant correlations between AA and health markers were more commonly found in females (e.g., for DunedinPACE and systolic blood pressure, $r = 0.2$, $p < .001$) than in males. GrimAA and DunedinPACE were significantly associated with hypertension, diabetes, and chronic kidney disease in males, but only with obesity and depression in females ($p < .05$). **Conclusion:** Epigenetic AA measures could be useful clinical indicators of overall age-related deficits, even in relatively healthy older people, and our findings highlight the importance of considering sex differences when using these biomarkers.

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Detecting Dementia EEG Signals Using Transfer Learning Networks

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Background: Dementia is characterized by a deterioration of cognitive function beyond the effects of typical aging, and early detection is essential for effective intervention. While deep learning potentially shows promise in classifying brain disorders when provided with extensive training datasets, obtaining EEG data from early-stage dementia patients remains challenging, due to ethical considerations and the current lack of efficient methods for early diagnosis. **Objective**: The primary objective of this study was to develop an accurate and convenient model for dementia detection. This was achieved by adapting an electroencephalogram (EEG)-based diagnostic network for major depressive disorder (MDD) and retraining it to recognize EEG signals specific to dementia. **Method:** A novel method called MDDTransNet was developed. This method utilizes a process known as transfer learning, where knowledge from one domain, such as EEG data for MDD, is adapted to improve performance in a related domain, in this case, EEG data specific to dementia. To provide further detail, the process begins by training a model on EEG signals associated with depression, and subsequently, this model is fine-tuned to recognize EEG signals indicative of dementia. This approach was chosen because it helps overcome challenges of having limited data specific to early-stage dementia. **Results:** The MDDTransNet model demonstrated an impressive accuracy rate of 98.58% for dementia detection. This outcome highlights the effectiveness of the transfer learning approach in leveraging knowledge from depression classification to enhance dementia detection. **Conclusion:** This study emphasized the potential of transfer learning networks in addressing the early detection of dementia using depression EEG data sets. The MDDTransNet model presented as a promising avenue for the early detection of dementia and monitoring its progression. With its capabilities, the MDDTransNet model has the potential to significantly advance early-stage dementia detection by providing a reliable and accessible tool for neurologists, psychiatrists, and geriatricians, who typically specialize in and are responsible for making dementia diagnoses.

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Challenges in Adaptation and Implementation of a Volunteer-Driven, Telephone Social Support Program, *HOW-R-U?,* During the COVID-19 Pandemic

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Background: Public health concerns surrounding social isolation and loneliness heightened during the COVID-19 pandemic, as infection measures designed to reduce the spread of novel coronavirus led to increased feelings of loneliness and depression. Implementation of evidence-based programs can take up to 17 years, hence use of appropriate frameworks to ensure interventions are implemented in a timely manner should be a priority. *HOW-R-U?* is a weekly volunteer-delivered telephone program designed to facilitate social connection and ease feelings of social isolation, loneliness and depression. **Objective:** To adapt and implement the *HOW-R-U?* program during the pandemic (March 2020-December 2021), across an aged and community care provider and an acute health service in Melbourne, Australia. **Method:** This pragmatic study detailed application of the Implementation Framework for Aged Care (IFAC) to adapt and implement *HOW-R-U*? by examining six questions: *Why?*; *What?*; *With whom?*; *By whom?*; *How?*; and *With what effect?*, each considered within the socio-cultural-political context. An existing implementation evaluation framework was used, including analysis of program data, semi-structured interviews and surveys with program recipients, volunteers, and referrers. **Results:** Implementation evaluation indicated that the codesigned systems and processes effectively supported ongoing implementation of *HOW-R-U?* with transition into business as usual across both organisations. Recipients reported calls had a positive impact on their lives, and volunteers reported enjoyment supporting others. **Conclusion:** *HOW-R-U?* was well regarded by all involved and learnings from this evaluation have informed implementation of the program into business as usual by both the aged and community care provider and the acute health service.

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Computers May Hold the Key for Early Detection of Cognitive Impairment

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Background: Advances in disease-modifying medications for dementia make developing accessible, feasible and cost-effective tests to aid identifying the early stages of dementia paramount. Motor function declines in the earliest stages of dementia pathology and may be used to detect those at risk of developing cognitive impairment. **Objective:** We aimed to assess the accuracy of an online computer key-tapping test in classifying stages of the dementia continuum. **Method:** Participants with cognitive symptoms completed a key-tapping test, 30s for each hand, in a cognitive clinic before receiving an interdisciplinary consensus diagnosis of dementia, mild cognitive impairment (MCI) or subjective cognitive impairment (SCI). Cognitively unimpaired healthy control (HC) participants were also recruited. Associations between cognitive diagnoses and key-tapping variables were tested using logistic regression (models were adjusted for sex, age, and years of education). Area under the receiver operating characteristic curve (AUC) was used to measure classification accuracy of key-tapping variables, including frequency, errors, rhythm and inter-tap velocity. **Results:** Fifty participants with dementia, 58 MCI, 40 SCI and 60 HC were recruited. Frequency (AUC = .97, 95% CI [.942, .997]) and velocity (AUC = .94, 95% CI [.901, .985]) best classified dementia from HC. Frequency (AUC = .90, 95% CI: [.845, .956]) and velocity (AUC = .88, 95% CI [.826, .947]) accurately classified MCI from HC. Rhythm (AUC = .67, 95% CI [.569, .786]) and frequency (AUC = .65, 95% CI [.542, .765]) classified SCI from HC. **Conclusions:** Computer Key-tapping can help identify those with SCI, MCI and dementia from HC. This provides an accessible and cost-effective method to detect those at risk of cognitive impairment and may support clinicians in timely referral for further investigations.

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Media Portrayals of Older Women and Its Relationship to Health and Well-Being: A Systematic Scoping Review

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Background: Media representations of women and older people have been extensively studied. However, there has been limited examination of how age and gender interact, specifically how older women are represented in media, and whether and how they internalise these representations. **Objective:** This study sought to identify and synthesise research on: media representations of older women; the impact of these representations on older women's self-perception, health and well-being; and whether ageism is perpetuated via media stereotypes. **Method:** We conducted a systematic scoping review. Inclusion criteria were: published between 1992 and 2022; examined women aged 60+ years; all media forms; and any combination of health, well-being, self-perception or self-esteem. Data was extracted and thematically analysed to identify key themes. **Results:** Screening resulted in 43 articles for analysis. Analysis of the literature shows a common theme of older women's under-representation in mass media of all types. Women's representations usually fell into narrow stereotypes: either (1) frail and vulnerable; or (2) happy, healthy, and youthful. Representations of older women belonging to marginalised group/s, for example people of colour or LGBTQIA+, were rare. **Conclusion:** At a time when increasing the representation of diversity in the media is being emphasised, this does not seem to have extended to portrayals of older women. The binarization of either "ageing well" or frailty perpetuates narrow ageist stereotypes, dismissing diversity. The review revealed a gap in the research about if and how media portrayals influence the ways older women think about themselves, and whether this influences their health behaviours and sense of well-being. There is also little research exploring under-representation in an Australian context and whether and how this has changed over time. The next phases in this research will include Australian media analyses and qualitative research exploring the extent and effects of under-representation and stereotyping on older Australian women.

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‘I Haven't Got a Cue’: Investigating the Effectiveness of Self-Generated Cues for Memory Performance in Younger and Older Adults

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Background: Memory is subject to changes as a result of the natural ageing process. However, research has shown that memory is greatly enhanced when an individual is actively involved in the process of remembering. This underpins the effectiveness of ‘self-generated cues’, which is any form of a memory aid developed by the individual themselves to facilitate future recall. Mixed evidence has been found on self-generated cues for older adults, who are hypothesised to have a larger network of knowledge and life experiences, upon which they tailor cues. There is also a scarcity of research about non-verbal self-generated cueing materials. **Methods:** Younger adults (n = 44) and older adults (n = 30) were recruited to participate in an associative memory task, where activities of daily living (ADLs) were paired with auditory cues (sounds related to the ADL). In the self-generated cue condition, participants were given the opportunity to select the sound they found best suited to the ADL from a pool of four sounds, and were instructed to learn the association between them. In the experimenter-generated cue condition, participants were given a cue by default and were given the same instruction. Cues were played at test with recall and reaction time recorded as indicators of memory. It was hypothesised that memory would be greater for self-generated cues than experimenter-generated cues, and that this would benefit older adults more than younger adults. **Results:** A repeated measures ANOVA revealed significant main effects of age and cue condition on both recall and reaction time. However, an interaction was not found. **Conclusions:** Although the results of this study did not suggest that self-generated auditory cues were of greater benefit for older adults compared to younger adults, the findings are in favour of self-generated auditory cues as a potent strategy to optimise memory of both younger and older adults.

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Aspects of Socialisation and Risk of Cardiovascular Disease: A Prospective Cohort Study Using Machine Learning Algorithms and a Conventional Method

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Background: A person's degree of socialisation can affect their risk of cardiovascular disease (CVD). However, it is unclear which social health indicators (SHIs) are related to CVD and whether these associations are gender-specific. **Objective:** We aimed to investigate the associations between aspects of socialization and risk of CVD. **Methods:** A secondary analysis of 9,936 (5,231 women and 4,705 men) initially healthy, community-dwelling Australians aged ≥70 years in the ASPirin in Reducing Events in the Elderly (ASPREE) study and ASPREE Longitudinal Study of Older Persons was undertaken. Twenty-five SHIs (related to relative/friend support, social interaction, community engagement, living arrangement, and caring and volunteer work) were included. Machine learning models based on elastic net and gradient boosting were used to select relevant SHIs. Cox regression modelling was used to examine the associations, stratified by gender. **Results:** Ten socialization factors for men and four for women were identified. For both genders, being married/partnered was associated with a reduced risk of CVD (men: hazard ratio (HR) = 0.76, 95% CI [0.60, 0.96]; women: HR = 0.67, 95% CI [0.58, 0.95]). For men, having 3-8 relatives they felt close to and could call on for help (HR = 0.76, 95% CI [0.58, 0.99]; reference <3 relatives), having 3-8 relatives they felt at ease talking with about private matters (HR = 0.70, 95% CI [0.55, 0.90]; reference <3 relatives), or playing games such as chess or cards (HR = 0.82, 95% CI [0.67, 1.00]) was associated with reduced risk of CVD. For women, living with others (HR = 0.71, 95% CI [0.55, 0.91]), or having ≥3 friends they felt at ease talking with about private matters (HR = 0.74, 95% CI [0.58, 0.95]; reference <3 friends) were associated with a lower risk of CVD. **Conclusion:** This study demonstrates benefits of socialising for cardiovascular health in older adults, suggesting that social prescriptions might be helpful, particularly for people who are single and have limited opportunities to receive support from family or friends.

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Building Courage to ‘Venture Out’: A Program to Support Participation in Nature-Based Activities Following Diagnosis of Dementia or Mild Cognitive Impairment

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Background: Contact with nature has benefits for physical and mental wellbeing, particularly for people experiencing cognitive concerns. However, neurocognitive disorder symptoms (e.g., memory impairment, disorientation, anxiety) can impact confidence and willingness to go outdoors and interact with nature. This project seeks to address barriers impeding people living with dementia or mild cognitive impairment (MCI), as well as their care partners, accessing green spaces through a supported engagement program that builds upon community nature-based initiatives (e.g., community gardens, Landcare). Here we present the proposal and initial development of the Venture Out Program based in nipaluna (Hobart). **Objectives:** The project has three objectives: (1) co-design and deliver a supported nature-based intervention (the Venture Out Program) in partnership with people living with dementia or MCI, care partners, and community groups; (2) determine the impact of the intervention on participant quality of life and mental wellbeing; and (3) establish the overall feasibility and acceptability of the program. **Methods:** *Phase 1 – Program Development and Co-design* will involve the development of a 12-week intervention (the Venture Out Program) through co-design workshops, training sessions in dementia awareness and outdoor health, and outdoor trials with key stakeholders including people living with dementia or MCI, care partners, and community nature providers. *Phase 2 – Intervention Implementation* will involve recruiting 65 recently diagnosed individuals alongside care partners to participate in the Venture Out Program, supported by participating community providers. *Phase 3 – Evaluation and Review* will involve a mixed-methods evaluation to establish the efficacy, feasibility, and acceptability of the Venture Out Program. **Outcomes and significance:** This project will advance primary health care practices such as nature prescribing and will expand available post-diagnostic options. By enabling people living with cognitive concerns to continue healthy, active lives as part of their community, The Venture Out Program has potential economic, health care, and community benefits.

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Humour Style Predicts Level of Social Engagement and Life Satisfaction in Healthy Older Adults

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Background: Rather than capturing “what is funny”, scientific humour measures reveal how people use humour to support their social and mental health. Four dimensions have been proposed to represent our humour style: two positive styles (affiliative; self-enhancing) and two negative styles (aggressive; self-defeating). **Objective**: This study examined whether humour style predicted levels of social engagement and life satisfaction in healthy older adults. **Methods**: Three hundred participants aged 65 years or over (60 males, 240 females, $M = 72.94$ years) completed an anonymous online survey. Multiple linear regression was used to determine the predicative relationship between humour style (measure: Humour Styles Questionnaire) and (1) social engagement (measure: Lubben Social Network Scale) and (2) satisfaction with life (measure: Satisfaction with Life Scale) while controlling for age and gender. **Results**: Humour style significantly predicted level of social engagement, $F(6, 271) = 8.5$, $p \leq .001$, and life satisfaction, $F(6,274) = 5.7$, $p \leq .001$. Higher levels of positive humour predicted more life satisfaction (affiliative, $B = .16$, $p = .028$; self-enhancing, $B = .20$, $p = .004$) and more extensive social network (affiliative, $B = .33$, p ≤.001). Negative humour style (self-defeating, $B = -.17$, $p = .008$) significantly predicted less life satisfaction. **Conclusions**: Preliminary results suggest humour style may play an important role in psychological health and social engagement in older adults. Higher self-reported positive humour styles (affiliative; self-enhancing) predicted more life satisfaction and social engagement, whereas negative humour (self-defeating) predicted poorer life satisfaction. Further research will elucidate how humour style contributes to psychological resilience in older adults.

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Improve Comprehensive Care: Insights From Care Professionals on the Comprehensive Care Standard via a National Survey

XIONG Beibei[1], STIRLING Christine[2], BAILEY, Daniel[1], MARTIN-KHAN Melinda[1,3,4]

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Background: Older patients seeking acute care in hospitals often present with complex and severe health conditions, necessitating comprehensive care (CC). However, a research gap exists regarding the implementation and effects of the mandated National Safety and Quality Health Service Standard - Comprehensive Care Standard (CCS) in Australian acute care hospitals. **Objective:** This study explored care professionals' knowledge, experiences, and perceptions of the CCS in Australian acute care hospitals. **Method:** An online survey was developed and circulated to care professionals working in Australian acute care hospitals via dissemination through our research team, healthcare organisations, and clinical networks. Survey items covered various domains: knowledge of the CCS and confidence in performing CC, experiences in implementing the CCS, perception of organisational support, and the perceived impacts of the CCS on patient care and health outcomes. A Likert scale was used to measure self-reported knowledge and support. Quantitative data were analysed using RStudio, while qualitative free-text data were analysed thematically using NVivo. **Results:** Care professionals (n = 649) reported a moderate level of knowledge of the CCS (median = 3/5) and a high level of confidence in performing CC (median = 4/5), although experienced only a moderate level of organisational support (median = 3/5). Only 4% of respondents believed that all patients in their unit had CCS-compliant care plans. Factors contributing to non-compliance included insufficient knowledge, motivation, teamwork, resources, documentation issues, limitations in systems and processes, and environment-specific challenges. Most participants believed that the introduction of CCS had improved various aspects of patient care and health outcomes, despite raising healthcare costs. **Conclusion:** Supported by both structured questions and free-text responses, respondents indicated a clear desire for increased knowledge and training, as well as for more resources and improved systems and processes tailored to the older population. The perceived increase in costs might hinder the sustainability of CCS. Consequently, future research should evaluate the cost-effectiveness of CCS implementation.

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Overviews (Ask the ERA Brains Trust)

In alphabetical order (by participant author surname)

Development and Validation of an Online Medication Management Portal for Older People

AFOLABI Temitope[1]

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Background: Advances in digital health pave the way for greater personalisation of healthcare services, enabling a precision medicine approach to promoting the health and wellbeing of diverse ageing populations. To date there are no studies investigating the development of digital platforms to enhance medication management for older people. **Objective:** To codesign an online portal for older people that optimises medication management and provides tools for them to communicate their medicine goals with healthcare providers. **Methods:** A steering committee of consumers, carers and clinicians was formed to guide the codesign process. Focus groups exploring the perspectives of older people and using technology to enhance medication management will be conducted. Surveys evaluating the user-experience and retrospective analyses of online portal usage will be conducted. **Discussion:** Preliminary findings have developed a minimum viable product in consultation with the steering committee. Engagement with a tailored online medication platform may lead to improved health outcomes.

Key questions:

- Are the following focus group questions sufficient to capture the perspectives of older people and carers on the development of a medication management portal?
  - *As you grow older, what are some of the challenges you face managing your medicines?*
  - *How can technology be used to address some of these challenges of medicine management faced by older people?*
  - *If you could design a medicines app/technology/website, what would you like it to do for you?*
  - *Is there anything else you would like to raise in relation to managing your medicines safely at home?*
- To address the needs of a diverse older people group, can you provide some suggestions for how to effectively recruit and engage older people of varying backgrounds (e.g., older people from culturally and linguistically diverse backgrounds) and a range of literacy levels?

- With regards to qualitative data analysis, any advice on how best to sort the data? Do you suggest using a cross-sectional/ categorical indexing or a contextual approach?

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Genetics, Hormones and Brain Health – The Curious Case of the Null Result

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Global prevalence of Alzheimer’s disease has a strong sex bias, with women representing approximately two-thirds of patients. Yet the role of sex-specific risk factors during midlife, including hormone replacement therapy and its interaction with other major risk factors for Alzheimer’s Disease, including APOE-e4 genotype on brain health, remains unclear. Some research has indicated the presence of an interaction; however, this was not detected in a study of approximately 200,000 participants from the UK Biobank, a large biomedical and health dataset. Methodological issues and non-transparent reporting of results appear to be key factors contributing to the mixed evidence. When these considerations are addressed, a consistent message is produced. This talk will highlight the need for scientists to report results transparently and also critically think about the research presented in published papers.

Key questions:

- What can the research community do to prevent issues with transparency of reporting occurring?

- Are the use of *p*-value correction factors necessary, given the denominator is not clear? Do they contribute to research issues relating to *p*-values?

- The contribution of missingness in a dataset is a major issue in research that is often ignored and not reported on. What impact does this have on the research findings presented to the research community and also, communicated to the public?

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Improving Care of Older People in the Community Through Detection of Complexity: ImPaCt Study

BOAK Jennifer[1]

[1] La Trobe University

Background: Older people are living longer with multimorbidity, consequently their care is more complex. Their need for support and nursing care in their home is more common. Detection of care complexity is lacking, impacting how care and supports are allocated to remain in their home. **Objective**: To trial a complexity tool in addition to usual assessment to enhance clinical judgement. Exploring the perceptions of complexity of health professionals. **Methods:** RCT and focus groups. **Results:** RCT demonstrated a statistically significant effect of the Patient Complexity Instrument (PCI) on the level of complexity when adding interventions to support care. The results of phase 2 included allied health and nursing having different perspectives of complexity when in separate discipline groups, however, when in a multidisciplinary group the differences were less apparent. **Conclusion:** The PCI was found to be acceptable to detect care complexity of older people and support nurses' decisions of subsequent care.

Key questions:

- My research uses an implementation science theoretical framework with an underpinning realist evaluation. What are your thoughts on realism in mixed methods studies?

- While my research will have clear policy implications, publishing can take months or years and there is a pressing need for the research to be released. How do I share my learnings faster and are there any trade-offs?

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Interconnected Themes: Ageing and Surf Lifesaving

FIEN Samantha[1,2]

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[2] Research Cluster for Resilience and Wellbeing, Appleton Institute

My research focus and activity is centred around two interconnected themes: ageing and surf lifesaving. The research within the ageing context primarily focuses on end-of-life care, telehealth, falls, frailty and walking speed. Whilst in the sphere of surf lifesaving my research focuses on resuscitation, shame, social support. Interestingly, the interlap between the two themes includes mental health, exercise, master's athletes and overall wellbeing. Considering these key themes, my mission is to generate novel insights to guide evidence-based decision-making that creates positive change in the worlds of ageing and surf lifesaving.

Key questions:

- What are your top tips to leading research teams as an ECR with MCRs and Professors?

- What experiences or programs should we be looking at as ECRs that would be beneficial to our career development?

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Modelling and Detecting Urinary Anomalies in Seniors From Data Obtained by Unintrusive Sensors

GE Yueyi[1]

[1] Department of Data Science and Artificial Intelligence, Monash University

Background: Urinary anomalies are severe health problems that, if left untreated, increases risk of mortality in older adults. **Objective:** Uses unintrusive sensors to detect abnormal toilet attendance from data collected from older adults. **Method:** We used data from healthy individuals to simulate their normal urination patterns, and then operationalised information from the medical literature and our team of physicians to change the urinary patterns of healthy people into the patterns that would occur if they contracted UTIs. The performance of two existing models for detecting abnormal urination patterns was compared. **Results:** One-Class SVM yielded the best results (statistically different from the baseline model adapted from the literature). **Conclusion:** This study makes three key contributions: (1) a method for pre-processing real-world data obtained from unintrusive sensors; (2) simulated separate datasets exhibiting slow and fast disease progression for different users for day and night; and (3) results of anomaly detection modelling applied to these datasets.

Key questions:

- Are there other medical conditions where unintrusive sensors are or could be applied for in-home monitoring and, if so, do you think the algorithms we have developed could potentially have application in processing data collected in these other contexts?

- Can the Brains Trust suggest any existing datasets containing abnormal behavioural changes that we could use? Similarly, do you know of any datasets containing visitor events (hour of the day where a house has visitors)?

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The Venture Out Living Green Lab: A Proposal

THOMSON Cassandra[1,2], **MARSH Pauline**[1], **SUN Joanna**[1], **NGUYEN Hoang**[1], **THOMAS Janet**[3]

[1] Wicking Dementia Research and Education Centre, University of Tasmania
[2] Turner Institute for Brain and Mental Health, Monash University
[3] Dementia Advocates Program, Dementia Australia

The Issue: Following onset of dementia, individuals and care-partners start to experience a ‘shrinking’ and increasingly interior world. They can become disconnected from nature, and as a result experience greater risk of isolation, chronic disease, and mental ill-health. **The Solution:** The ‘Living Lab’ model is a real-life research environment, that is designed to simultaneously undertake research while delivering benefits for its participants and generating positive outcomes for whole communities. Our green lab will be a highly collaborative, sustainable project that provides supported psychosocial outdoor options for people living with dementia, allowing them to maintain access with nature safely. **Objectives:** (1) to create sustainable dementia-inclusive, enabling outdoor environments across Tasmania; (2) form a community of practice that improves green space access for people living with dementia, care-partners, and support workers; and (3) embed a long-term research project that identifies the benefits of supported nature connection on quality of life and wellbeing.

Key questions:

- Taking risks is part of everyday life and can result in personal growth and enhanced quality of life. 'Dignity of risk’ refers to the idea that all adults, including those living with dementia, have the right to make decisions about their own lives, even if there is some risk involved. Supporting people living with dementia to be outdoors involves a trade-off between risk and safety. How can these competing needs best be managed?

- Can the Brains Trust share any tips or experiences on how to maximise the sustainability of a multi-site project such as this?

- Nature-based and creative interventions can be considered fringe or alternative by some. Do you have any advice for building wider acceptance of these types of interventions within the major medical funding bodies in Australia?

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Zoom Map

Access to the conference is via a single Zoom link to the **'Main Room'**. Opening and closing plenaries will be held in the main room. If you leave Zoom at any time during the conference you can click on the same link to re-join, which will return you to the main room'.

Concurrent sessions throughout the day are held in five '**Breakout Rooms**' – please select which Room number you wish to join from the Zoom Map below, using the Breakout Room function to go to your selected room (you can use the same function to move between Rooms during the concurrent sessions).

Please refer to the separate '**Virtual Conference Instructions**' document provided for further information.

Time (AEST QLD)			MAIN	ROOM 1	ROOM 2	ROOM 3	ROOM 4
9.30 - 9.55am	25	LINK OPENS	Open				
10.00 - 10.15am	15	PLENARY – OPEN	Open				
10.15 - 11.15am	60	CONCURRENT A – Oral presentations	Access to Breakout Rooms >	**Dementia Care**	**Research Matters**	**Innovative Methods**	**Interventions**
11.15 - 11.30am	15	BREAK					
11.30 - 12.30pm	60	CONCURRENT B – Oral presentations	Access to Breakout Rooms >	**Brain Health, Cognitive Impairment and Memory**	**Healthcare Planning**	**Insights From Professionals**	
12.30 - 1.30pm	60	BREAK					
1.30 - 2.50pm	80	CONCURRENT C – Oral presentations	Access to Breakout Rooms >	**The Dementia Journey**	**The Role of Gender and Other Factors**	**Social Aspects of Ageing**	**Healthy Ageing and Medication Use**
2.50 – 3.10pm	20	BREAK					
3.10 – 4.10pm	60	CONCURRENT D – Ask the ERA Brains Trust	Access to Breakout Rooms >	**Research Design Including Mixed Methods**	**Planning Ahead**	**Deep Dive Into Data**	
4.10 – 4.30pm	15	PLENARY – CLOSE	Awards / Close				

Time Zone Conversion Chart

All session timings in the programme are in Brisbane (AEST) time. The table below provides the conversion to other time zones.

CONFERENCE QLD (AEST)	DURATION (MIN)	SESSION	NSW / VIC / TAS (AEDT) *1 hour later*	SA (ACDT) *30 minutes later*	WA (AWST) *2 hours earlier*	NZ (NZDT) *3 hours later*
9.30 - 9.55AM	25	PRE-MEET (Q&A) – All welcome	10:30 - 10:55AM	10:00 - 10:25AM	7:30 - 7:55AM	12:30 - 12:55PM
10.00 - 10.15AM	15	PLENARY – OPEN	11:00 - 11:15AM	10:30 - 10:45AM	8:00 - 8:15AM	1:00 - 1:15PM
10.15 - 11.15AM	60	CONCURRENT A – Oral presentations	11:15 - 12:15PM	10:45 - 11:45PM	8:15 - 9:15AM	1:15 - 2:15PM
11.15 - 11.30AM	15	BREAK	12:15 - 12:30PM	11:45 - 12:00PM	9:15 - 9:30AM	2:15 - 2:30PM
11.30 - 12.30PM	60	CONCURRENT B – Oral presentations	12:30 - 1:30PM	12:00 - 1:00PM	9:30 - 10:30AM	2:30 - 3:30PM
12.30 - 1.30PM	60	LUNCH BREAK	1:30 - 2:30PM	1:00 - 2:00PM	10:30 - 11:30AM	3:30 - 4:30PM
1.30 - 2.50PM	80	CONCURRENT C – Oral presentations	2:30 - 3:50PM	2:00 - 3:20PM	11:30 - 12:50PM	4:30 - 5:50PM
2.50 – 3.10PM	20	BREAK	3:50 - 4:10PM	3:20 - 3:40PM	12:50 - 1:10PM	5:50 - 6:10PM
3.10 - 4.10PM	60	CONCURRENT D – ERA Brains Trust	4:10 - 5:10PM	3:40 - 4:40PM	1:10 - 2:10PM	6:10 - 7:10PM
4.10 – 4.30PM	20	PLENARY – CLOSE	5:10 - 5:30PM	4:40 - 5:00PM	2:10 - 2:30PM	7:10 - 7:30PM