

REHABILITATION, AGEING AND INDEPENDENT LIVING (RAIL) RESEARCH CENTRE

Member eBulletin #8

A message from the Director

It is great to see the strong impact of the restrictions imposed during the peak of the COVID-19 outbreak, and the successes in Australia as we start opening up again. It is still a case of taking extra precautions, and minimising group activity for some time to come though. At the university, many researchers remain working from home, while staff with a need to be on campus are gradually returning.

It has certainly been an interesting few months, and it is becoming clear that we won't be returning the way things were, but to a new normal gradually into the future. Some of the new ways we have done things over the past few months have actually worked very well, and should become the new norm. But it is important for us all to consider that the way some things have evolved during the pandemic have not necessarily been positive for many of the people our research involves and interacts with, for example older Australians, and people living with disability. A focus going forwards needs to be on working to ensure the health and wellbeing of vulnerable groups continues to be reviewed and improved, and that research explore opportunities to build systems, capacity and resilience among those at risk to ensure that if the need ever arises again, that the impact won't be so great next time on vulnerable Australians.

Please consider passing this e-bulletin on to any of your Monash University colleagues who may be doing research in aligned research areas. Any Monash University staff member can self-nominate to be a member of RAIL by filling in the online [Member survey / registration](#).

Professor Keith Hill

RAIL staff updates

We are pleased to welcome Dr Aislinn Lalor to the RAIL team from Monday 25th May.



Dr Aislinn Lalor

Aislinn completed her PhD at the School of Primary and Allied Health Care, Monash University, in 2017. Her PhD research examined the causes and consequences of impaired sleep quality of older adults during and following extended hospitalisation. Aislinn's career interests focus on building research in the areas of sleep, older adults and assistance animals (and is currently puppy raising a Guide Dog puppy for Guide Dogs Victoria).

Aislinn is also a lecturer in the Department of Occupational Therapy, Monash University and an executive committee member of the Australian Association of Gerontology, Victoria Division. Prior to commencing her PhD, Aislinn worked clinically for several years in community practice (predominantly aged care) and acute mental health for older adults.

Member profile

Dr Xiaoping Lin

Dr Xiaoping Lin is a Research Fellow at the Registry Science and Research Unit, Department of Epidemiology and Preventive Medicine, Monash University. Before joining Monash University, she worked ten years at the National Ageing Research Institute.



Xiaoping's research areas include mental health, dementia, and health service development and evaluation. Being an immigrant herself, Xiaoping has a particular interest in research with people from Culturally and Linguistically Diverse (CALD) backgrounds and has extensive links with the

CALD community in Melbourne. Over the years, she has helped secure more than \$500,000.00 in research funding, including a recent grant from the Alzheimer's Australia Dementia Research Foundation as the chief investigator.

Xiaoping currently works on two NHMRC-funded projects. These projects will establish a Clinical Quality Registry (CQR) for Australians newly diagnosed with dementia or Mild Cognitive Impairment (MCI). The CQR will collect data to monitor and drive improvements in the quality of care and patient outcomes for people with dementia and MCI. The CQR will also facilitate the recruitment of participants into dementia research and trials.

Higher Degree Research (HDR) students

Kylie Rice is a newly enrolled PhD student with the RAIL Research Centre.

She is an occupational therapy senior clinician in neurological rehabilitation at Epworth Healthcare. Kylie has over 20 years' experience working in neurological rehabilitation with patients across the continuum of care in both the public and private sectors.



Kylie has had a research interest since her undergraduate occupational therapy degree. She has completed a post-graduate diploma and master of occupational therapy that were research focused.

Her PhD research will be clinically-based incorporating her clinical work at Epworth which involves providing functional vision training with a technology-based vision intervention, the Vision Coach, with neurological and traumatic brain injury patients. Epworth is the first rehabilitation centre in Australia to have a Vision Coach device available to use with patients. The Vision Coach is one emerging technology being used for neurological vision rehabilitation.

Kylie had first-hand experience with rehabilitation vision technologies when completing a study tour to a few rehabilitation centres in the USA, as part of an Epworth scholarship in 2018. Kylie is interested in linking new and emerging vision technologies into clinical practice, which lead to her scholarship and driving the introduction of the Vision Coach to Epworth. Her interest in vision rehabilitation also stems from her practice experience working with patients with visual field deficits and the need for more focus on restorative therapy with the increasing evidence for neuroplasticity of the brain, including the visual systems.

Kylie's research will focus on the effectiveness and utility of the Vision Coach on visual skills (scanning and reaction time) and ADL performance with persons with visual field impairment after an acquired brain injury. Her research will involve a supervisory collaboration between Epworth and the RAIL Research Centre. Her supervisors are Libby Callaway, Keith Hill and Professor John Olver (Epworth).

Grant success

External grants involving RAIL staff:

DHSS Victoria - Allied Health Capability Framework

DHHS Victoria has been working over the last 12 months to develop an Allied Health Capability Framework for working with people with disabilities and complex needs.

The Framework is one of the last deliverables in a \$26M National Disability Insurance Scheme (NDIS) workforce strategy, called "Keeping Our Sector Strong" – see <https://www.vic.gov.au/keeping-our-sector-strong>. The Allied Health Capability Framework has been designed to deliver the content and methods to support translation of this Capability Framework into allied health practice. The Framework has been designed for various allied health professions, including: audiology, dietetics, occupational therapy, orthoptics, physiotherapy, prosthetics and orthotics, psychology, podiatry, social work and speech pathology.

A consortium led by the Monash School of Primary and Allied Healthcare, in conjunction with NDIS participants contributing lived experience, Peninsula Health, Yooralla and community based private allied health professionals, has been appointed. This team will work to develop a suite of free, online and accessible implementation and training tools for this new Framework, delivered to the sector by December 2020.

Stage One of this project included an extensive scoping of existing education resources available for health professionals, mapped against the four domains identified in the framework. This included a literature and website search, and meetings with each of the peak bodies for the various health professions represented in the framework.

For further details regarding the Allied Health Capability Framework Implementation and Training Tools project, contact Libby Callaway via libby.callaway@monash.edu



**Peer support for the Huntington's community... by the Huntington's community,
'Huntington's Community Connect'**

A Monash University RAIL team are delighted to be partnering with Huntington's Victoria to deliver a critical piece of evidence for Australia's Huntington's Disease (HD) community.

Monash University RAIL researcher Dr Natasha Brusco is leading a team of RAIL researchers (Dr Natasha Layton and A/ Prof Libby Callaway) and Monash University colleague A/ Prof Narelle Warren to deliver this National Disability Insurance Scheme-funded grant intended to address the critical gaps which exist within the Australian HD community.

Huntington's Disease (HD) is a rare neurodegenerative disorder of the central nervous system characterised by unwanted movements, behavioural and psychiatric disturbances and dementia. Deterioration in the regions of the brain that are responsible for motor movement control and coordination, cognition, personality and emotions results in significant impairments in a person's ability to think, feel and move. HD onset predominantly occurs in young-middle adulthood (35–50years). Being a genetic disease, each child of a parent with HD has a 50% chance of inheriting the condition; however, not all people know their gene status (gene positive or gene negative).

In Australia, it is estimated that over 1,800 people have Huntington's Disease and approximately 9,000 are at risk with a reported prevalence rate in Australia which ranges from 4.5 per 100,000 to 6.5 per 100,000. Due to the small population size, little is known about the health, social and disability support needs - met and unmet - of this population.

A prevalence study and gap analysis will inform the development of nation-wide access project to deliver up to date, relevant and quality information and support, including peer support, for people impacted by HD. An implementation evaluation will complete the suite of research activities during 2020- 2022.

This research is novel in two respects.

This is the first time that research into Huntington's Disease in Australia has explicitly included the full breadth of affected people. The Steering Group and the population invited to participate will include gene positive and symptomatic individuals as well as gene positive but non-symptomatic individuals, people who are gene-negative, families and circles of support, and health practitioners.

Additionally, the gap analysis will utilize and develop a set of impact and outcome domains created by the Huntington's disease community.

Further information is available from Chief Investigator Dr Natasha Layton, Rehabilitation, Ageing and Independent Living Research Centre, Monash University E: natasha.layton@monash.edu

Grants



Australian Association of Gerontology - research grant available:

The AAG has two \$20,000 grants available to support early career researchers to improve their track record to lead to an ARC Grant or Fellowship or comparable research funding. These grants are aimed at supporting a discrete research effort that provides evidence and critical thinking that furthers the interests of vulnerable older people in advanced age (with a strong emphasis on psycho-social research and quality of life). The funding round will open on the 1st of June and close on the 27th of July. **For further details, see**

- <https://www.aag.asn.au/education/the-hal-kendig-research-development-program>

Events

Member forums



A well attended virtual forum was held on Thursday 14th May. Associate Professor Dawn Mackey provided RAIL members with a presentation about 'Novel Approaches to Enhance Mobility of Older Adults', including an overview of her evaluation of compliant flooring as a technology to prevent fall injuries in residential aged care. She also spoke about her design and scaling of a physical activity program for older adults in the community.

We would like to thank Dawn for sharing her current research work with our community.

The next RAIL member forum:

The RAIL research team is proud to announce our next Members Forum is from 5.00-6.00pm on Thursday the 25th of June 2020.

This twilight forum will feature **Professor Derick Wade** sharing his insights and expertise on **REHABILITATION**.



Professor Wade is a consultant in neurological rehabilitation and has extensive experience and expertise in several other clinical areas, including head injury rehabilitation, management of

multiple sclerosis and motor neurone disease, assessment of patients in the Permanent Vegetative State and the management of patients who have disability without any underlying disease. Since 1994 he has been the **Editor in Chief** of the specialist journal **Clinical Rehabilitation** and is regularly invited to give lectures worldwide. Recent publications include “What is rehabilitation? An empirical investigation leading to an evidence-based description”; “What attributes should a specialist in rehabilitation have? Seven suggested specialist Capabilities in Practice” and “Making healthcare decisions in a person’s best interests when they lack capacity: clinical guidance based on a review of evidence”. Please join us for this twilight forum by the world renowned rehabilitation expert, **Professor Derick Wade**.

Venue: via [Zoom](#) (meeting ID: 945 0369 0808)

Date and time: 5.00pm Thursday 25th June

RSVP: [Online](#) by 22/06 (zoom options will be available)

RAIL paper of the month



Caring for people with serious injuries in urban and regional communities: a qualitative investigation of healthcare providers’ perceptions

[Jemma Keeves](#)^{1,2}, [Sandra C Braaf](#)¹, [Christina L Ekegren](#)¹, [Ben Beck](#)¹, [Belinda J Gabbe](#)¹

In Victoria, people with serious injuries have reported ongoing issues with their post-discharge care including a lack of access to appropriate outpatient services and deficiencies in expertise amongst community-based clinicians. This project investigated the perspectives of community-based healthcare providers working with people following serious injury across urban and

regional Victoria. We found that allied health professionals face a number of challenges in the provision of optimal care to people with serious injuries. Participants felt there was an urgent need to improve the availability of psychological support and attendant carers in regional areas. Furthermore, they suggested that a designated care-coordinator role may assist people transitioning between hospital and home to engage with necessary services. This research also found technology and telehealth were key areas that participants felt could be better utilized to facilitate better communication between health professionals and support rural clinicians caring for people with complex injuries.

National Injury Prevention Strategy 2020-2030: Draft report for consultation

The Draft National Injury Prevention Strategy has recently been released for comment. The Commonwealth Department of Health engaged The George Institute for Global Health to develop the draft, in partnership with the Australasian Injury Prevention Network (AIPN) and the Ngarruwan Ngadju First Peoples Health and Wellbeing Research Centre. Stakeholder consultations held last year informed this draft.

The draft national strategy addresses priority populations (Aboriginal and Torres Strait Islander People, rural and remote populations, socio-economically disadvantaged people), injury issues across the life-course, as well as cross-cutting priority areas of injuries associated with alcohol, extreme weather events, and the built environment.

All individuals or organisations with an interest in injury prevention are invited to provide a comment **directly to the Commonwealth's Consultation Hub** which hosts the draft national injury prevention strategy by Friday 19 June 2020 -- the link is: <https://consultations.health.gov.au/population-health-and-sport-division/national-injury-prevention-strategy/>

Health Economics

The RAIL research team is presenting a 6 part mini-series on economic evaluations alongside Rehabilitation, Ageing and Independent Living (RAIL) research programs.

This series will explore:

1. **Economic evaluations: What are the different types?**
2. Determining the perspective of an economic evaluation

3. Defining the units of health care and disability service utilisation, as well as defining the effect of the intervention
4. The impact of the time horizon and adjusting for risk in an economic evaluation
5. How to present results from an economic evaluation
6. How to use the results of an economic evaluation to inform health and disability service delivery and policy

Prior to launching into the different types of economic evaluations, I would like to provide a little background into health economics. Health economics is defined as “The comparative analysis of alternate courses of action in terms of both their costs and consequences”¹. 2013 was a big year for health economics, with the publication of the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) checklist². This was co-published in multiple peer-review journals and this created a definitive point in time when economic evaluations world-wide were held to a new standard of reporting.



Part 1: Economic Evaluations: What are the different types?

There are four main types of economic evaluations.

A cost analysis is the first type of analysis and this is not considered to be a full economic evaluation; as it is a partial economic evaluation. A cost analysis is a one dimensional report of cost for each alternate intervention with no consideration for consequences of the intervention. Within the context of a RAIL program of research, a cost analysis could value add to pilot work examining feasibility of an intervention to understand micro-costings associated with the

intervention. This would then assist with planning a full economic evaluation for the next phase of the research program.

A cost minimisation analysis is a one dimensional report of cost for each alternate, under the assumption that the consequences are equivalent. It is important that the researchers provide evidence, from the current study, previous pilot work or from the literature, to justify why the consequences are equivalent or the analysis is more simply a cost analysis (partial economic evaluation). Within the context of a RAIL program of research, cost minimisation is ideal for disinvestment studies where it is expected that removing an intervention will not have an impact on patient or service outcomes. It is also ideal for non-inferiority intervention trials.

A cost effectiveness analysis is the most common form of economic evaluation in health care. A cost effectiveness analysis examines both the costs and the consequences for each alternate intervention. A cost effectiveness analysis can include any measure of effect to define the consequence, as long as the measure of effect is in natural units such as number of falls, change in functional status, portion of people who return to work. When the measure of effect considers life satisfaction, for example a quality of life score converted into quality adjusted life years (QALYs) gained or disability avoided life years (DALYs), this is called a cost utility analysis which is a sub-set of cost effectiveness. A cost effectiveness analysis will enable the researchers to provide an incremental cost effectiveness ratio (ICER) which enables comparison between similar programs with similar measures. For example, if a health service management is considering investment in interventions to reduce un-planned hospital readmissions for aging rehabilitation patients, they could consider all relevant hospital based cost effectiveness evaluations to determine the range of ICERs per re-admission avoided, to help establish the intervention which presents the best value for money for their health service.

A cost benefit analysis allows comparison between different interventions with different measures of consequence. In this analysis, both the costs and consequences are reported in monetary units e.g. willingness to pay for each DALY or QALY gained. In this case, the dollar value of the benefit is subtracted from the dollar cost of the intervention to report the net cost benefit. Within the context of a RAIL research program, this could be valuable for influencing change in health and disability policy as this enables decision makers to develop a league table which ranks the value of each intervention, both inside and outside of health and disability care, based on the net cost benefit.

¹ Drummond MF, Sculpher MJ, Torrance G, et al. *Methods for the Economic Evaluation of Health Care Programmes*. (3rd Ed). New York: Oxford University Press, 2005: 1.

² Husereau Don, Drummond Michael, Petrou Stavros, Carswell Chris, Moher David, Greenberg Dan et al. Consolidated Health Economic Evaluation Reporting Standards (CHEERS) statement BMJ 2013; 346 :f1049

Upcoming conferences

Please note – we have checked as best as possible regarding updates on whether events in coming months are being cancelled or proceeding (as detailed below). Please check websites / conference organisers to confirm details of specific events.

- **(POSTPONED TO Tuesday 13 October – Wednesday 14 Oct 2020)** - ATSA independent living expo <http://atsaindependentlivingexpo.com.au> Free exhibition
- **(POSTPONED TO Monday 12 October - Tuesday 13 October)** Melbourne - Biennial Universal Design Conference <http://universaldesignaustralia.net.au/australian-ud-conference-ud2020/>
- **(POSTPONED – new date to be set)** Adelaide – The NHMRC National Institute for Dementia Research (NNIDR) Australian Dementia Forum. Theme: Innovation, Discovery and Translation. Abstract submission open until Feb 14. <https://nnidr.eventsair.com/adf2020/>
- **(UNDER REVIEW) July 12 - 15 2020.** Australian & New Zealand Association for Health Professional Educators (ANZAHPE) 2020 Conference, hosted in Melbourne, <https://www.anzahpe.org/2020-conference>
- Nov 17-20, 2020. Australian Association of Gerontology conference – Hobart. Theme: A climate for change in Ageing. <http://2020.aagconference.aag.asn.au/>
- **(POSTPONED TO Saturday 28 November - Monday 30 November 2021)** Australian and New Zealand Falls Prevention Society conference – Auckland, NZ. Theme: Live stronger for longer. Abstract submission opens Feb 27, abstract submissions close May 29. <http://anzfpconference2020.co.nz/>
- Latest NDIS-hosted events for Scheme participants, families and/or providers. See <https://www.ndis.gov.au/news/events>

If you are aware of any other conferences that may be relevant to members of RAIL, please forward details (if possible, before the timing of closure of abstract submissions).

Early and mid-career research support activities

Although the staffing level for RAIL at this point is small, we are keen to provide support for any early or mid career researcher that we can. We are happy to provide an external review perspective of grants you are preparing as one avenue of support. If you would like to discuss possibly accessing this service, please email Cassie in the first instance (spahc.rail@monash.edu).

Member contributions

We would love to showcase current research from our members. We invite you to submit a short story (and relevant images) about any research you are working on that aligns with RAIL.

Submissions are due by the 30th of each month to spahc.rail@monash.edu