

Reforming aged care together



The final report of the Royal Commission into Aged Care and Quality Safety laid bare the failures of Australia's aged care system, calling for a 'profound shift' in which 'the people receiving care are placed at the centre of a new aged care system' and setting out comprehensive steps for reform of the sector.

Deakin University is already leading the way in improving the quality and safety of aged care, from cutting edge-technology that makes life easier and safer for people with dementia and their carers, to the development and evaluation of new safety protocols and patient-centred care. The Royal Commission's report provides significant opportunities for Deakin's research capabilities in aged care to contribute to the reshaping of the sector and how we care for our older people.

In response to the Royal Commission's findings, we're mobilising our capabilities to deliver translational research and evidence-based solutions to the enormous challenge of transforming aged care in Australia. Our researchers in quality and patient safety, digital health, health economics, co-design of clinical trials and intervention evaluation, are working with our industry and research partners to help address the key concerns and recommendations of the Commission.

Please join us, as together we contribute to reforming aged care.

"Deakin understands the complex needs of the health sector and is expert at working to industry timeframes and building value into all it offers. The University delivers translational clinical, population and health service-focused research and cutting-edge technological innovation to help those working in health improve outcomes for our patients and their communities, and build better, safer and more efficient systems of care."

Professor Warren Payne, Executive Director Western Alliance

Collaborating to improve aged care outcomes through research translation

Deakin is a key partner in the Melbourne Ageing Research Collaboration (MARC), a multi-disciplinary partnership of 20 organisations led by the National Ageing Research Institute (NARI) that have joined forces to improve the lives of older people.

Through collaboration, combined expertise and shared purpose, the partners aim to positively impact the quality of life and health experiences of older people across all settings, including community, health and aged care services.

The collaboration is supported by contributions from each partner, the JO and JR Wicking Trust and the Victorian Department of Health and includes an active Community Advisory Group (CAG).

MARC conducts research that has direct relevance for all partners and focuses on end of life care, dementia care, falls prevention and mental health.

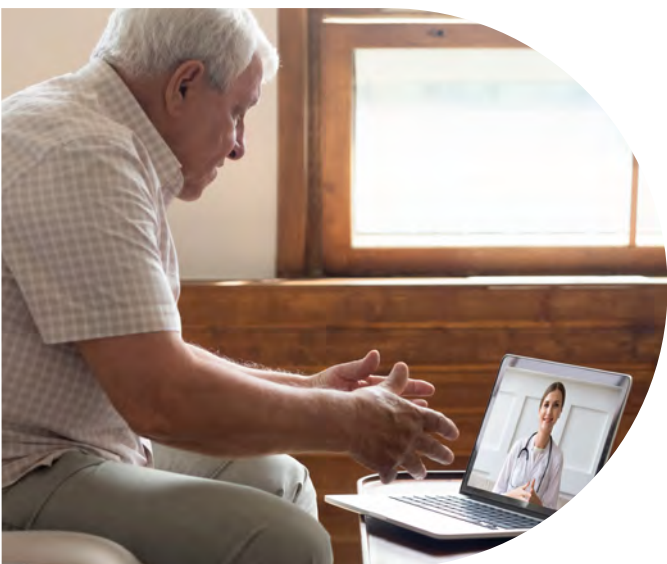
Deakin researchers have been active leaders and contributors to a range of research projects and MARC has also provided a two year PhD scholarship for a Deakin Higher Degree by Research student. Current projects that Deakin researchers are working on include:

- recognising patients at risk of dying
- grief in older people
- micro learning for Community Aged Home Care workers
- preventing avoidable hospital admissions for people with dementia

Deakin also provides important research guidance in health economic impact, research translation and implementation science, strategy and evaluation, and clinical care. Deakin academics also present at public and partnership events.

"MARC is unique and conducts research generated from the ground up by those responsible for direct care, consumers and research partners. We aim to create rapid and sustainable improvements in clinical practice and policy rather than focussing on research outputs alone. Our collaboration with Deakin researchers is mutually beneficial as researchers are connected with real-life clinical experiences and other academics while healthcare staff and policy makers learn how to plan, conduct and implement research in their own contexts."

Debra O'Connor, Deputy Director NARI, Director MARC



Digital experiences to improve dementia care

Working with Dementia Australia, [Deakin's Applied Artificial Intelligence Institute \(A2I2\)](#) has delivered innovative digital training solutions to improve care of people with dementia. [Dementia-Friendly Home](#) is an interactive app that teaches carers about simple changes around the home that can improve quality of life for people living with dementia. Users can explore a virtual home while being provided with suggestions to improve the home based on the ten Dementia Enabling Environment Principles.

[Enabling EDIE \(Educational Dementia Immersive Experience\)](#) is an award-winning immersive virtual reality experience that allows carers and relatives to experience the world through the eyes of the person with dementia and learn how simple changes around the home can improve accessibility and quality of life, while [Talk with Ted](#) is an immersive experience designed to educate care workers to better communicate with and support people living with dementia. The software was engineered by A2I2 staff from scratch, with the Ted avatar being designed to exhibit the behaviour and emotions associated with dementia. At the core of this tool is the ability to have a full conversation with Ted. Trainees must adapt their communication in a way that is empathetic and respectful of the

“Dementia Australia and Deakin University have been working together now for seven years. Over this time, we have developed a very successful working collaboration with Deakin's Applied Artificial Intelligence Institute (A2I2). We are proud to be associated with the university, developing innovative solutions to challenges faced by society.”

Dr Tanya Petrovich, Business Innovation Manager, Centre for Dementia Learning, Dementia Australia

A model for caring

The Tri-focal Model of Care, developed by researchers from [Deakin's Institute for Health Transformation's Centre for Quality and Patient Safety Research \(QPS\)](#) promotes partnership-centred care, evidence-based practice, and a positive environment in healthcare settings and is particularly important in delivering high quality aged care. Its implementation is supported by a specifically designed education program, which has also been translated into an online course for health professionals, carers, aged care residents and their families.

Findings from implementation in seven residential aged care facilities across Victoria showed the model can enable older people, family members and staff to partner in caring for the older person, producing better outcomes for the older people involved and more positive interactions between staff and families.

In 2019, the Tri-focal Model of Care 12-module online program was included in the World Health Organisation Global Database of Age-friendly Practices. Since 2016, 'partnership-centred care' has been the subject of a two-week FutureLearn (massive open online) course, [Caring for Older People: a Partnership Model](#). Since commencement, over 20,000 participants have enrolled and, in 2020, the course was ranked in the top 10 online courses in Australia, based on learner ratings.

“I have learned so much which I will be able to take forward in my day to day working practice. Deakin University always seems to be so good at delivering these courses. Their academics are always passionate and knowledgeable and are skilled at passing that knowledge onto their students.”

Stephen Richards, course participant

Depression and musculoskeletal deterioration: a need for integrated care

Deakin's [Institute for Mental and Physical Health and Clinical Translation \(IMPACT\)](#) is home to the well-established Geelong Osteoporosis Study (GOS), a prospective cohort study that's making a substantial contribution to health research in ageing Australians. Chronic musculoskeletal deterioration and depression are two of the most common causes of disability and GOS data have shown the degenerative decline of bone (osteoporosis), muscle (sarcopenia) and joints (osteoarthritis) in the face of depression renders older people significantly more vulnerable to adverse health outcomes, in particular falls, fractures, and mobility disability.

GOS researchers have proposed a paradigm shift that approaches depression and musculoskeletal health concurrently to effectively interrupt the downward spiral. The outcomes will improve the health and wellbeing of older Australians and be transferable worldwide. The team recently provided expert opinion highlighting the need to consider psychological wellbeing when developing clinical guidelines for identifying and treating sarcopenia to the [Australian and New Zealand Society for Sarcopenia and Frailty Research's \(ANZSSFR\) Sarcopenia Diagnosis and Management Task Force](#), which is led by members of [Deakin's Institute for Physical Activity and Nutrition \(IPAN\)](#).



Mobility, exercise and nutrition

Physical activity and nutrition are vital for maintaining and improving the physical and mental health of older people and the prevention and management of almost all chronic diseases. Researchers at IPAN study the biological mechanisms behind exercise and nutrition and conduct high-quality clinical and translational human research trials to develop innovative solutions to increase physical activity and reduce sedentary behaviour, as well as design and evaluate novel evidence-based nutritional approaches, to inform clinical guidelines and practice in the real-world.

IPAN's work includes health/diet/physical activity program design and evaluation, recipe and meal plan assessments, development of nutritional food supplements and testing their impact on health, disease, and wellbeing, and the evaluation of wearable and digital physical activity and health devices.

IPAN researchers are working on a series of projects focusing on a new flexible model of healthcare service delivery incorporating digital/telehealth and person-centred models of care to increase the reach and accessibility to evidence-based self-management programs designed to improve mobility and healthy eating behaviours to reduce the risk of falls and fractures and manage comorbidities in older people.

Working with IT industry partner Great Australian, the team is developing content that can be delivered remotely using voice-activated intelligent personal assistant devices to support older adults to exercise and reduce sedentary behaviour, maintain healthy diets, adhere to medication prescriptions and liaise with their health professionals.

"The IPAN group at Deakin University has worked collaboratively with us to develop personalised, evidence-based and accessible health content which complements our previous experience introducing smart devices for lifestyle support and reducing social isolation to aged care residences and NDIS services. We are proud to be working with the University to improve the health and independence of older adults."

Dr Eugene Gvozdenko, Great Australian Pty. Ltd.

If you'd like to join Deakin and our partners as we work to solve some of the biggest problems facing aged care, contact:

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