





Bringing research to life

Australia's only independent national research institute dedicated to ageing (NARI) has for the past nearly four decades carried out vital research aimed at boosting wellbeing in later life.

Our research is aimed at helping to improve health outcomes, aged care practice and guide policy and funding decisions to invest in solutions for Australia's ageing population.

NARI knows that bringing research to life is vital to enable older people to age positively.

Facts and figures

- Australia's population is expected to increase from 23 million in 2013 to over 35 million in 2056.
- By 2050, nearly one-quarter of Australia's population will be aged 65 and over, compared with 13 per cent today
- The number of centenarians is increasing by eight per cent each year.

We all want to live longer and healthier and the good news is that by learning more about how people age and by harnessing the information into policy and prevention programs, older people are able to lead healthier lives, manage chronic diseases better, continue to contribute as carers, workers and volunteers, and enjoy their 'golden' years.

The National Ageing Research Institute's mission is to bring 'research to life' to enable practical outcomes from research in order to help people age well.

Its work is making a difference and contributing directly to the national ageing agenda of today and tomorrow.



Progressing the ageing agenda

The National Ageing Research Institute was set up in 1975 to be the centre of excellence in Australia for research into ageing and improving the lives and health of older people.

Today, NARI is renowned for its work in falls and balance, pain, dementia, mental health, carers' health, healthy ageing, system improvements, public and preventive health and physical activity.

The Institute focuses on the human and whole person dimensions of ageing concentrating on clinical and psychosocial research into the current major challenges in ageing. NARI is keen to ensure that research has directly benefits older people and prides itself on the high rate of successful translational research produced every year

NARI's reputation for delivering high quality, professional research on time and with the highest ethical integrity means that it is sought after by federal, state and local governments as well as organisations such as *beyondblue*, and VicHealth.

NARI is committed to working in partnership with other research institutes and universities to provide applied research solutions that are at the cutting edge of ageing research in Australia.

It also builds capacity in ageing research and practice through education of undergraduate and postgraduate students and professional development for workers in the ageing field and. Regional and metropolitan seminars are delivered on many different subject areas including pain diagnosis and management, dementia, physical activity, falls prevention, mental health, assessment and care planning and person-centred care.

NARI is not for profit, registered as a charity and is fully tax deductible. It mainly relies on competitive, philanthropic and tendered funding opportunities.

Approaching four decades of achievements

- NARI has a substantial track record of attracting and providing substantial returns on investment in its research.
- It has undertaken over \$100 million worth of research programs over the past 30 years.
- It has a national record of being selected through competitive tendering processes to deliver ageing research and health ageing programs across Australia.
- It attracts visiting fellows and students from all around the world eager to work with leading researchers in the field.



Making a difference by leading the way



Some of the most significant and innovative changes in aged care practice over the past 40 years are as a result of the work performed at NARI. These include:

- Memory clinics which ensure better diagnosis and care of people with dementia;
- Aged Care Assessment Services which enable better targeted care to those with highest needs resulting in keeping people in the community and out of residential care for as long as possible; and
- Leading research in falls prevention and pain diagnosis and management in older people particularly through the development of evidence based screening tools and guidelines.

In Australia NARI leads the way with its applied research in falls and balance, pain and dementia, as well as healthy ageing and physical activity.

The AIBL Flagship Study of Ageing

Amongst the national and international studies that NARI is taking a leadership role in Professor David Ames is the Clinical Leaders of the Australian Imaging, Biomarker & Lifestyle Flagship Study of Ageing (AIBL), a collaborative project seeking to discover which biomarkers, cognitive characteristics, and health and lifestyle factors determine subsequent development of symptomatic Alzheimer's Disease (AD). This study, which started in 2006, has produced up to 200 peer-reviewed publications.

Reducing Pain in People with Dementia

Simple pain relief is being investigated as a way of managing distressing behaviours often manifested by people with dementia.

Professor Stephen Gibson, an acknowledged leader in the field of pain, is working in many different ways to help improve diagnosis and management of pain in residential and community settings.

As he says, pain is often hard to observe and diagnose in older people particularly in those with dementia so whatever NARI can do to make a difference will be a significant improvement.

With funding from the National Health & Medical Research Council (NHMRC), one of the projects being conducted at NARI is investigating the role of analgesic medications in people with both pain and behaviour and psychological symptoms of dementia. Insights gained from the research will see whether analgesics are an appropriate treatment for pain related agitation.

Falls and prevention

New data from the Australian Bureau of Statistics shows that 1530 people aged over 75 died from falls in 2011. Thousands of older people are hospitalised by falls each year, with estimates that 15 per cent of older people will die as a result of breaking a hip in a fall, and one-third won't survive a year. NARI is a leader in falls prevention and balance research. Our research spans the continuum from early identification and prevention for active older people through to working with very high risk groups such as people with stroke or those with dementia.

Its researchers are working on a number of projects including looking identifying and treating early balance problems to prevent falls in at risk people. NARI's balance retraining program has been successfully translated into every day practice in community health centres - bringing research into practice.

NARI's leadership in falls and prevention has been invaluable to a collaborative project involving the Royal Melbourne Hospital, Southern Health and NICTA. A portable motion analysis system has been developed by NICTA which allows physiotherapists to monitor the movements of patients recovering from stroke.

The device slightly larger than a wristwatch, tracks patient's limb movements in real time and has the potential to prevent falls by elderly patients and in sport medicine.

Towards healthier Australians

NARI has received prestigious competitive grants and is commissioned by organisations and governments across Australia to conduct research into many different areas in a bid to find solutions and new ways of making sure that older Australians are able to participate fully in society. A few examples are:

How can physical activity help your memory?

NARI is currently leading a three year randomised clinical trial to see whether exercise can delay progression of cerebrovascular disease in older people with memory complaints.

Led by Professor Nicola Lautenschlager, this National Health & Medical Research Council project is attracting enormous international attention.

The team is working with research participants who also have at least one risk factor for CVD, such as high blood pressure, high cholesterol, heart disease or smoking. The participants have been recruited from those enrolled in the Australian Imaging Biomarkers and Lifestyle (AIBL) Flagship Study in Melbourne.

The participants will be divided into two groups - to receive usual care or to walk at home. They will be monitored by phone as well as regularly tested to see changes in behavior over the three years.

The research builds on a previous study that successfully developed an exercise program for people with mild cognitive impairment and which is now being tested at NARI on patients with mild to moderate Alzheimer's disease.

Women from other cultures

NARI has taken the lead in ground breaking research with different cultural groups; identifying gaps, piloting and developing resources for carers, clinicians and patients in areas including dementia and mental health.

A recent project followed a group of Spanish women who are now feeling healthier, have less pain, are more independent and have boosted their self-esteem after taking part in a healthy lifestyle program run by NARI.

The Spanish Women Get Active pilot project in the City of Melbourne was based on the Department of Health's Well4Life program that aims to improve nutrition and physical activity for older people.

After a 28-week exercise program led by a Spanish-speaking instructor, the women had significantly increased their upper and lower body strength and balance. One participant lost 12 kilograms in weight.

The program is now being extended to four other groups from a non-English speaking background - Italian, Eritrean, Serbo-Croatian and Chinese with funding from the Federal Department of Health and Ageing.



How healthy are you?

The Healthy Ageing Quiz, funded by the Productive Ageing Centre of National Seniors Australia, is an online quiz to help older people and those approaching older age, to evaluate their current lifestyle.

Questions relate to physical activity, falls and balance, smoking and alcohol use, weight and diet, chronic conditions and doctor visits, sleeping, participation in social, productive and mentally challenging activities, social connections and support, optimism and adaptation. It also provides specific recommendations for improvements in each health domain.

The quiz has generated strong media interested on radio, newspapers and magazines including *Body + Soul*, *Fifty Plus News*, and *The Senior*.

What is elder abuse?

A study on elder abuse recently completed at NARI suggests that agreement is urgently needed on what constitutes elder abuse.

The research showed that health professionals were more likely to correctly identify abusive and potentially abusive strategies than carers and older people. However, up to two-fifths of health professionals did not identify two strategies that were categorised as definitely abusive to older people.

The 697 study participants read a fictional scenario and then completed a questionnaire, indicating whether or not 13 particular actions were appropriate. The correct responses were based on the views of an expert panel and government policy, which states elder abuse as being 'any act occurring within a relationship where there is an implication of trust, which results in harm to an older person'.

Health science students were more likely to identify abusive situations than health professionals, highlighting the need for this latter group to improve their knowledge so they can effectively manage and also advise carers about challenging behaviour.

The study reflected similar findings to a smaller UK study on which this research was based. The project team included Melbourne Health, St Vincent's Health and La Trobe University.



Power to the research participants

NARI has fostered the concept of applied research across the majority of its projects, setting it apart from other institutes in Australia.

One of the highlights of its research programs is the support and interest of older people who willingly volunteer their time to take part not just in research but also in and around the office.

Other ways that volunteers can become involved is by becoming a research participant. Projects are varied and interesting.

Technology spins off for older people

Imagine taking part in a virtual exercise class from home?

NARI is working with a group of 20 over sixty year olds in The Ageing Well at Home with Broadband project.

Each participant is given an Xbox console and access to the National Broadband Network. At set times during the week, they log into to take part in a class led by a peer instructor.

The aim is to assess the effectiveness of the exercise class in improving or maintaining their health and social connectedness, as well as to determine the acceptability and feasibility of service delivery to older people in their homes using broadband enabled technology.

Collaborating organizations in this Victorian Government funded project include Moreland City Council, National Ageing Research Institute, Microsoft, Institute for a Broadband Enabled Society, NBNC0, AARNet, InfoXchange, Council on the Ageing and Merri Community Health Services.

Talking by telephone.

Chronic Obstructive Pulmonary Disease (COPD) is a lung disease that affects almost one in seven Australians aged 40 or over. While there is no cure for the disease, there are measures that people can take to help them to breathe easier, stay out of hospital and improve their quality of life. Depression and anxiety are important factors in determining outcomes for people with COPD. NARI is currently investigating whether telephone support is effective for people with COPD.

According to Professor Colleen Doyle, who is leading the project, compliance with medical treatments, pulmonary rehabilitation and psychosocial supports can improve quality of life and maintain health in people with COPD.

The project, funded by *beyondblue*, is testing cognitive behavior therapy against befriending which involves talking about positive experiences and avoiding discussing health.

NARI is working in conjunction with the Australian Lung Foundation, Alfred Health and Caulfield General Medical Centre, Melbourne Health, Eastern Health, Austin Health, Bendigo Health, Peninsula Health and Barwon Health.

Improving the mental health of carers

Carers have the lowest level of wellbeing of any group in the Australian community, according to the Australian Unity Wellbeing Index Surveys.

They fare worse on measures of stress and depression than the general population, and those caring for someone with dementia do even worse.

Samantha Loi is a postgraduate student working with NARI through its links with the University of Melbourne. Funded through the National Health and Medical Research Centre, Samantha is working on the IMPACCT (Improving Mood through Physical Activity in Carers and Care Recipient Trial).

Working under the leadership of Clinical Associate Professor Briony Dow, Samantha is investigating what triggers poor mental health in older carers. Her PhD is considering a number of characteristics in carers, which may have an impact on their mental health - personality, burden and attitudes to ageing. These characteristics will then be compared in two groups of older carers, those who are depressed, and those who are not, and seeing how these differ.

“Working with NARI gives me the opportunity to learn directly from specialists in the ageing research field and work on research which will directly benefit older Australians.”

The program works with volunteer carers from Melbourne, Ballarat and Geelong in collaboration with Carers Victoria, Carers Choice Ballarat and the University of Melbourne.

NARI is always interested to hear from people wishing to volunteer. Please contact us on either 03 8387 2305 or by email: info@nari.unimelb.edu.au



What next? Future challenges

The Intergenerational Report Australia to 2050: Future Challenges anticipates that the ageing of our society will increase government spending and slow economic growth.

NARI is already well positioned to be able to address the major challenges and opportunities that are likely to emerge over the coming decades.

Its research is already highly sought after by all governments, not only helping to inform policy but also where and how to direct funds.

The Productivity Commission Inquiry Report *Caring for Older Australians* (June 2011) highlighted the many deficiencies in the current aged care system and called for greater price transparency and ease of use for the consumer.

While further advances in the management of some diseases are expected, more people will require complex care for dementia, diabetes and other morbidities associated with longevity, as well as palliative and end-of-life care.

NARI is well advanced in its clinical research, evaluation of care and a commitment to promotion of health and wellbeing with a focus on the person.



Through its work, NARI is already addressing these challenging questions.

Leading research

NARI also plays significant leadership roles in peak Australian research and professional groups such as the Australian Association of Gerontology, Pain Australia, Psychology and Ageing Interest Group and many others. NARI is a member of the Australian Association of Medical Research Institutes. Our involvement with these different groups ensure a collaborative approach is taken to researching and solving issues affecting older people

Strong publications record

NARI's researchers collaborate with other international specialists and frequently address international and national conferences as a way of ensuring research findings are shared. NARI's researchers have an enviable publication record in many national and international journals.

New technologies

Its work in new technologies, as well as the use of social media and new portable devices, are already enabling older people to remain healthy and independent for as long as possible.

New education

NARI's role in providing education to health professionals, aged care professionals and students is also set to become more crucial as delivery of health services changes to incorporate e-Health solutions and new technologies.

New agenda

NARI is well positioned with its extensive networks within the ageing research and services community and its collaborations with other organisations to continue to drive a new agenda that will help transform the lives of Australia's ageing population.

Our work is
making an impact.

How you can help

There are many ways that individuals and companies can support NARI including:

Donate Volunteer
Fundraise Campaign

Whatever you choose to do will make a difference.



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