



University of
Southern
Queensland



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Health Research

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Research at the University of Southern Queensland

The University of Southern Queensland is a dynamic, regional University that has established its position as a prominent teaching and research institution, providing education worldwide from three physical locations across South East Queensland (Toowoomba, Springfield, and Ipswich) with an extensive online presence. The University's mission is to drive economic and social development through higher education and research excellence.


University researchers are working directly with local communities, industry, and our international partners to form strong and enduring research partnerships that deliver tangible benefits and real impact. The University's world-class research institutes, centres and schools are home to unique state-of-the-art facilities enabling our researchers to deliver a broad range of research outcomes across multiple disciplines.





The University of Southern Queensland is home to state-of-the-art biomedical laboratory facilities that strengthen the University's teaching and research nexus and foster connections with regional community and health service providers to deliver relevant, pragmatic, evidence-based health solutions.

The University's Flagship Research Areas

 Health, including Sport and Exercise Science, Mental Health and Allied Health.

 Agriculture, including Climate Science, Drought Mitigation and Adaptation, Crop Health, Agricultural Technology and Environmental Science.

 Space and Defence, including Astrophysics, Hypersonics and Rocketry, and Materials Engineering.

 Regional Development, including Agribusiness, Energy, Sustainable Economic Development, Regional Decarbonisation, Innovation, Workforce, Wellbeing, Climate Variability, Culture and Heritage.

Research Excellence

The global reach and world-class quality of the University's research is confirmed by International Rankings and the Australian Research Council's Excellence in Research for Australia (ERA) Report. In the most recent ERA Report, the University's research was rated as 'world standard or better' in 30 areas of research and 18 fields of research were rated as 'well above world standard'.



The following 18 fields of research received the ultimate accolade of 'well above world standard'



Astronomical and Space Sciences
Materials Engineering
Mechanical Engineering
Numerical and Computational Mathematics



Environmental Science and Management
Agriculture, Land and Farm Management
Crop and Pasture Production



Physical Sciences
Medical and Health Sciences
Human Movement and Sports Science



Clinical Sciences
Psychology
Nutrition and Dietetics
Public Health and Health Services



Chemical Sciences
Inorganic Chemistry
Macromolecular and Materials Chemistry
Microbiology



In the 2024 Times Higher Education World Rankings, the University of Southern Queensland was ranked in the 350-400 band and is ranked #154 in the world for Research Quality.



In the 2024 Times Higher Education Young University Rankings, the University of Southern Queensland was ranked 55 in the world.

The University of Southern Queensland's Health Research Portfolio

Health is a flagship for the University of Southern Queensland, with a particular focus on advocating for the health and wellbeing of rural and regional communities. As a regionally based institution with geographic reach, the University is well placed to respond to the health needs of regional Australia, where social determinants play a particularly strong role in influencing health outcomes.



Professor Sonja March is the Director of the Centre for Health Research and is the Mental Health Program Theme Lead.

Health Research

Much of the University's health research is concentrated within the multi-disciplinary Centre for Health Research, which takes an interdisciplinary approach to health issues that have the greatest impact on communities, especially in regional Australia.

The Centre sits within the University's Institute for Resilient Regions and has wide-ranging research expertise in behaviour change, chronic disease, mental health, ageing, artificial intelligence and technological innovations and health equity. The Centre conducts high-impact research with a focus on the development, dissemination and translation of knowledge as well as capacity building and community and stakeholder engagement.

The strategic focus on regional issues is fostered by longstanding partnerships with regional healthcare

providers and connectivity with communities who are benefiting directly from the translation of collaborative research into practice.

The University's research seeks to understand and address overall trends in the social determinants of regional health, such as lower levels of income, employment, and education, higher prevalence of lifestyle and behavioural risk factors, increased risks related to occupational accidents and injury, and, in some areas, greater difficulty accessing healthy food such as fresh fruit and vegetables.



The University has a highly regarded reputation in the delivery of teaching in nursing, health science, and allied health disciplines including psychology, counselling, sport and exercise science, paramedicine, biomedical science and medical laboratory science.

Research Themes

Focused areas of health research strength include:

- **Mental Health and Wellbeing** including innovative approaches to improving the delivery of evidence-based care, particularly for priority populations such as children and families and regional Australians.
- **Cancer Control and Survivorship** including understanding and improving the disparities between regional, rural and remote cancer survivors and their city-based counterparts who experience better outcomes in access to care and quality of life and trialling new models of care.
- **Health Equity** which aims to reduce disparities and improve health outcomes among priority populations including culturally and linguistically diverse (CALD), First Nations, Neurodiversity, Sexuality and Gender.
- **Technological Innovations, Artificial Intelligence and Health** including development of innovative medical materials, and the application of AI for the assessment of mental and cognitive states, and detection of chronic illness risk.
- **Health Promotion** focusing on strategies for improving individual wellness, physical health and healthy lifestyles and community wellbeing (public health). Projects examine the role of physical activity and screen time in health, sports and activity-based interventions, and public health approaches to promoting community health and wellbeing.
- **Ageing and Health** exploring the ageing process and care of older adults from an inter-disciplinary perspective (nursing, biomedical, allied health). Projects examine both healthy ageing and the more common clinical conditions that tend to occur in older age, like dementia, stroke and other health problems.

Infrastructure

- **Sport and Exercise Clinic** operated by the University's School of Health and Wellbeing offers a variety of services to the public, such as assessment, exercise prescription and education for individuals and groups. The clinic also provides the University with important facilities that enable research into the effects of exercise and physical activity on health outcomes.

Bachelor of Paramedicine students develop their practical skills in the University's Paramedic Simulation House, preparing them for unpredictable real-life scenarios.



Mental Health and Wellbeing

The University of Southern Queensland has extensive expertise in mental health research with a specific focus on child and adolescent mental health, suicide behaviours and prevention, technology-based interventions, and improving access to mental health services for rural and remote populations.

The Centre for Health Research delivers the Innovative Mental Health Solutions Research Program, which aims to examine cutting-edge approaches to better understand, detect and improve mental health and wellbeing, especially in regional communities.

The Program explores opportunities to integrate digital, innovative, flexible solutions into the provision of health and mental health services through a consolidation of expertise, collaborations and projects that offer unique insights into regional needs.

Research Projects

Translating evidence-based interventions into population-level digital models of care for child and adolescent mental health

Of the more than 500,000 young Australians who experience mental health issues, just half seek help and less than 5 per cent gain access to specialist care for adolescents and children. Anxiety in children and adolescents is very common and without intervention, can lead to significant and ongoing problems into adulthood.

Professor Sonja March has been researching mental health in young people for 18 years. Together with colleagues, she created an online program for child and adolescent anxiety, known as BRAVE. In 2014, Beyond Blue supported Professor March's research team to translate BRAVE into an open access platform which is free for all Australians. The program has had more than 80,000 registrations to date, and research data shows that those engaging in the program show substantial reductions in anxiety.

In 2019, the University received a \$5 million grant from the Federal Government's Medical Research Future Fund, through the Million Minds program to Professor March's team who have since built on the BRAVE program to develop a comprehensive online platform for anxiety, depression and related difficulties, that integrates detection, assessment, and tailored interventions.

The project team includes researchers from Griffith University, The University of Queensland, Queensland University of Technology, Federation University and The Australian National University.

The Manna Institute: Re-imagining mental health in regional Australia

The University of Southern Queensland is a founding member of the Manna Institute; an Australian-first virtual research and training institute dedicated to improving the mental health and wellbeing of rural, regional and remote communities. The Manna Institute's dedicated team of university researchers, industry and community partners actively collaborate with service providers and agencies, First Nations peoples and those with lived experience of mental illness.

A key focus of Manna Institute is the establishment and expansion of mental health workforces. From clinical health professionals and peer workers to community advocates and regional researchers, Manna Institute is building workforce capacity, diversity and sustainability through exciting new collaborations.

The Manna Institute is building strong foundations to deliver initiatives with impact through:

- Engagement in partnerships and conducting practical research that informs real change.
- Championing innovative projects, to better support our communities and save lives.
- Delivering mental health solutions that are about people as well as programs, especially in regional Australia, where mental health workers are in short supply and work with limited resources across vast distances, leading to high turnover.

The Manna Institute is funded by a \$3.66 million Commonwealth grant under the new Regional Research Collaboration fund. The Manna Institute brings together leading mental health researchers from seven universities in the Regional Universities Network: Charles Sturt University, Central Queensland University, Federation University, Southern Cross University, the University of Southern Queensland, the University of Sunshine Coast and lead institution the University of New England.

University Researchers Professor Tracy Kolbe-Alexander, Professor Sonja March and Dr Govind Krishnamoorthy are members of the Manna Institute.



Delivering a Staged Mental Health Care Plan for Children in Education Settings

Almost 50% of children with mental health difficulties do not receive any treatment, placing them at risk of lifelong disadvantage. Evidence-based digital mental health interventions are efficacious and scalable and offer the ability to overcome many barriers to receiving treatment, yet they are underutilised.

Researchers from the Centre for Health Research have developed a world-first animation-based instrument for children aged 4-12 years that detects emotional and behavioural difficulties via child self-report, to incorporate their valuable perspective. With funding from Australian Rotary Health, the research team is now conducting a trial which aims to extend this detection tool into a staged-care mental health screen and support plan (MHSSP).

In this study, the MHSSP will be implemented in school settings to facilitate universal detection, assessment, early intervention, and referral to specialist support for the most common childhood emotional and behavioural disorders.

Early intervention will include online psychoeducation training modules embedded in the MHSSP to improve parent problem-recognition and understanding, monitoring, and awareness of help-seeking avenues, as well as child modules for problem recognition and coping. Whilst school-based approaches have been trialled to increase adolescent help-seeking, no coordinated system exists for younger children that address both child and caregiver problem identification, awareness, help-seeking, and receipt of intervention.

This cluster randomised control trial will test the MHSSP in primary school settings with a minimum of six schools. Following demonstration of its efficacy in detecting distress, improving awareness, directing families into appropriate treatment, and facilitating formal help-seeking, the MHSSP will be disseminated nationally through an online platform. This free service will provide Australian children and parents with rapid and accessible mental health screening, guided pathways to streamline mental health care and will promote caregiver help-seeking literacy and behaviours, subsequently improving the trajectories of those children with currently unidentified or untreated mental health difficulties.



The Centre for Health Research is delivering a school-based program to support the early detection and management of trauma and stress in children.



Early Intervention for Child Mental Health: A Pragmatic Implementation Trial with Regional Schools

There is a higher prevalence of mental health disorders in children exposed to traumatic, adverse childhood experiences and certain social determinants which can be more prevalent in regional areas. Unfortunately, most children experiencing traumatic stress do not receive support.

School-based programs can support early detection and intervention. Researchers from the Centre for Health Research have developed the Trauma-informed Behaviour Support (TIBS) program - a novel, co-designed, school-based intervention aimed at reducing post-traumatic stress and behavioural concerns in children.

The intervention is delivered individually and in a group format and is focused on building children's social and emotional skills, including emotional literacy, somatosensory regulation, and communication. The program has been designed to be integrated with existing evidence-based educational practices and systems, providing

trauma-specific interventions for children, and also providing supports to educators and key stakeholders to enable successful implementation of the program.

Building on promising preliminary results when delivered with First Nations students in the Northern Territory, the research team has received funding from Australian Rotary Health to evaluate TIBS in a pragmatic implementation trial, comparing outcomes between two regional schools in Queensland.

The present study is the first to assess the additive effects of trauma informed care, positive behaviour support and multi-tiered systems of support in addressing child mental health concerns in Australian regional schools. The outcomes will inform the effective, sustainable and cost-effective implementation of school-based interventions, particularly in regional areas, where access to mental health services for children is limited.

Cancer Control and Survivorship

The Centre for Health Research conducts research and advocacy activities which aim to bring together government, health services, and patients to develop evidence-based and innovative interventions that improve outcomes for those who have experienced a cancer diagnosis.

University researchers are working on several joint initiatives with partners including Cancer Council Queensland and Prostate Cancer Foundation Australia to improve cancer survivorship and quality of life for regional Queenslanders. Professor Jeff Dunn AO is Chair of Cancer Survivorship for the

University and has spent more than 30 years working across cancer control and survivorship initiatives, with a particular focus on regional Australian men who have experienced a diagnosis of prostate cancer.

Professor Jeff Dunn AO is the current President of the Union for International Cancer Control and leads efforts to shape cancer control on a global scale.

Prostate Cancer Survivorship

Prostate cancer is now the most common cancer diagnosed in Australia and men living in regional or rural Australia are approximately 24% more likely to die from the disease than their urban counterparts. Researchers from the University of Southern Queensland are working in partnership with the Prostate Cancer Foundation Australia (PCFA) to improve cancer survivorship and quality of life for regional Queenslanders.

The world-first study Prostate Cancer Survivorship Essentials or PCEssentials is a National Health and Medical Research Council Partnership led by the University of Southern Queensland and the PCFA.

PCEssentials integrates evidence-based strategies to improve men's quality of life and outcomes after hormone therapy, with the aim of enhancing their ability to support their own health and wellbeing. PCEssentials includes nurse-led survivorship care interventions that are delivered by phone or video-call, making the program accessible to men across all geographical locations.

A similar project conducted in partnership with PCFA has enabled the development and evaluation of a patient-centred Prostate Cancer Survivorship Care Plan known as 'My Personal Plan' – an evidence-based resource tailored to individual needs, providing a powerful tool for comprehensive care.

Virtual Prostate Cancer Survivorship Care

The University is partnering with the West Moreton Hospital and Health Service to test a Virtual Care platform that will support men undergoing treatment for prostate cancer to stay at home and out of hospital. The Virtual Care platform is delivered via a novel nurse-led approach and is measuring program acceptability and feasibility from both the patient and clinical stakeholder perspective, with a view to rolling out the program on a larger scale.

The program will aim to prove key indicators of quality of life, including distress levels related to diagnosis, and management of side-effects of treatment such as insomnia and fatigue. The test program aims to build capacity to address this nationally significant health issue and improve the outcomes for Australian men in the future.



Regional and Rural Cancer Survivorship

Cancer is a leading cause of death in Australia, and patients living in regional and rural areas experience poorer outcomes after a cancer diagnosis than their city counterparts. In partnership between the Cancer Council Queensland, researchers from the Institute for Resilient Regions are seeking to understand the socio-cultural, behavioural, psychological, and health-system factors shaping the differential rates of cancer mortality and morbidity in regional Queensland.

The landmark 'Travelling for Cancer Treatment' study (Building Regional Resilience in Cancer Control) follows cancer patients who travel to receive treatment, to provide insight into the unique challenges faced by this group. The study is paying particular attention to the experience of cancer patients in regional Queensland, from cancer screening through to clinical management, as well as medical and psycho-social support received over the five-years after diagnosis.

This project ultimately aims to deliver an evidence-base to enable advocacy into additional public investments in regionally focused research and translational initiatives that are vital to improving healthcare for regional Queenslanders.

Health Promotion

Through a commitment to reducing the burden of disease, the Centre for Health Research is boosting the wellbeing of priority populations through the development and assessment of health promotion initiatives.

The Centre has a particular focus on investigating the role of physical activity in reducing the impact of chronic disease and improving mental health and general wellbeing. Ultimately, the Centre seeks to contribute to the evidence base which supports the development of effective interventions that improve the health and lives of as many people as possible.

In 2019, Professor Stuart Biddle was among 27 international experts chosen by the World Health Organisation (Who) to join their Guideline Development Group to review the global recommendations for physical activity and

sedentary behaviour for the first time in more than a decade. Professor Biddle, an expert in physical activity and sedentary behaviour, specialising in behaviour change, took part in a 16-month process which focused on an extensive review of the best available evidence from 2017 to 2019. The updated guidelines reinforce the existing message that any type of activity that raises heart rate and builds muscle can be beneficial, and also highlight the risks of sedentary behaviour, recommending adults break up long periods of sitting by getting up and moving around regularly, and that children should limit the amount of recreational screen time.

Research Projects

Creating healthy and active communities

Physical environments can play a huge role in influencing the physical activity levels of a community. Cities with infrastructure such as walkways, paths, signage, and areas free of traffic tend to be more conducive to 'active transport' which allows people to travel by foot or by bicycle rather than relying on sedentary transport by vehicle. Professor Tracy Kolbe-Alexander from the University's School of Health and Medical Sciences investigates the impact of community infrastructure design on health and wellbeing, with a particular focus on community-based participatory approaches.

Professor Kolbe-Alexander is currently working on a project funded by Toowoomba and Surat Basin Enterprise and conducted in partnership with the Safer Toowoomba Regional Partnerships Obesity Prevention Focus Group, the Toowoomba Region and the Our Voice network to decrease dependence on private vehicles for transport. Nine out of 10 trips in Toowoomba are made with a private vehicle despite the average distance being less than 5km and the dependence on private vehicles for transport in Toowoomba is higher than in Greater Brisbane and the Sunshine Coast.

The project engaged community members as 'citizen scientists' and provided them with the opportunity to advocate for meaningful improvements in their neighbourhoods. The many themes and suggestions that emerged from the process will be translated into infrastructure design and planning that will ultimately enable more physical activity and healthier communities.



Square Eyes or All Lies

Professor Stuart Biddle from the Centre for Health Research is collaborating with a multidisciplinary team on a project that is examining Australian parents' number one concern about their children's health and behaviour: their interactions with electronic screens. Current screen time guidelines are based on low-quality evidence and lack the nuance required to address this complex issue.

This project, which draws on expertise in psychology, education, public health, and computer science is being led by the Australian Catholic University, with funding from the Australian Research Council. Members of this research team have published some of their review findings in Nature Human Behaviour, where they harmonised effects from 102 meta-analyses (2,451 primary studies; 1,937,501 participants) on screen time and outcomes.

They found that screen use was negatively related to literacy, but this effect was positive when parents watched with their children. For health outcomes, they found evidence for several small negative relationships, including social media being associated with depression. This work has also facilitated further research by Professor Biddle which is funded by the Ipswich Hospital Foundation. This new project examines parental views and perceptions about screen time and reviews existing guidelines to ensure they are practical for families.

The impact of e-cigarettes on lung health and exercise

Over the past decade, the use of e-cigarettes, commonly known as vaping, has increased significantly, particularly among young people. Debate over whether using e-cigarettes is safe has been a hot topic, largely due to the lack of evidence about the effects of their use. It is estimated more than 200,000 Australians use e-cigarettes, with the greatest use believed to be among young adults. The most common reasons adults start using e-cigarettes is because they believe they are safer than smoking tobacco or can help them quit smoking, despite a lack of evidence of their effectiveness.

In a world-first study, University of Southern Queensland researchers have investigated if the regular use of e-cigarettes in young and otherwise healthy adults can reduce respiratory function and exercise capacity, in response to the pressing need for a greater understanding of the risks and health dangers of e-cigarettes.



Professor Stuart Biddle was named in the prestigious Clarivate Highly Cited Researcher list in 2018 and 2021.

Associate Professor Dean Mills, a respiratory physiologist from the University's School of Health and Medical Sciences recruited young, otherwise healthy regular e-cigarette users aged 18-35 years to investigate the extent to which e-cigarettes may impair lung development and lead to long-term health problems.

The research project has also investigated their susceptibility to lung infections, including coughs, colds and even COVID-19. Ultimately the project aims to add to the body of evidence that will help e-cigarette users to understand the effect of inhaling the chemicals contained in e-cigarettes and the potential consequences for their lung function and overall wellbeing. This evidence will also support future legislative changes such as those recently introduced to manage the import, advertising, availability and sale of e-cigarette products.

Technological Innovations, Artificial Intelligence and Health

The University of Southern Queensland has embraced advances in technology that are enabling the application of Artificial Intelligence (AI) to a range of health diagnostics and treatment interventions.

The use of AI is an emerging area of research strength for the University, with a particular focus on machine learning and the development of predictive algorithms with a specific focus on the following areas:

- **EEG Based Brain Activity Decoding** for clinical instrumentation and the early detection of neurological disorders.

- **Human Head Modelling.**
- **Development of an Auto Transcranial Doppler Ultrasound Probe** using machine learning algorithms.
- **Development of an Intelligence Method for Realistic 3D Modelling** of the human cerebral blood vessels from Magnetic Resonance Data.
- **Developing Decision Support Systems** to help dental clinic use text mining and knowledge engineering techniques, and an ensemble machine learning model to help heart disease patients in tele-health environment.

Professor Rajib Rana is a computer scientist from the School of Mathematics and Computing with research expertise in AI, machine learning and automatic emotion recognition.



Research Projects

Using Artificial Intelligence to prioritise emergency calls

In 2020, Professor Rajib Rana was awarded an Advance Queensland Industry Research Fellowship to develop AI algorithms which detect physiological changes in speech caused by distress, for use by emergency service call operators to automatically determine distress levels in people's voices. Unfortunately, about one-third of calls made to emergency helplines are hoax calls, which waste valuable resources and place lives at risk. This technology allows call handlers, dispatchers, and clinicians to identify hoax calls so they can prioritise services to callers who are most at risk.

Health services experience a large number of mental health service requests, and the distress interference system enables call operators to effectively manage high volumes of calls, provide earlier intervention and assist in faster ambulance deployment times to potentially save lives.

An AI-assisted STI risk assessment and Linkage to Care coaching system

University researchers Professor Yan Li, Dr Zhaohui Tang and Professor Amy Mullens have been awarded a competitive research grant from the Australian Government as part of its First National Blood Borne Viruses and Sexually Transmissible Infections Research Strategy 2021 – 2025. The grant is supporting the development of a mobile app, powered by AI, centred around sexual health risk behaviours, and screening and testing for Sexually Transmissible Infections, or STIs.

Due to the sensitive nature of STI related data, Australians have frequently reported privacy and confidentiality concerns as one of the main barriers to STI testing and treatment. To address this barrier, the research team took an innovative approach to make the AI-based app secure so that participants' data privacy and confidentiality are guaranteed. The app enables a large group of participants to collaboratively build a common and accurate AI model without exchanging sensitive raw data among themselves.

The app will be linked to patterns of behaviour, demographics, and information that relates overarching algorithms and the symptoms the user

may be experiencing. The app delivers real time health support and messaging – or 'nudges' – to encourage more timely treatment. By reducing the barriers to testing, this research project will improve access to medical services, particularly among important priority groups.

An automated mood inference tool for early detection of relapse in mood disorders

According to the Australian Institute of Health and Welfare, mental health issues are the leading cause of burden in young adults aged 25-44 years. Fortunately, research indicates that early detection and intervention can significantly improve the outcome for those who are experiencing mental health issues. With funding from the Advance Queensland Program, Professor Rajib Rana developed a mood inference tool for use by people who have previously been diagnosed with mental health issues.

This tool can automatically track mood during everyday phone conversations on a smartphone and detect potential relapses in pre-existing mental health conditions. By notifying users of prolonged negative moods, the early relapse prediction system prompts them to seek assistance from healthcare professionals. This cutting-edge technology has the potential to revolutionise mental health care in Australia and beyond.



Ageing and Health

This research program explores ageing and care of older adults from an interdisciplinary perspective in acute, community and specialisation settings.

Research Projects

The West Moreton Care at End of Life and Older Persons Care Collaboratives Project

Nurse researchers are partnering with the Darling Downs and West Moreton Primary Health Network to bring together like-minded government and non-government services and community to optimise systems, processes, and outcomes in social care activities with the community. The Older Persons Care Collaborative and End of Life Care Collaborative hosts 60 organisations in its membership list and works across three networks of discussion.

Nurse researchers engage innovative world café approaches through co-designed activities to improve care and community development for West Moreton seniors and those diagnosed with a life limiting illness. The nurse led initiative builds community and health service capacity and the Older Persons Care Collaboratives Project is currently focused on several primary and social care interventions:

Somerset Assist

Somerset assist is a novel self-managed community aged care initiative in the Esk and Somerset area. The project engages a co-design approach to establish a self-managed aged care service that employs and trains locals in personal care and provides local aged care services for the residents of Esk and its surrounds.

This reduces the need for locals to pay for travel from their allocated aged care package and provides employment in the local area for those caring for people at home.

Emergency Management Information Project for Regional and Rural Seniors

Self-preparedness of local seniors at times of disaster planning is a nurse led project that adopts a person-centred disaster preparedness approach. The emergency medical information project covers the Somerset, Lockyer, Scenic Rim and Ipswich areas to provide seniors with accessible health information for use during flood and evacuation.



With ageing populations growing at extraordinary rates worldwide, Associate Professor Melissa Taylor's research is developing solutions to the growing demand for care and support for older people.

Dental care for older Australians

The Royal Commission into Aged Care Quality and Safety identifies complex issues leading to substandard care and recognises the neglect of oral health care in residential aged care. Without Medicare rebates for dental care, affordable access for many ageing Australians is not achievable. With funding from Aged Care Research and Industry Innovation, this translational project optimises oral health awareness, education, screening and referral using a digital health platform at Blue Care's Nowlanvil residential care facility in Ipswich Queensland.

Working collectively with a Dentist, Uniting Care, Senior Dental therapists, and West Moreton Older Persons Care Collaborative, University nurse researcher Associate Professor Melissa Taylor leads the team that provides oral health screening for residents from the comfort of Nowlanvil instead of a face-to-face dental appointment.

This approach provides residents with access to care plans and early oral health referral pathways to avoid complex oral health issues including malnutrition, abscess development and pain.

Courageous Conversations

University research nurses are working with clinicians to prepare them for complex and difficult conversations when a life limiting illness diagnosis occurs. Words are often difficult to find and answers to questions can be confronting to the best clinician. Health staff are upskilled to provide comfort and support whilst difficult conversations are had.

The project is conducted through a compassionate communities approach of learning, engaging and understanding end of life needs and enhancing workforce participation to support community through difficult times.

Health Equity

This research theme brings together inter-disciplinary researchers to reduce disparities and improve health outcomes among priority populations in health and wellbeing. Key programs of research include Culturally and Linguistically Diverse (CALD) Communities, Neurodiversity, and Sexuality and Gender.

Research Projects

HIV prevention knowledge, attitudes and practices among young Queenslanders: PrEP access for at-risk youth

Pre-exposure prophylactic (PrEP) medications for the prevention of HIV infection were first approved by the Australian Therapeutic Goods Administration in 2016, for vulnerable populations aged over the age 18. Certain cohorts of Australian youth face age-related trajectories of risk that place them at future vulnerability to HIV infection, making them a continuously emerging priority population.

This requires an understanding of the barriers and facilitators youth face across multiple socioecological levels (such as individual, cultural, social, and structural) to provide models of care to this group that can effectively facilitate the uptake of PrEP.

This project seeks to identify and explore the knowledge, attitudes, and practices of Queensland young people (16-24 years) in relation to their usage of PrEP.

This research will provide critical insight into youth specific barriers and facilitators to PrEP engagement and initiation. Outcomes of this research will inform development of appropriate and acceptable youth-focused models of PrEP education and provision with a particular focus on youth under the age of 18 in Australia, thereby providing evidence and strategies to improve long term health outcomes of young people at risk of HIV infection and reduce the economic burdens associated with life-long HIV treatment and care.



Increasing the capacity of GPs to provide Hep B testing for Chinese and Vietnamese community members

Despite the widespread availability of vaccination for hepatitis B virus (HBV) in Australia and its overall low prevalence in the general population, chronic hepatitis B (CHB) remains a serious public health challenge within some subpopulations. While constituting approximately 5% of the Australian population, people born in the Asia-Pacific make up over 50% of the estimated population living with CHB, the largest proportions of whom are Chinese and Vietnamese migrants.

Initial consultations with service providers and community members, suggest that general practitioners (GPs; and nurses) are typically the first point of contact for many Chinese and Vietnamese community members, and are important stakeholders in promoting HBV screening and risk reduction strategies. With funding from the Sexual Health Research Fund, University researchers are investigating the barriers, capacity and challenges within general practice for the delivery of optimal HBV care to affected members of the Chinese and

Vietnamese communities. The project is exploring the critical points along the patient journey, from testing and diagnosis to treatment. In conjunction with GPs, the project will seek to develop guidelines for a culturally responsive pilot program designed to improve uptake of HBV testing and follow-up management, specifically treatment, among Chinese and Vietnamese Community members.

This study will provide an opportunity to educate GPs on contemporary HBV issues and start to redress current inequalities in Culturally and Linguistically Diverse access to HBV services. The direct engagement with GPs who are already managing the care of Chinese & Vietnamese communities identified as being at higher risk of HBV exposure is innovative – with researchers, community members and clinicians working collaboratively to co-create knowledge and strengthen the evidence base to inform best practice.





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