

RESEARCH
STRATEGIC PLAN
2022-32



Barwon
Health

A WORLD CLASS
RESEARCH ECOSYSTEM

CONTENTS



We, Barwon Health, acknowledge the Traditional Owners of the land, the Wadawurrung people of the Kulin Nation.

We pay our respects to the Elders both past and present. We thank the Traditional Owners for custodianship of the land, and celebrate the continuing culture of the Wadawurrung people acknowledging the memory of honourable ancestors.

STEERING COMMITTEE

The Research Strategic Plan Steering Committee, including Dr Simon Woods, Prof Peter Vuillermin, Prof Julie Owens, Prof Rachel Huxley and Anna Burgess provided oversight and leadership for the development of the Barwon Health Research Strategic Plan.

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MESSAGE FROM THE CHIEF EXECUTIVE AND DIRECTOR OF RESEARCH

Research capability is integral to achieving the goals of the overarching Barwon Health Strategic Plan. We recognise the compelling evidence that engagement with research drives improvements in health service performance and consumer outcomes. The benefits accrue over time and require a clearly defined strategy and sustained investment. As the last few years have shown, we live in highly dynamic times, and face unprecedented health, economic and environmental challenges. Now more than ever, our choices must be informed by science.

We have a strong history of research. Barwon Health, in partnership with Deakin University, is home to one of the most renowned mental health research programs in the world.

Over the coming decade we will build on existing capability in epidemiology, drug discovery and clinical trials to become the exemplar listening and learning mental healthcare system. Provision of cradle to grave care to a large and engaged community has enabled us to establish internationally important population based cohort studies.

Projects such as the Barwon Infant Study (BIS) and the Geelong Osteoporosis Study (GOS) combine 'people power' with biobanking and cutting edge laboratory science to identify new targets for prevention, early diagnosis and treatment of childhood allergic diseases through to fractures and frailty among the aging. Similarly, our infectious diseases program leverages our setting to address population health responses to challenges including *Mycobacterium Ulcerans*, *Hepatitis C*, and *SARS-Cov-2*, as well as in-hospital conditions such as *Staphylococcus* infections.

Barwon Health's established clinical trials groups in Cancer Services, Infectious Diseases, Endocrinology, Cardiology, Orthopaedics and Intensive Care deliver access to novel therapies, and drive a culture of enquiry, rigor and efficient translation of evidence in practice. The generous support of the Costa family is enabling the establishment of an overarching system and infrastructure for clinical trials that will expand and diversify access, increase workforce engagement, support sustainability, and ensure readiness for implementation of the National Clinical Trials Governance Framework.

Partnership with our consumers is a crucial element of our research strategy. Barwon Health will invest in systems that enable consumer input across the research journey: from ideas incubation, to project design, funding applications, implementation, interpretation of findings, and then translation into practice and policy. Our research goes beyond scientific insights, to inform how we partner with people to improve their health and wellbeing - a philosophy embodied by our iValidate program which drives innovations and excellence in person-centred end-of-life care.

Barwon Health will establish a Research Executive to oversee the implementation of this strategy, in combination with improved systems for governance, reporting and allocation of resources. We will invest in a more enabling environment and a more research active workforce. We will identify and support emerging researchers in all disciplines, and improve opportunities for nursing, allied health and female clinicians to become research leaders. Barwon Health recognises it is crucial that we invest in practical pathways for people to complete research training while maintaining their clinical development and role. We will build synergy between safety, quality and research. We will consolidate and improve existing partnerships and identify new opportunities relevant to our priorities. In so doing, Barwon Health will create a world class research ecosystem, through which we will support strategic programs of work addressing well defined and important goals.

Barwon Health's vision for research is about being sufficiently ambitious and deliberate to ensure our efforts are both locally relevant and internationally important. We will be measured not only by the evidence we produce, but the impact we have on people's lives.



Frances Diver
Chief Executive



Professor Peter Vuillerman
Director of Research

The Barwon Health Research Strategic Plan has built on the work of the Barwon Health Research Strategy Discussion Paper and been informed by the Steering Committee, Research Strategy Town Hall meetings, the work of the Adrian Costa Clinical Trial Centre Steering Committee, the staff survey regarding research; and advice from Barwon Health clinician researchers and members of the Barwon Health Executive.

RESEARCH STRATEGIC PLAN SUMMARY

OUR VISION

WITHIN TEN YEARS BARWON HEALTH WILL MAKE INTERNATIONALLY IMPORTANT CONTRIBUTIONS TO RESEARCH THAT HAVE A MEASURABLE IMPACT ON THE HEALTH OF OUR COMMUNITY.

ENABLING MISSION

TO DEVELOP A STRATEGIC, WELL GOVERNED AND SYNERGISTIC RESEARCH ECOSYSTEM THAT CREATES OPPORTUNITIES, BUILDS CAPABILITY AND DRIVES CHANGE.

THEMES

- Partnership with our community.
- Playing to our strengths.
- Locally relevant; internationally impactful.
- Connected data, biosamples and systems.
- Strength through partnerships.

OUR ASPIRATION

- A world class research ecosystem and culture.
- Excellence in cohort studies, clinical trials and translation.
- Improved outcomes through integration of research and clinical care.

PROGRAM MISSION

TO DELIVER A COHESIVE, COORDINATED AND SUPPORTED SUITE OF RESEARCH PROGRAMS THAT WILL ACHIEVE THE RESEARCH VISION



DEVELOPMENT

- Enhance synergy between research, safety and quality to drive continuous improvements in care.
- Improve health outcomes for our most disadvantaged populations through public health research and translation.
- Develop allied health research capacity to drive innovation in digital health.



EMERGING

- Build the capacity and capability of cancer services research to drive improvements in person centred outcomes.
- Build the exemplar listening and learning mental healthcare system.
- Improve person centred care for people with Motor Neurone Disease.



ESTABLISHED

- Improve the outcomes for people with infectious diseases.
- Prevent childhood allergic disease and asthma.
- Improve shared decision making and goal concordant care.
- Improve outcomes for people who require surgery.
- Improve the physical and mental health of the frail and ageing.
- Improve outcomes for people with musculoskeletal disease or injury.

THE ENABLERS WE WILL INVEST IN

1. IMPROVED GOVERNANCE AND REPORTING

- Establish the Research Executive.
- Efficient and robust ethics and governance.
- Robust and informative reporting mechanisms.
- Effective leadership, oversight of and monitoring of the Strategic Plan for Research.
- HREC accreditation as a multi-site reviewing entity.

2. A MORE ENABLING ENVIRONMENT

- Improved consumer engagement and co-design.
- Improve grant writing, biostatistics, health economics, and implementation science capability in partnership with Deakin.
- Improved data management and biobanking capacity.
- Supported HR processes.
- Establish research financial and activity reporting requirements and support.

3. A RESEARCH ACTIVE WORKFORCE

- Incorporate academic appointments into medical workforce strategy.
- Identify and support emerging academic leaders and promote equity and diversity.
- Increase research training and opportunities for higher degrees by research.
- Improved research opportunities for BH staff with Deakin University.
- Establish formal mentoring programs.

4. IMPROVED CLINICAL TRIALS CAPABILITY

- Grow the Adrian Costa Clinical Trials Centre.
- Expand access to clinical trials.
- Increase workforce engagement with clinical trials across disciplines.
- Achieve National Clinical Trials Governance Framework accreditation.

5. IMPROVED TRANSLATION

- Monitor and report translation of research into care.
- Increase participation in multicentre trials likely to change practice and efficiently translate trial outcomes.
- Establish a multidisciplinary forum with Deakin University to support co-production and translation.
- Build synergy between research, safety and quality to drive continuous improvements in care.

6. STRATEGIC PARTNERSHIPS

- Advance and realise the full benefits of the Barwon/Deakin Alliance for research.
- Strengthen Western Alliance partnership.
- Strengthen existing partnerships and identify new opportunities.
- Grow the Change to Improve Mental Health (CHIME) Translational Research Partnership.

VISION AND MISSION

The Vision set by the Barwon Health Strategic Plan 2020-25 is that:

BY 2050, EVERYONE IN OUR COMMUNITY ENJOYS THE BEST HEALTH AND WELLBEING IN VICTORIA.

The Barwon Health Research Strategic Plan 2020-25 represents a set of deliberate actions to work towards the complementary vision that:

WITHIN TEN YEARS BARWON HEALTH WILL MAKE OUTSTANDING CONTRIBUTIONS TO RESEARCH THAT HAVE A MEASURABLE IMPACT ON THE HEALTH OF OUR COMMUNITY.

As a collective we will ensure:

- We ask and answer research questions that are locally relevant and internationally important.
- We have a thriving research ecosystem, embedded in our health service.
- We partner strategically and productively.
- We play to our strengths.
- Our reputation, culture, capabilities and people attract and retain the best and brightest.

Barwon Health will be known as:

- A centre of excellence for population-based research and clinical trials.
- An exemplar of continuous improvement of clinical outcomes through integrated research.
- Having a world-class research ecosystem.

To achieve this Barwon Health will invest to establish a platform of enablers, creating a world-class research ecosystem that systematically promotes the conduct of high-quality research. This work will address recognised gaps, build on strengths and provide a structure for reporting progress.

We will focus on:

- Improved governance and reporting.
- A more enabling environment.
- A research active workforce.
- Improved clinical trials capacity.
- Improved translation.
- Strategic partnerships.

The Barwon Health Research Directorate will provide overarching governance for the delivery of the Research Strategic Plan (this document).

A portrait of Michael Berk, a middle-aged man with glasses, smiling. He is wearing a light blue button-down shirt under a dark suit jacket. The background is a solid blue color. To the right of the portrait, there is a white geometric network graphic consisting of interconnected lines and dots.

CASE STUDY – INSTITUTE FOR MENTAL AND PHYSICAL HEALTH AND CLINICAL TRANSLATION (IMPACT)

Barwon Health has a number of well-established research programs, the most prominent of these is IMPACT led by Professors Michael Berk and Ken Walder. With its origins at Barwon Health over 20 years ago, IMPACT is now an internationally renowned research institute and a compelling example of the potential of the alliance between Deakin and Barwon.

The IMPACT team consistently produce high impact research which accounts for around 40% of publications attributed to Barwon Health each year. IMPACT has a diverse, collaborative, interdisciplinary research program that maintains many of the attributes that Barwon Health is striving for at an organisational level.

Key elements in IMPACT's journey have been a consistent focus on culture and mentoring, clearly defined and important strategic goals, high value partnerships, and effective community engagement. Underlying all these elements is an unwavering commitment to contributing excellent science that makes a positive difference to people's lives.

A WORLD CLASS RESEARCH ECOSYSTEM



STRATEGIC RESEARCH PROGRAMS

The establishment of a world-class research ecosystem will support the progression of the Strategic Research Programs. These Programs have been developed by leading researchers at Barwon Health and are a starting point for the development of a cohesive, coordinated and supported Barwon Health research effort.

Each Strategic Research Program articulates how it supports the Barwon Health Vision statement. We anticipate that the number and content of the Strategic Research Programs will continue to evolve and align with Barwon Health priorities. For example, appointing a Professor of Nursing is a priority, and they will be supported to develop a nursing research program that is in synergy with the overarching Research Strategy.

Only through the collective impact of our enabling investments and Strategic Research Programs progressing together will Barwon Health be able to achieve its Vision.

Governance

Each Program will be overseen by a multidisciplinary steering committee including consumer representatives, and experts from Deakin University and other strategic partners.

Process and Reporting

Each Program will define its key five-year activities and milestones, progress against these milestones will be reported via the Director of Research to Barwon Health Executive. Investments will be prioritised and distributed through this reporting structure.

Meetings

Programs will provide updates on progress, barriers, and enablers to the bimonthly Research Leadership Group meetings. The Adrian Costa Clinical Trials Centre Advisory Committee will meet on the alternate month. We will hold monthly Idea Incubation Sessions, primarily to support early career researchers to develop their work, and quarterly Town Hall Meetings. The weekly Grand and Research Webinar Series will continue to provide a forum to disseminate Barwon Health and Deakin University Research. We will hold an Annual Symposium in late November, which will include public facing events.

Program Classification

To acknowledge the different stages of evolution and required supports, the Strategic Research Programs are identified as: in development, emerging or established.



DEVELOPMENT

- Enhance synergy between research, safety and quality to drive continuous improvements in care.
- Improve health outcomes for our most disadvantaged populations through public health research and translation.
- Develop allied health research capacity to drive innovation in digital health.



EMERGING

- Build the capacity and capability of cancer services research to drive improvements in person centred outcomes.
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- Improve outcomes for people with musculoskeletal disease or injury.



1 THE ENABLERS WE WILL INVEST IN



1. IMPROVED GOVERNANCE AND REPORTING

1.1 Establish the Research Executive

The Barwon Health Research Executive will support the Director of Research on the implementation, evaluation and direction of the Barwon Health Research Strategic Plan (this document).

1.2 Efficient and robust governance

Improved governance will enhance accountability and oversight of research; and improve our ability to correct gaps and obtain and implement strategic investments. Efficient systems will also build trust with industry, government and academia that Barwon Health provides a world class environment to conduct research.

1.3 Robust and informative reporting mechanisms

Increased visibility and transparency of research activities through useful, formal and robust reporting mechanisms to the Barwon Health Board and Executive. Improved communications to Barwon Health staff and to the broader community.

1.4 Effective leadership, oversight and monitoring of the Research Strategic Plan

The Research Executive will guide the implementation of the Research Strategic Plan (this document). The Executive will support the Director of Research to implement the plan and report progress to the Barwon Health Executive and Board.

1.5 HREC accreditation as a multi-site reviewing entity

Expanding the function of Barwon Health's HREC will allow Barwon Health to review multisite trials, providing a service for research in our broader region, increasing research income and enhance the reputation of the Adrian Costa Clinical Trials Centre to commercial sponsors as a 'one stop shop' for clinical trials.

2. A MORE ENABLING ENVIRONMENT

2.1 Improved consumer engagement and co-design

Provide training opportunities and leverage off existing expertise across Barwon Health to improve consumer engagement and input throughout the life of research programs. Improve researcher's access to efficient and effective systems for co-design.

2.2 Improve grant writing, biostatistics, health economics, and implementation science capability in partnership with Deakin

Work with Deakin and Western Alliance to ensure Barwon Health researchers have access to training, support and/or expertise in skills such as grant writing, biostatistics, health economics, and implementation science.

2.3 Improved recruitment, data management and biobanking capacity

A streamlined process for inviting our consumers to participate in research in combinations with implementations of the Secure Health Data and Biosample Platform (SHeBa) initiative will improve Barwon Health's capacity to capitalise on the vast quantities of data and biological samples collected during routine care.

2.4 Supported HR processes

Work with Barwon Health People and Culture to implement more streamlined, flexible human resources processes for employees engaged in research.

2.5 Establish specific research financial and activity reporting requirements and support

Enhance the quality and continuity of assistance with financial management provided to researchers to enable robust and efficient financial management and reporting.

3. A RESEARCH ACTIVE WORKFORCE

3.1 Incorporate academic appointments into medical workforce strategy

Embedding clinical/academic medical staff appointments into the workforce structure of Barwon Health is a key step in embedding research into care. Clinical/academic appointments will provide a more structured career pathway into research for clinicians, support access to mentorship and facilitate translation by providing greater integration of research and clinical care.

3.2 Identify and support emerging researchers in all disciplines and promote equity and diversity

Building a diverse and capable research workforce across all disciplines is crucial. Improving opportunities for nursing, allied health and female clinicians to pursue a career in research, and become research leaders, is a key priority.

3.3 Increase research training and opportunities for higher degrees by research

Improving access to research training and higher degrees by research will:

- bring together clinical and academic teams to tackle important clinical research questions.
- support allied health, nursing and medical practitioners to develop their research interests, skills and capability.
- provide flexibility to enable people to maintain their clinical training and roles whilst embarking on a PhD.

3.4 Improved research opportunities for Barwon Health staff with Deakin University

Work with Deakin University to provide clear pathways and opportunities for Barwon Health staff to be supported to participate in and lead research.

3.5 Establish and grow formal mentoring programs

Establish a systematic program to encourage and support Barwon Health doctors, nurses, and allied health professionals to participate in research through implementation of a formal mentoring program. Barwon Health will provide early career researchers the support and guidance required to pursue a career as a clinician researcher, and will assist research leaders to secure competitive funding and enhance the impact of their work. An effective mentoring program will improve Barwon Health's capacity to recruit and retain an excellent, research active workforce.





4. IMPROVED CLINICAL TRIALS CAPACITY

4.1 Grow the Adrian Costa Clinical Trials Centre

A thriving clinical trials program improves the overall standard of medical care by expediting the uptake of evidence into practice and increased adherence with evidence-informed care. The generous financial support of the Costa Family enabled Barwon Health to establish the Adrian Costa Clinical Trials Centre. The strategic goals for the Centre align with overarching the Research Strategic Plan and are:

1. *Creating a world class research ecosystem integrated with clinical services*

- Excellent systems: from ideas incubation to translation.
- A strong and sustainable financial and operational model.
- Leveraging the implementation of the NCTGF.
- Establishing recognition of the Costa Centre's brand.

2. *Attracting, developing, and retaining excellent people*

- Exciting and inclusive culture.
- Excellent support and opportunities.
- Training, mentoring and Fellowship programs.
- Training & support to maintain accreditation standards.
- Rotations through the Centre for clinicians.

3. *Building on strengths and addressing areas of need*

- Support and leverage established programs: HOTT, CSTU, CTU, Cardiology and Orthopaedics.
- Support and grow less established teams.
- Develop capacity for Phase 1 trials.
- Systems to support co-design.

4. *Strengthen strategic partnerships*

- Define and optimise the Barwon/Deakin partnership in clinical trials.
- Strengthen strategic partnerships e.g. VCCC.
- Clinical trials networks.
- Nurturing relationship with commercial sponsors as a preferred site.

4.2 Expand access to clinical trials.

Through the growth of the clinical trials program, enabled by the Adrian Costa Clinical Trials Centre, Barwon Health will expand and diversify its clinical trials program. This will include increasing clinical trials activity in disciplines with less developed programs and enhancing Phase 1 clinical trials capacity.

4.3 Increase workforce engagement with clinical trials across disciplines

Training, mentoring and Fellowship programs will be established to ensure a range of disciplines have access and support to participate in and ultimately lead clinical trials.

4.4 Achieve accreditation with the national clinical trials framework

The purpose of the National Clinical Trials Governance Framework is to ensure that clinical trials are conducted in a safe environment and in a high-quality manner for improved health outcomes for patients and the community. The National Clinical Trials Governance Framework describes the actions that are essential for health service organisations to achieve integrated corporate and clinical governance systems for clinical trial service delivery. Through these systems, organisations and individuals are accountable to patients and the community for continuously improving the safety and quality of their clinical trial services.



5. IMPROVED TRANSLATION OF RESEARCH INTO CLINICAL CARE

5.1 Increase participation in multicentre trials likely to change practice

Building and diversifying the capacity and capability of the research workforce at Barwon Health will present opportunities to participate in and lead impactful multicentre trials. As the reputation of Barwon Health as an efficient and capable place to conduct research grows, Barwon Health will become a preferred site for industry and investigator initiated multicentre trialists. Increased participation in and leadership of practice changing multi-centre trials, and implementation of the trial informed improvements in care, will become a long term measure of the impact of the Research Strategic Plan.

5.2 Monitor and report translation of research into care

New evidence must be translated into changes in practice and policy to benefit our community. Barwon Health will establish a mechanism to identify, monitor and communicate examples of translation of research into care.

Clinical units will be supported to demonstrate examples of local implementation of new evidence based practice.

5.3 Establish a multidisciplinary forum with Deakin University to support co-production and translation

Partner with IMPACT, IPAN and the Institute for Health Transformation to establish a multidisciplinary forum to build capability and improve access to expertise in co-production and translation.

5.4 Build synergy between research, safety and quality to drive continuous improvements in care

Building synergies between research and clinical safety and quality will lead to more efficient and productive use of resources, improved opportunities for training and workforce development, and better research and patient outcomes.

6. STRENGTHEN STRATEGIC PARTNERSHIPS

6.1 Advance and realise the full benefits of the Barwon/Deakin Alliance for research

The Barwon Health and Deakin University alliance presents a unique opportunity to build a research program that is locally relevant and internationally important. We will consolidate, grow and diversify the impact and benefits of the Alliance to better support researchers across both organisations and improve the health of our community.

The Alliance is strengthened through:

- A shared commitment to the Barwon South West community.
- Mutual benefit of an improved workforce and improved patient and community outcomes.
- Integration of clinical and research teams.
- Aligned priorities.
- Shared and complementary staff and expertise across clinicians and researchers.
- Enabling academic and clinical staff to collaborate.
- Enabling multidisciplinary teams to plan and implement research relevant to the current healthcare environment.

6.2 Strengthen Western Alliance partnership

Western Alliance is a collaboration of health services, universities and the Primary Health Network across western Victoria which supports its members to improve the health of their communities through research-based and evidence-informed health care.

Western Alliance provides translation-focussed research funding, research capability building and training initiatives and research support to Barwon Health employees. They also promote and facilitate collaboration between their member organisations across rural and regional western Victoria.

Barwon Health will continue to work with Western Alliance and strengthen the partnership to ensure an effective and collaborative approach to research and capability building across the Barwon-South West and Grampians regions.

6.3 Strengthen existing partnerships and identify new opportunities

Barwon Health Research Programs have well-established peer-to-peer, programmatic and organisational partnerships across Victoria, nationally and internationally. These partnerships can be built on and formalised to enhance Barwon Health's capacity to produce locally relevant, internationally important research.

6.4 Grow the Change to Improve Mental Health (CHIME) Translational Research Partnership

CHIME is a new service innovation and research initiative launched by Barwon Health and Deakin University, aiming to transform regional mental healthcare to deliver the quality of care that enables people who have experienced mental illness to live their best lives.

CHIME will accelerate research, generate an evidence-base for better care and support a dynamic environment in which novel treatments and services can be designed, trialled and evaluated.



2 STRATEGIC RESEARCH PROGRAMS

EACH STRATEGIC PROGRAM LINKS TO ONE OR MORE OF THE PRINCIPLES WITHIN STRATEGIC PRIORITY 1 OF THE BARWON HEALTH STRATEGIC PLAN 2020-25, TO DELIVER BEST CARE:

- **Person-Centred** – Our consumers direct the care they receive to achieve their goals.
- **Value** – We aim always to improve the value of our services.
- **Integration** – We integrate care without gaps or duplication of effort.
- **Evidence** – We apply evidence to improve care.
- **Appropriate** – Right care, right time, right place, right way.

2.1 ENHANCE SYNERGY BETWEEN RESEARCH, SAFETY AND QUALITY TO DRIVE CONTINUOUS IMPROVEMENTS IN CARE

It is critical that Barwon Health foster continuous improvement in the quality and safety of the care and the health services we provide.

Building synergies between research and clinical safety and quality will lead to more efficient and productive use of resources, improved opportunities for training and workforce development, and better research and patient outcomes.

Quality care activities are targeted, dynamic and responsive to the needs of our community, the clinicians and Barwon Health.

Quality initiatives adapt published research findings to the local context, generating new knowledge in the process. Areas with little existing knowledge may be identified during quality improvement activities, which in turn inform research questions.

Over time, this creates a learning community contributing to continual cycles of: performance to data; data to knowledge; knowledge to performance.



Dr Lawrence Gray.

Working with stakeholders including Safety and Quality teams and the Pharmacy and Medicine Use and Safety Research Committee will enable the development of key research programs. This process will be efficient and cost-effective, feeding and targeting future research. Safety and Quality activities act as the first steps in the development of future clinician researchers. Improving our structure will attract and develop the workforce required to realise our research goals.

This Program is designed to build the systems, culture and clinician engagement required to address gaps. We seek to grow and harmonise workforce capacity, remove silos and reduce duplication and inefficiency, increase resources, and generate outcomes that drive improvements in care.



Steering Committee Chair

Dr Lawrence Gray

Ms Keren Day

Goal

An integrated quality improvement and research system and culture.

Program benefit

Continual improvement against person centred measures.

Target outcome

A clearly defined framework, mentoring program, metrics, informatics capacity and partnership with Deakin University.

2.2 IMPROVE HEALTH OUTCOMES FOR OUR MOST DISADVANTAGED POPULATIONS THROUGH PUBLIC HEALTH RESEARCH AND TRANSLATION

The Barwon South West Public Health Unit (BSW PHU) is one of nine local public health units established across Victoria. The BSW PHU supports the region that spans from Greater Geelong to the South Australian border and north to the Southern Grampians region.

Initially, the BSW PHU is focused on COVID-19 preparedness, response, and vaccination, then it will move into other key areas of communicable diseases, such as blood-borne viruses including viral hepatitis, HIV, STIs, and food-borne diseases.

The PHU will also support the Barwon Health vision for reconciliation, as articulated in the Barwon Health Strategic Plan 2020-25, to close the unacceptable and ongoing health gap between Aboriginal and Torres Strait Islander Australians and non-Indigenous Australians.

It will be essential to build a holistic public health model in our region that tackles chronic diseases including lifestyle-related issues, such as obesity, diabetes, cardiovascular disease, cancers, and potentially, mental health, drugs and alcohol illnesses.

Having a regional public health unit gives us the opportunity to improve the public health of an entire region, particularly those facing disadvantage.

The BSW PHU will develop a public health research and translation program aimed at improving the health outcomes for our most disadvantaged populations.



Goal

Develop a public health research and translation program aimed at improving the health outcomes for our most disadvantaged populations.

As a program for development the benefits and targets will be confirmed through a consultative process after the research leads have been identified.

Sharbano and nurses at Cultura.



2.3 DEVELOP ALLIED HEALTH RESEARCH CAPACITY TO DRIVE INNOVATION IN DIGITAL HEALTH

Barwon Health is a large comprehensive health service with growing allied health research activity. We intend to accelerate research capacity building amongst allied health clinicians to strengthen research capability and deliver evidence-based service transformation that matters to regional communities.

Capability improvements will:

- be complemented by supporting clinicians to enrol in research degrees (Masters and PhD level). Emerging clinician researchers will participate in research education and grant programs with Western Alliance and Deakin University.
- contribute to greater multi-disciplinary research at Barwon Health as allied health professionals work across all sectors of Barwon Health from physical health, mental health, aged care and disability services.

Development of research activity and infrastructure, including technology enabled models of care, is important to achieve our ambitions in research and development. Allied health has three long-term research strategies:

- To be a preferred regional partner in allied health research.
- To engage in co-design research projects that matter to our community, Barwon Health and funding partners.
- To develop niche flagship programs of national & international significance.

This Program aims to strengthen allied health research governance frameworks to assist our leaders and managers support clinicians into research and to track our progress whilst aligning with Barwon Health strategic research goals



Steering Committee Chair

Dr Paula Harding

Goal

To accelerate allied health research capability and strengthen the research culture to deliver valued research outcomes such as new knowledge, partnerships and research income.

Program benefit

Greater allied health clinician participation in research resulting in new models of care, increased workforce skills, active research projects with partner organisations and higher degree research enrolments.

Target outcome

Fifty percent increase in journal publications and grant income and 100 percent increase in ethics applications and research grant awards by 2027. To be able to demonstrate service improvement and innovation impact by showcasing service transformation and growth in our research active workforce.



Dr Paula Harding, Director of Allied Health.

2.4 BUILD THE CAPACITY AND CAPABILITY OF CANCER SERVICES RESEARCH TO DRIVE IMPROVEMENTS IN PERSON CENTRED CARE

Barwon Health has the largest Cancer Services program in regional Victoria, with a strong clinical trials program and emerging capacity in investigator-initiated research. Building the capacity and capability of the Cancer Services research program is crucial to workforce development and the provision of cutting-edge therapies to our patients, ultimately improving the outcomes of regional and rural cancer patients.

The objective of this Program is to build broad research capability that reflects our standing as a tertiary level treatment facility and recognises the multidisciplinary nature of cancer care. Our program will strengthen existing, well-established partnerships and develop new collaborative partnerships that will lead to a diversification of research engagement and facilitate personalised cancer care.

This Program is designed to expand and develop Cancer Services Clinical Trials into a tertiary level, multifaceted research endeavour capable of delivering novel and innovative interventions through translational, allied health-focused and health outcome-related research. It will consist of a number of initiatives designed to build workforce capacity, improve access to novel therapies, and drive innovations in digital health. Additionally, we will develop and grow research-based wellness and survivorship programs that embed digital health strategies focusing on patient-centred care.



Steering Committee Co Chairs

Associate Professor Philip Campbell

Dr David Campbell

Dr Graham Pitson

Goal

A world class integrated and diverse cancer research program delivering excellence in personalised patient care.

Program benefit

An academic yet supportive environment conducive to high rates of workforce satisfaction, professional fulfilment and retention of highly skilled staff providing the best of care to cancer patients in our region.

Target outcome

A research culture within Cancer Services Clinical Trials committed to innovations in patient care leading to international recognition through publications and presentations at national and international conferences.



2.5 BUILD THE EXEMPLAR LISTENING AND LEARNING MENTAL HEALTHCARE SYSTEM

The Royal Commission into the Victorian Mental Health Care System has clearly articulated the need for innovative, evidence based and person-centred improvements. Barwon Health is uniquely positioned to respond, and in so doing, enhance the services we provide to our community.

Change to Improve Mental Health (CHIME) is a new service innovation and research initiative launched by Barwon Health and Deakin University. Established in recognition of the challenges and opportunities in the mental health and alcohol and other drug service system, CHIME aims to create a dynamic ecosystem of researchers, consumers, carers and mental health practitioners to undertake and translate research to improve services and outcomes for people experiencing issues with mental health and alcohol and other drugs (AOD) in the Barwon region. The creation of a listening and learning healthcare system will be an exemplar for other research translation partnership and continuous learning systems across Barwon Health, and will be scalable across Victoria, and nationally.



Renae Carolin, CHIME Director.

Research priorities include service innovations, novel therapies, and the innovative design of mental healthcare facilities, supported by enabling platforms including a community and consumer engagement platform, a research-engaged workforce and data and digital systems. CHIME's work will deliver improved mental health and wellbeing outcomes and experiences, support system transformation and drive continuous improvement in treatment, care and support for people experiencing mental illness and psychological distress.



Steering Committee Co Chairs

Frances Diver

Professor Julie Owens

Goal

To support the creation of a world-first listening and learning mental healthcare system.

Program benefit

Evidence informed practice to continuously improve services and consumer outcomes.

Target outcome

30% of the Mental Health Alcohol and other Drug (MHAOD) workforce engaged in research and 20% increase in peer-reviewed publications.



2.6 IMPROVE PERSON CENTRED CARE FOR PEOPLE WITH MOTOR NEURONE DISEASE

Motor neurone disease (MND) is a rapidly progressing, neurological disease. MND often begins with weakness of the muscles in the hands, feet or voice, although it can start in different areas of the body and progress in different patterns and at different rates. People with MND become increasingly disabled. Life expectancy after diagnosis is one to five years, with 10 per cent of people with MND living 10 years or more.

This program aims to build on the success of the MiNDAUS Partnership and further develop the project titled **Motor Neurone Disease: Patient centred care for a progressive neurological disease - evidence driving policy**. This project is based on the principles of care and addresses the common themes from client surveys, specifically, access to specialist advice, better communication between providers and coordinated service delivery, and participation in research.

The program has three themes:

1. Empowering patients and their carers.
2. Unification and integration of data collection in MND.
3. Integrating evidence to inform policy.



Steering Committee Chair

Associate Professor Paul Talman

Goal

Establish a broader “collective” which includes the wider population of MND researchers, greater engagement with those with lived experience of MND, more involvement of clinics and MND Associations in the adoption of the project outcomes and the ultimate establishment of a Centre of Excellence in MND Research.

Program benefit

Improve the network of MND Researchers. Greater engagement with those with lived experience of MND. More involvement of clinics and MND Associations in the adoption of the project outcomes.

Target outcome

Establishment of a Centre of Excellence in MND Research.



Associate Professor Paul Talman.

2.7 IMPROVE THE OUTCOMES FOR PEOPLE WITH INFECTIOUS DISEASES

The Barwon Health and Deakin University Centre of Innovation in Infectious Disease and Immunology Research (CIIDIR) will improve the outcomes of patients with infectious diseases through the work of a multidisciplinary group that tackles the transmission, treatment and prevention of some of the public's most pressing health challenges, including COVID-19, healthcare-associated infections emerging infectious diseases, mycobacteria ulcerans (Buruli Ulcer), infections of medical devices, C. difficile infection, Hepatitis, infective endocarditis (infection of the heart) and antimicrobial resistance.

This Program will have a particular focus on improvement in the prevention and treatment of medical device infections and brings together expertise in infectious diseases, orthopaedics, microbiology and frontier materials to investigate the causes, prevention, and treatment of prosthetic device infections.

Medical device infections are mainly caused by Staphylococcal species (particularly Staphylococcus aureus or 'Golden Staph'). Carriage of Golden Staph prior to surgery increases the risk of infection three-fold. Staphylococcal infections present a major public health threat, with mortality rates up to 40% including bacteraemia and septic shock. We currently have limited knowledge why Staphylococcal infections have such varied presentations, but it is known that bacteraemia increases the risk of a medical device becoming infected.

When an implanted medical device is involved, the infection becomes much more complicated to treat. Management of these infections relies on complex clinical decisions and final treatment approaches rely on the individual preference of treating clinicians. This frequently results in poor treatment outcomes for patients with Staphylococcal medical device infections.



Steering Committee Co Chairs

Professor Eugene Athan
Professor Alyssa Barry

Goal

Establish an in vitro platform for investigating Staphylococcal medical device infections.

Program benefit

Reliable platforms to test novel treatments and preventative therapies of Staphylococcal medical device infections.

Target outcome

Fifty percent increase in high impact publications and one hundred percent increase in research income generated by commercialisation of intellectual property and clinical trial sponsorship by 2027.



Professor Eugene Athan.

2.8 PREVENT CHILDHOOD ALLERGIC DISEASE AND ASTHMA

Around 1 in 10 babies develop a food allergy, acute wheezing illnesses are the most common reason children are admitted to the University Hospital Geelong, and there has been a dramatic rise in the incidence of type 1 diabetes. Dysregulation of the developing immune system plays a crucial role in each of these conditions. In this context, identifying and developing novel prevention strategies is a locally relevant and internationally recognised research priority.

The organisms that live in the mother's and infant's gut have a key role in driving the development of the baby's immune system before and after birth. A low fibre diet, widespread use of antibiotics and increased rates of birth by caesarean section may each increase the risk of immune related disease via impacts on the gut microbiome.

This Program builds on the Barwon Infant Study to generate and translate discoveries about the gut microbiome, early life, allergic disease and asthma. The Pregnancy Research and Translation Ecosystem (PRT-E) provides a path for replicating and translating evidence from BIS. The Children's Inpatient Research Collaboration of Australia and New Zealand (CIRCAN) positions us to lead multicentre trials of microbiome/immune based interventions, such as the NHMRC funded trial of the bacterial lysate OM-85 for prevention of asthma related hospital admissions.



Steering Committee Co Chairs

Professor Peter Vuillermin

Dr Luba Sominsky

Goal

Discover and validate modifiable risk and prevention factors for immune related diseases in children.

Program benefit

New knowledge to inform novel prevention strategies and treatments.

Target outcome

Fifty percent increase in high impact publications and one hundred percent increase in research income generate by commercialisation of intellectual property by 2027.



Dr Luba Sominsky.



2.9 IMPROVE SHARED DECISION MAKING AND GOAL CONCORDANT CARE

Barwon Health has identified consumer directed care as a strategic priority, with person-centred end-of-life care as a focus. Research tells us that a high proportion of hospitalised patients with life limiting illness (LLI) receive non-beneficial or unwanted care in the last year of life.

The major barrier to high quality person-centred care is poor communication. The solution is systematic shared decision-making programs - that operationalise the process of identifying patient goals, values, and preferences and aligns care to these. In this context, the iValidate program was designed in 2015, involves a team with expertise in clinical medicine, clinical communication, ethics, consumer engagement, and public health research. The program is aligned to Australian and international standards, and includes education, clinical implementation, and outcome assessment for shared decision-making.

This Program is designed to prove and extend the benefits of iValidate, in turn driving improvements in person-centred care that are locally relevant and internationally significant. A central element is the Geelong Partnership Model of Care for High-Risk Hospitalised Patients Trial (Gentle High) trial that combines a randomised trial with an embedded qualitative research program developed with end users and consumers.

The objective is to measure the effect of implementing a shared decision-making program on person-centred outcomes, clinical and healthcare utilisation, and cost-effectiveness for hospitalised patients at high risk of dying in the subsequent year. Similarly, the High-Risk Surgery Peri-Operative Partnership (HiPOP) Model of Care study is designed to evaluate a novel intervention to promote shared decision making among patients with life limiting illnesses facing major surgery.



Steering Committee Co Chairs

Associate Professor Neil Orford
Professor Peter Martin

Goal

Ensure all Barwon Health patients with life limiting illness or complex high-risk care, are engaged in care aligned to their preferences, goals, and values.

Improve shared decision-making throughout the Australian healthcare system by providing a high-quality, financially sustainable, and proven training program.

Program benefit

Improve patient, family, clinical, and healthcare utilisation outcomes for hospitalised patients with life limiting illness or at high risk of complex care.

Target outcome

Gain competitive funding for randomised trial of shared decision-making intervention

Develop national centre for education, clinical implementation, and research in hospital based clinical communication.



Michelle Horton, ICU Research Nurse.

2.10 IMPROVE OUTCOMES FOR PEOPLE WHO REQUIRE SURGERY

Continuous improvement in Barwon Health's surgical outcomes is dependent on nurturing a thriving system and culture of enquiry, innovation, evaluation and translation.

The Barwon Health surgical program has a strong track record in safety, quality and research directed at improving perioperative outcomes locally as well in East Timor, New Guinea and the Pacific.

Our longstanding participation in clinical registries enables identification of priorities for action, however improved patient centred metrics are needed. Registries record events such as unplanned return to theatre and death, but many other preventable outcomes with important implications for quality of life, such as perioperative stroke, are inadequately captured.

Establishment of the Masters of Surgical Research program with Deakin University has provided an effective and popular pathway for early career clinicians on the path to accredited surgical training. Ensuring the continued evolution and sustainability of this initiative is a priority. Has this been agreed?

Barwon Health will continue to assist low-income countries in our region to realise the Lancet Commission's 2030 goals for equity of access to anaesthesia and surgery. Supporting surgical trainees within these countries to establish their own safety, quality and research programs is crucial.



Professor David Watters.

In concert, continued collaboration with the Institute for Intelligent Systems Research and Innovation (IISRI) at Deakin University led by Professor Saeid Nahavandi will progress existing work on robotics and haptics with goals of improving access and perioperative outcomes.

This Program builds on our existing programs to improve the utility of registry data, train early career surgeon-researchers, grow local capacity and access in low-income countries, and drive innovations in the use of robotics and haptics.



Steering Committee Co Chairs

Professor David Watters

Professor Glenn Guest

Goal

To provide a surgical training and research environment that fosters capacity and drives continual improvements in care.

Program benefit

An excellent training environment and improved surgical outcomes.

Target outcome

Evidence of improvements in clinical registry data collection and application, 20% increase in Masters completions, demonstrable growth in capacity of regional partners, and successful translation of >2 new technologies.

2.11 IMPROVE THE PHYSICAL AND MENTAL HEALTH OF THE FRAIL AND AGEING

During ageing, marked deterioration of muscle and bone and infiltration of fat into these tissues leads to sarcopenia (loss of muscle mass and function) and osteoporosis (fragile bones). During ageing, the interplay between muscle, bone and fat also impacts cardiometabolic health, mental health and cognitive function.

The cornerstone of this Program is the Geelong Osteoporosis Study (GOS) which generates serial data for adults selected at random from electoral rolls. This is one of few large population-based cohort studies in Australia which is documenting changes to the health and wellbeing of young, middle-aged and older men and women over decades.

The GOS provides 'controls' for several case-control studies designed to identify differences between people with and without certain disorders/conditions including fracture, arthroplasty, critical illness, chronic kidney disease, premature ovarian insufficiency, surgical menopause, and bipolar disorder. GOS data identify links with non-communicable diseases and lifestyle behaviours. GOS data also provide the basis for economic modelling, are pooled with other leading cohort study data for international meta-analyses, and provide evidence for clinical trial design.



Steering Committee Co Chairs

Professor Julie Pasco

Professor Mark Kotowicz

Associate Professor Lana Williams

Goal

The program addresses goals for discovery and translation.

Our goals are to:

- document the burden of musculoskeletal disease and translate our data into public health initiatives for prevention and management.
- identify factors associated with healthy musculoskeletal ageing.
- improve sensitivity and specificity of diagnostic techniques for musculoskeletal conditions.
- investigate mechanisms that underpin musculoskeletal decline and frailty.
- examine temporal and secular changes in musculoskeletal health and its outcomes.
- discover bi-directional links between musculoskeletal, cardiometabolic and mental health.

Program benefit

- Discovery of new targets for prevention and treatment.
- Translation of **existing evidence into prevention, treatment and improved outcomes.**
- Improving standards of care.
- Foster implementation of evidence-based lifestyle programs that encourage appropriate sleep, nutrition and physical activity; and reduced sedentary behaviour, to improve physical and mental health in the population.

Target outcome

- Produce high impact publications and translate the findings into improved community outcomes.
- Secure grants from national and international funding sources.
- Build the musculoskeletal PhD and postdoctoral researcher program.





Professor Richard Page, Director, Barwon Centre for Orthopaedic Research and Education (B-CORE).

2.12 IMPROVE OUTCOMES FOR PEOPLE WITH MUSCULOSKELETAL DISEASE OR INJURY

Continuous improvement in Barwon Health's orthopaedic and trauma outcomes is dependent on nurturing a thriving system and culture of enquiry, innovation, evaluation and translation.

The Barwon Health B-CORE team explores a diverse range of musculoskeletal health issues and conducts 'bench-top to bedside' research from basic investigations to clinical trials of new treatments, process change in care delivery and population-wide studies of prevention. B-CORE is a member of IMPACT, Deakin University School of Medicine. In the past decade, we have expanded to include researchers across multiple disciplines, including joint replacement surgery, genomics, epidemiology, political science, and health economics. We engage with research teams internationally to help advance the science of musculoskeletal health. Our longstanding participation in clinical registries (Barwon Joint Registry, Trauma, Shoulder Surgery and Paediatric Orthopaedics) enables identification of priorities for action, the inclusion of patient reported outcome measures (PROMs) has deepened our understanding. B-CORE long association with the Australian Orthopaedic Association National Joint Replacement Registry continues to provide rich ground for collaboration.

The Masters of Surgical Research program established with General Surgery and Deakin University has provided an effective and popular pathway for early career clinicians on the path to accredited surgical training. Ensuring the continued clinician involvement, evolution and sustainability of this initiative is a priority. Barwon Health will continue to support innovations in service delivery enhancement building on previous work on remote

joint replacement review clinics, community fracture care, shoulder and upper limb tertiary care and paediatric orthopaedics.

This Program builds on our existing work to improve the utility of registry data, train early career surgeon- researchers, grow local capacity and explore biological modifiers that influence orthopaedic surgery outcomes.



Steering Committee Co-Chairs

Professor Richard Page
Dr Stephen Gill

Goal

To optimise improvements in Orthopaedic Surgery and Musculoskeletal Health, through innovative research that empowers people and enables healthier environments.

Program benefit

An excellent training environment and improved orthopaedic access and surgical outcomes.

Target outcome

Evidence of improvements in clinical registry data collection and application, 20% increase in Masters completions, demonstrable growth in capacity of regional partners, and successful translation of >2 new technologies.

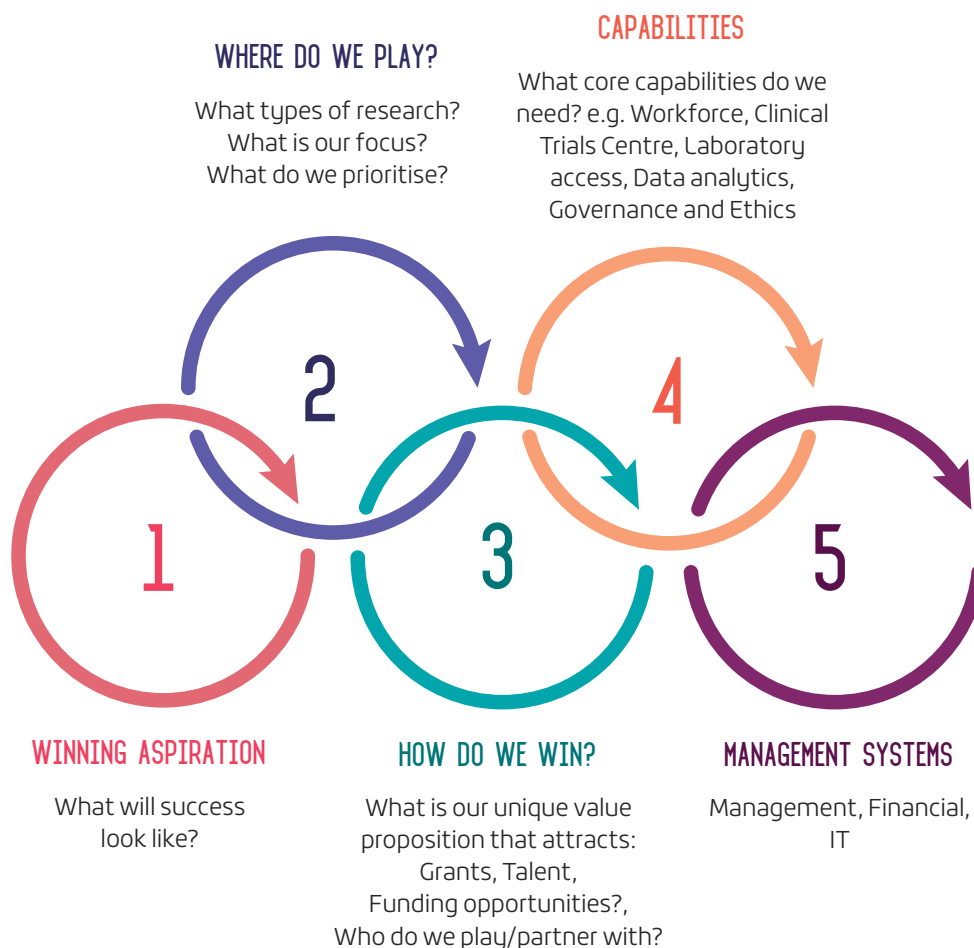


3 APPENDICES



APPENDIX 1 – BARWON HEALTH RESEARCH STRATEGY PLANNING

Planning for the Barwon Health Research Strategic was framed using the 'Playing To Win' Framework to drive discussion and identify the areas of competitive advantage Barwon Health has that can support the building of a world-class and sustainable research program.



WHERE DO WE CURRENTLY PLAY?

Barwon Health contributed to over 400 research publications per year, contributing to 1612 publications from 2017-2020. Barwon Health researchers lead this research as either a first or senior author on 50% of publication. It is worth noting that, from these publication there are relatively few first/senior author papers in journals with impact factors of greater than 10.

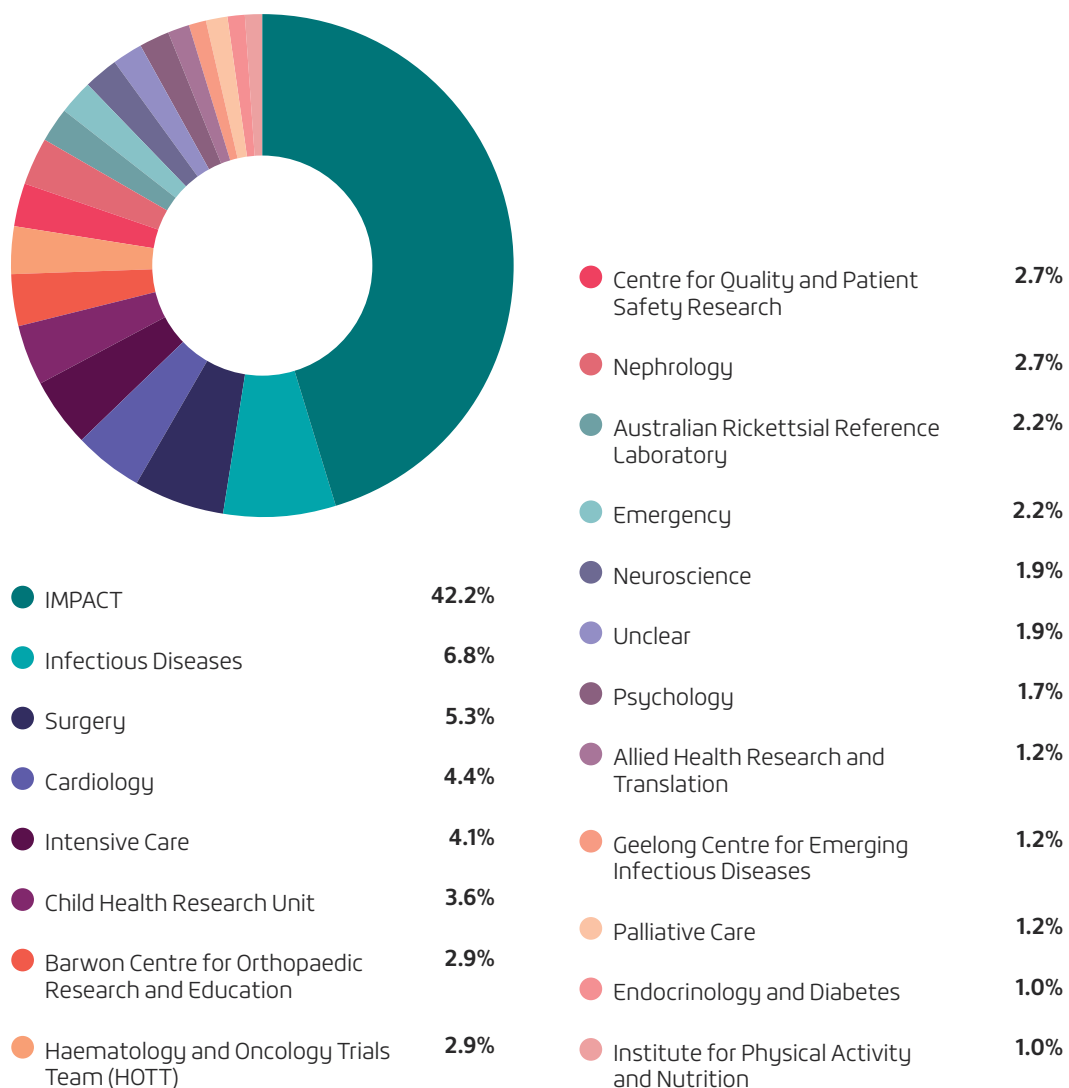
Category 1 (NHMRC/MRFF) funded investigator initiated research programs led by Barwon Health include:

- Mental health (IMPACT).
- Infectious diseases.
- Intensive care/bone health.
- Paediatrics.

Barwon Health regularly conducts industry funded trials in haematology and oncology, infectious diseases, endocrinology and cardiology.

Barwon Health has established general population cohort studies incorporating biosample collection and analysis, including the e Geelong Osteoporosis Study, the Barwon Infant Study and Covid-19 Cohort Study.

Graph 1. 2019 Barwon Health Research Publications by Research Program (%)



WHERE COULD WE PLAY IN THE FUTURE?

Opportunities for funding research exist through:

Research in Australia is typically supported through industry, government grants or philanthropy.

The key funding opportunities for Barwon Health are through:

1. Medical Research Future Fund (MRFF)

The MRFF is an ongoing research fund set up by the Australian Government in 2015. The MRFF aims to transform health and medical research and innovation to improve lives, build the economy and contribute to health system sustainability.

The priorities for MRFF funding are established by the Australian Medical Research and Innovation Strategy 2021–2026, including the following:

- New or emerging areas of health need.
- Existing areas of unmet health need.
- Improvement in the efficiency and effectiveness of the health system.
- Social, environmental, and cultural factors that impact health and wellbeing.
- Enhancements to the translation of research outputs to deliver impact through health and economic outcomes.
- Promotion of capacity and capability in the health and medical research workforce.
- Encouragement of adaptive approaches to emerging challenges.

THE MRFF DISTRIBUTED \$573 MILLION OF FUNDING IN 2020–21, THIS IS FORECAST TO GROW TO \$646 MILLION IN 2021–22¹.

2. National Health and Medical Research Council (NHMRC)

The themes of investment, translation and integrity represent NHMRC's current strategy for health and medical research. The NHMRC is committed to²:

- create knowledge and build research capability through investment in the highest-quality health and medical research and the best researchers.
- drive the translation of health and medical research into clinical practice, policy and health systems and support the commercialisation of research discoveries, contributing to an Australian health system that is research-led, evidence-based, efficient and sustainable.
- maintain a strong integrity framework, which underpins rigorous and ethical research, and relevant and evidence-based guidelines, thereby promoting community trust.

The major national health issues, also called NHMRC's health priorities, for the 2021–2024 triennium are:

- Strengthening resilience to emerging health threats and emergencies, including environmental change, pandemics and antimicrobial resistance.
- Improving the health of Aboriginal and Torres Strait Islander people including through research that addresses health inequities.
- Building capacity and innovation in the effective translation of research into quality health policy, services and care.
- Preventing and managing multimorbidity and chronic conditions.
- Identifying emerging technologies in health and medical research and in health care, and promoting their safe, ethical and effective application.

1. health.gov.au/initiatives-and-programs/medical-research-future-fund/about-the-mrff/mrff-funding-process

2. nhmrc.gov.au/about-us/publications/nhmrc-corporate-plan-2021-22

3. Breakthrough Victoria Fund

The Breakthrough Victoria Fund³ aims to drive investment in research, innovation and commercialisation.

Key industry sectors will be:

- health and life-sciences.
- agri-food.
- advanced manufacturing.
- clean economy.
- digital technologies.

INVESTMENTS WILL BE CENTRED ON VICTORIA'S KEY INNOVATION AND EMPLOYMENT PRECINCTS, INCLUDING WAURN PONDS.

4. Victorian Medical Research Acceleration Fund

The Victorian Medical Acceleration Fund supports the health and medical research sector and researchers to improve health and wellbeing outcomes for Victorians. The Fund⁴ provides \$3 million per annum to support and accelerate health and medical research through the provision of one-off grants to successful applicants.

The intended long term outcomes of the Fund are:

- Increased attractiveness of Victorian medical research to investors.
- Increased capability, knowledge, and expertise across the Victorian medical research sector.
- Victoria's reputation as a world leader in health and clinical outcomes is bolstered.
- A stronger medical research sector supports the economic recovery and growth of Victoria.

5. Barwon Health Foundation

The Barwon Health Foundation is a vehicle for providing a source of funds to advance the development of clinical research conducted by Barwon Health.

In 2020, the Foundation⁵:

- Supported the establishment of the Adrian Costa Clinical Trials Centre.
- Completed the funding of two PhD scholarships.
- Invested in CHIME.
- Contributed to the Barwon Infant Study.
- Support clinical trials research in the UHG Emergency Department.
- Committed to the seed funding of equipment and consumables for five PhD scholarships.
- Continued fundraising for a postdoctoral research fellowship in cancer.

6. Industry

The Creating a Healthy Future The impact of Victorian Government investment in health and medical research report⁶, published in January 2021, shows that Victoria's medical technology and pharmaceutical companies attract more than 40 per cent of Australia's medical research investment, spend almost \$1 billion on research and export more than \$2.4 billion a year. Victoria's medical research sector supports more than 30,000 jobs across institutes, universities and industry. One-third of Australian clinical trials activity takes place in Victoria.

Victoria adheres to the highest level of Good Clinical Practice standards, with Australian clinical data and results accepted by international regulatory agencies, including the US Food and Drug Administration and the European Medicines Agency⁷.

Australia's Clinical Trial Notification scheme provides an expedited regulatory pathway for phase I trials, with over half being receiving ethical approval in less than 20 days and 87 per cent receiving ethical approval in less than 30 days.

3. vic.gov.au/breakthrough-victoria-fund

4. djpr.vic.gov.au/medical-research/funding

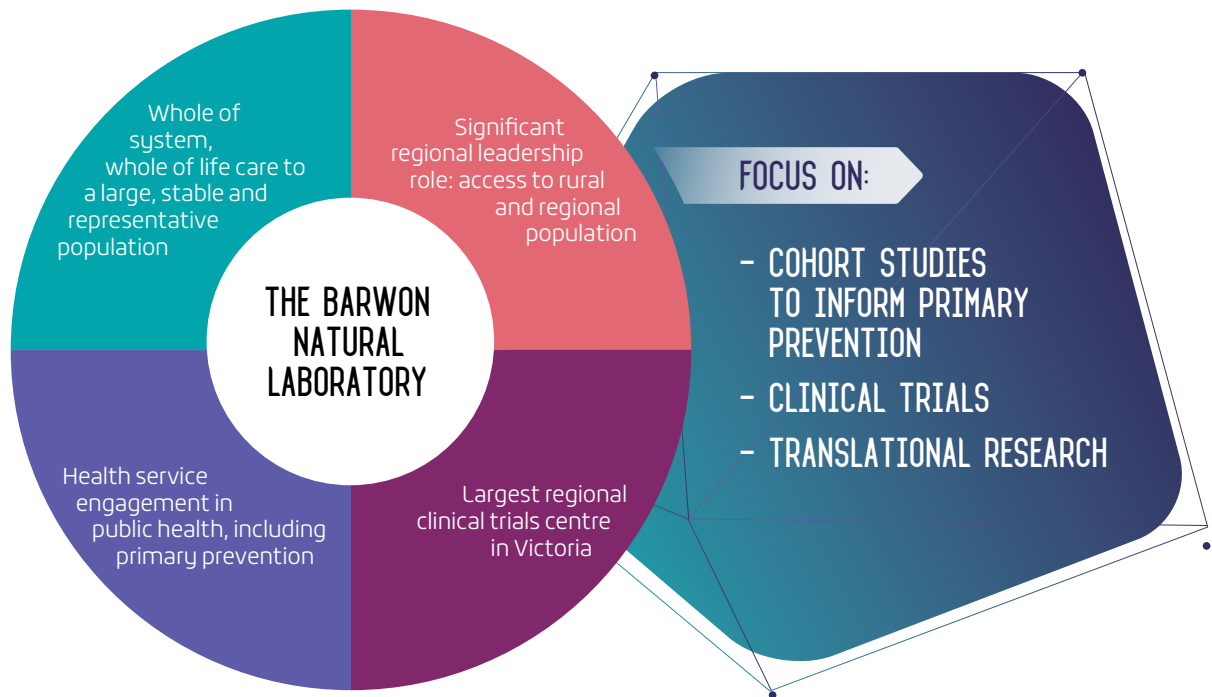
5. barwonhealth.org.au/research/images/Barwon_Health_Research_Report_2020.pdf

6. djpr.vic.gov.au/_data/assets/pdf_file/0009/1988532/Creating-a-Healthy-Future-Report.pdf

7. global.vic.gov.au/victorias-capabilities/industry-sectors/medical-technologies-biotechnology-and-pharmaceuticals/clinical-trials

WHERE SHOULD WE PLAY?

What is Barwon Health's unique competitive advantage?



WHO SHOULD WE PLAY WITH?

Deakin University

The Barwon Health and Deakin University partnership presents a unique opportunity to have a collective impact on the health and wellbeing of the local Barwon Region community.

Deakin University is a large, leading university with well aligned Faculties and Research Institutes. Barwon's main Deakin partner is the Faculty of Health which comprises five Schools (Medicine, Nursing and Midwifery, Exercise and Nutrition Science, Psychology and Health and Social Development) and three research institutes.

The Faculty's research is underpinned by digital, data analytics and technological devices, biostatistics, health economics, implementation science and consumer engagement platforms.

The Faculty of Health and its clinical and community trials, and cohort studies, have particular strengths in mental, physical, paediatric and population health, treatment and service design, as well as novel therapy development.

The faculty works with industry to undertake a broad range of multidisciplinary and translational research studies that address important individual and population health problems. A particular priority for the Faculty is to deliver reductions in health care burden and community costs across the western region of Victoria.

Western Alliance

The Western Alliance comprises a 12 member organisations located across the Barwon/Southwest and Grampians regions of western Victoria. The two regions have a combined population of over 660,000 residents or approximately 44% of rural/regional Victoria's population. Western Alliance supports its members to improve the health of their communities through research-based and evidence-informed health care, with the vision *healthier rural and regional communities*.

Western Alliance has the aim of being a NHMRC accredited Centres for Innovation in Regional Health.

Barwon South West Health Partnership

Barwon Health is the lead site for the Barwon South West Health Service Partnership. The Health Service Partnership model aims to help move the Victorian health system from competition to collaboration by requiring health services to work together on a small number of strategic system priorities that can be enhanced by working together rather than in isolation or competition.

Research Program Partnerships

There are a number of well-established partnerships led by the individual research programs, such as with Murdoch Children's Research Institute, the Burnett Institute and the Doherty Institute.

State and Federal government

The Barwon Natural Laboratory can provide a compelling case to government to partner with Barwon Health as the place to evaluate health system innovations. Opportunities exist in major reforms areas such as the NDIS, mental health reform and aged care reform.

WHAT CAPABILITIES DO WE NEED?

Governance

The development of a Research Strategic Plan is a critical enabler to bolstering the governance of research in general and clinical trials at Barwon Health. Improvements have been made through strengthening the capability of the Research, Ethics, Governance and Integrity and through the establishment of the Research Management Committee. The HREC membership has been changed to incorporate some more clinical input.

There exists opportunity to:

- Improve Board level governance.
- Use the trial assessment against the National Framework for Clinical Trials Governance to identify areas of weakness.
- Improve clarity and strengthen governance of combined Deakin/Barwon projects.

Reporting

There exists limited centralised reporting and oversight of research activity, including reporting to the Barwon Health Executive. Reporting to the Board is focussed on activity rather than on governance. The Research Microsite has improve transparency of the research programs current working.

Barwon Health Research Directorate

The **Research, Ethics, Governance and Integrity (REGI) Unit** manages research compliance, research ethics applications and review processes. REGI coordinates the National Health and Medical Research Council (NHMRC) accredited Barwon Health Human Research Ethics Committee. It has improved its capability, but its capacity is limited and its IT systems require upgrade

The **Barwon Health Research Support Unit** provides laboratory science management and clinical trial support, including help with the translation of clinical needs into research investigations, while providing support for clinical staff in research design, data analysis and research publications.

The **Barwon Health Biostatistics Support Service** provides statistical support for research undertaken within Barwon Health.

The **Research Data Management Service** assists staff who require expertise in data management tasks at all stages of their research.

WHAT MANAGEMENT SYSTEMS DO WE NEED?

Research Programs at Barwon Health are supported by centralised corporate functions, research is not a core function or specialty for these areas as systems are focused on direct care delivery:

- Public Affairs and Communications.
- People and Culture Directorate.
- Finance.
- Information Management.
- ICT Support.

Management systems present a potential opportunity for partnering with Deakin University as an organisation that has existing expertise in supporting research.



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