

# Roadmap for Strengthening Health Research and Translation in Queensland

# Our partners



Children's Health Queensland



























# **Acknowledgement of country**

We acknowledge the Traditional Owners and their custodianship of the lands on which this project originated. We pay our respects to their Ancestors and their descendants, who continue cultural and spiritual connections to Country. We recognise their valuable contributions to Australian and global society.

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# Our Roadmap intention

Queensland's health and medical research sector makes a positive difference to the health of Queenslanders every day. The translation of medical research changes lives through new discoveries and new treatments. There are many examples of world leading contributions by those working in Queensland. However, the full potential of the clinical and research system is not being realised. Our ambition is to reverse this trend and position Queensland's health and medical researchers as leaders nationally and internationally.

The priorities, goals and actions outlined in this document are designed to match this ambition and are timely considering recent government plans as Queensland enters a new and exciting phase of growth and opportunity. The Queensland Government's Advance Queensland: Innovation for a Future Economy 2022–2032 Roadmap sets the direction and priorities for Queensland to become a leading and sustainable world class innovation economy. Included in that document are plans to:

- » support Queensland universities and research institutes and the health system to leverage increased Australian Government funding opportunities such as new Cooperative Research Centres and through the Medical Research Future Fund (MRFF); and
- » support Queensland Hospital and Health Services and health and knowledge precincts to foster research into innovative products and services for translation into improved patient care and commercialisation opportunities including through clinical trials.

Under the leadership of Health Translation Queensland (HTQ), Queensland's leading research institutes, universities, health service providers and Queensland Health are working together to better understand what actions we need to take to ensure we can Advance Queensland. Specifically, we seek to:

- » continue to improve translating our world class health and medical research into opportunities that contribute to our future economy; and
- » identify opportunities that will contribute to improving the health and wellbeing of all Queenslanders.

This Roadmap for Strengthening Health Research and Translation in Queensland (the Roadmap) focuses on three priority areas.

- Strengthen Queensland's health and medical research ecosystem
- 2 Build Queensland's capability through an expanded health and medical research workforce
- 3 Optimise opportunities for improved funding

Together, these priorities build on existing foundations for an expanded innovative, sustainable and globally competitive health and medical research sector across Queensland.

This Roadmap details the actions required to realise each of the three

This Roadmap details the actions required to realise each of the three priority areas. Obtaining an increased share of competitive funding in the next decade will be a surrogate measure of success. As partners and collaborators, we are engaged and ready to contribute.



# Roadmap objective

The objective of this
Roadmap is to engage
decision makers, leaders
and the health and medical
research sector in working
together on the actions
required to build an
innovative, sustainable and
globally competitive health
and medical research
sector in Queensland.

# About Health Translation Queensland (HTQ)

HTQ is a peak body that brings together many of Queensland's universities, research institutes, health and hospital services, CSIRO's Australian e-Health Research Centre and Queensland Health.

At HTQ, we provide a platform for greater integration and collaboration between clinicians, educators, researchers, academics, policy makers and health consumers.

# **HTQ vision**

Improved population health outcomes through collaborative partnerships that translate scientific discovery and knowledge into practice.

# **HTQ** mission

To enable the translation and integration of innovative health research with education, policy, clinical care, and consumer engagement.

# Why we need a Roadmap



HTQ analysed Queensland's health and medical research funding performance in 2020 relative to other states and territories.

In October 2021, HTQ released the <u>Queensland Health and Medical</u>
<u>Research Funding Analysis</u> based on data from the federal government funding bodies, the National Health and Medical Research Council (NHMRC) and the Medical Research Future Fund (MRFF). The findings identified a deficit in funding for Queensland compared to other states.

The report attracted strong interest from across Queensland's healthcare and medical research ecosystem. Subsequent analysis showed that the data is representative of outcomes from the previous decade of NHMRC funding.

HTQ hosted consultations to gauge stakeholder appetite for a coordinated approach to improving Queensland's performance in attracting national funding – this Roadmap is the result of those consultations.

Please note that we refer to clinician researchers throughout this Roadmap. We recognise that clinician researchers may practice in any healthcare discipline including medical, allied health, nursing and midwifery. This is aligned with NHMRC's report *Investigating clinician researcher career pathways*.

# The bigger picture

Correcting the funding deficit is essential to improve and add value to Queensland through health and medical research. However, it is a means, not the endpoint. To have impact, the research must be relevant to the needs of the community.

A research culture in the health system attracts and retains the best quality practitioners. Productivity, efficiency and patient satisfaction increases. Engagement in research increases awareness of international best practice and results in rapid translation and implementation of change. These outcomes drive HTQ and guide the Roadmap to progress this agenda.



# Our approach

# Step 1 – Defining the problem

Understanding the barriers and opportunities to strengthening Queensland's Health and Medical Research funding position.

(HTQ Funding Analysis report)



# Step 2 – Leveraging the network

Defining tangible actions that clinicians, educators, researchers, academics, policy makers and health consumers can collectively implement.

(Developing the Roadmap for Strengthening Health Research and Translation in Queensland)



# Step 3 – Achieving a stronger health and medical research translation sector in Queensland

Securing commitment across the Queensland health and medical research sector to collaborate and take action in the implementation of the Roadmap to achieve sustainable and expected Commonwealth funding for Queensland-based health and medical research.

(Implementing the Roadmap for Strengthening Health Research and Translation in Queensland)

The <u>HTQ Queensland Health and Medical Research Funding Analysis</u> examined the comparative success or otherwise of Queensland federally funded health and medical research applications. As well as identifying a deficit in funding (per capita or by GDP contribution) for Queensland researchers compared to other states, the report also identified barriers and opportunities to driving broader system change and attracting increased and more sustainable NHMRC and MRFF funding for Queensland. Under the leadership and guidance of the HTQ Board, consultations with stakeholders from across Queensland considered the report's findings and recommendations. This resulted in the decision that HTQ should prepare a Roadmap for Strengthening Health Research and Translation in Queensland. In doing so, it is recognised that funding was a symptom and that it pointed to other missed opportunities that would be beneficial for Queenslanders.

A taskforce of experts in health and medical research, translation and regional research and scientific policy worked together with HTQ with the objective of identifying actions aimed at achieving increased and more sustainable federal funding for Queensland's health and medical research sector.

# A Roadmap for the future – in summary

This Roadmap articulates a set of actions that, if undertaken, would improve Queensland's profile in Australia's health and medical research ecosystem and strengthen its federal funding position.

The actions are practical and informed by the knowledge and experience of people at the coal face of Queensland healthcare and medical research.

Implementing these actions will require collaboration and commitment across government, healthcare, education, research, industry, and community.

# Priority 1 Strengthen the ecosystem

## Goal

Develop a dedicated Queensland Health and Medical Research Strategy, aligned with the Advance Queensland: Innovation for a Future Economy 2022-2032 Roadmap

- Queensland's health and medical research ecosystem must be strengthened to be more competitive
- Queensland's health system has unique assets that are underutilised by researchers
- Aligning Queensland's research with the needs of consumers and the health system will bring benefits to the community and increase the chances of funding success
- Focused health and medical research investments could provide increased returns through prevention, clinical outcomes and commercialisation

#### **Actions**

- > Engaging all in the sector in a 'Team Queensland' approach
- > Harnessing Queensland's competitive advantages
- > Investing in activities that support Queensland's medical research and translation competitiveness



# Priority 2 Build workforce capability and capacity

## Goal

Increase the number and diversity of active clinician researchers

- Queensland needs to increase its number of federal funding applications, particularly from clinicians from all disciplines
- Systems must be established to support clinician researchers, especially Aboriginal and Torres Strait Islander researchers
- Queensland must retain talented researchers, especially female and early and mid-career researchers

## **Actions**

- > Facilitating more research by clinicians and others in the healthcare system
- > Recognising and retaining talent and supporting them to flourish
- > Improving the diversity of active clinician researchers



# Priority 3 Optimise funding

## Goal

Broaden the scope and increase the probability of funding

- Leveraging and diversifying income sources are essential
- Funding applications need to address changing NHMRC and MRFF priorities and align with the needs of Queensland's health system
- Queensland must strengthen its involvement and leadership in medical research commercialisation

# Actions

- > Aligning medical research with health and economic opportunities, and consumer needs
- Ensuring that quality is maintained as the number of funding applications is increased
- > Embed consumer and community involvement as standard practice in all stages of research especially in the development of funding applications



# Priority 1 Strengthen the ecosystem

#### Goal:

Develop a dedicated Queensland Health and Medical Research Strategy, aligned with the Advance Queensland: Innovation for a Future Economy 2022-2032 Roadmap



# Understanding Queensland's health and medical research ecosystem

The components of the health and medical research ecosystems in all states and territories are similar. They involve a mix of universities, research institutes, health departments, hospitals, health services, practitioners and the community.

One aim of this Roadmap is to develop approaches to ensure that the whole is greater than the sum of the parts in Queensland. This is the essence of a successful ecosystem which is founded on collaboration between the diversity of entities that operate within that system. They evolve, cooperate, and even compete, and in doing so the system learns, responds, adapts and thrives.

There is an opportunity for Queensland to strengthen its health and medical research ecosystem – the way the various entities interact, the way they adapt and the way they share in a common goal of ultimately improving the health and wellbeing of Queenslanders.

In Queensland, there are some crucial differences, which seem to work against Queensland obtaining the same degree of success in securing funding compared to other states and territories. One of these differences is the presence of a single dominant and successful university – the University of Queensland (UQ).

In 2021, UQ attracted 77% of the total NHMRC funds that were awarded to Queensland. UQ also secured a similar percentage of the MRFF funds awarded to Queensland in the same year.

In Victoria, the best performing institute secured 35% and in NSW 44% of the total NHMRC funding awarded to those states. The structural imbalance of funds awarded to Queensland institutions is repeated each year.

This means that there is room for a broadening of effort and success.

It should be noted that the Queensland Government's *Advance Queensland*: *Innovation for a Future Economy 2022-2032 Roadmap* identifies opportunities that have not been fully harnessed in the health and medical research ecosystem.

Goals for a legacy from the 2032 Olympic Games depend also on implementation of medical research. Both initiatives require a Queensland strategy for health and medical research to deliver maximum benefit from those working across different institutions.



# Increasing the number of universities and institutes that consistently attract significant funding

There are excellent researchers in all Queensland institutions. However, there needs to be an increase in successful applications from all institutions. The data shows that, other than UQ and QIMR Berghofer, no other university consistently receives federal funding of \$15 million or more (per annum).

To increase the pool of applicants, smaller, regional and other universities need to improve their performance. They could benefit from mentoring and exchange of information on best practice, especially from HTQ partners and larger institutes such as UQ.

This is integral to a 'team Queensland' approach.

# Collaboration

Improving collaboration between and across entities is another opportunity for Queensland's health and medical research ecosystem. The benefits of co-location have been maximised in some states with the Melbourne Biomedical Precinct in Parkville being a shining example of different and diverse organisations working together.

Queensland has a number of precinct opportunities with hospitals and universities in close proximity in locations such as Herston Health Precinct, Boggo Road Precinct and the Gold Coast Health and Knowledge Precinct. Each of these areas could be strengthened as core health and medical research precincts. The modern variation of virtual assemblages should also be added to considerations to achieve better results collectively.

# **Priority 1**

# Strengthen the ecosystem (cont.)



# **State structures**

The importance of the leadership provided by state government departments on the overall outcome of funding applications cannot be underestimated. Within and across government, portfolio areas can be restructured to enable and support the health and medical research ecosystem. For example, some states, such as Victoria, have a dedicated and single point of leadership in this area, led by a Minister for Innovation, Medical Research and the Digital Economy.

Queensland appears to be organised such that different state departments and portfolio areas are responsible for different components of the health and medical research ecosystem.

To support its innovation agenda, Queensland could consider establishing a dedicated portfolio and minister to take leadership of the health and medical research ecosystem.

The boundaries of such a department should extend beyond the hospital sector to include universities and innovative commercial entities. These are equally important players in improving research and development activities relevant to health across the state.

# Increase medically relevant applications

The data from the MRFF shows that Queensland typically secures around 12% of MRFF annual funding. This is a comparatively poor result for Queensland.

It is recognised that the MRFF prefers applications that are led by a clinician. Many of the active clinician researchers in Brisbane (located in Metro North Health, Metro South Health, Children's Health Queensland, Mater Health and The Wesley Hospital), have conjoint positions in UQ. This means that their funding applications are linked to UQ.

With significant hospitals and medical schools located at the Gold Coast, Townsville and the Sunshine Coast, there appears to be untapped opportunities to build greater engagement from clinician researchers in those locations and hence increase MRFF success in Queensland.

# **Navigation**

Navigating the different components of the ecosystem can be a challenge. Investment in facilitators to assist in the flow of information and brokers to help in the establishment of new teams based in different institutions would be a welcome initiative toward strengthening the ecosystem.

The creation and maintenance of a database of research activities throughout the state would also improve knowledge flow and consequently the quality of funding applications.

# Use unique assets

There are opportunities to build on unique aspects of the Queensland health system. Unlike other states, Queensland has centralised some of its key clinical requirements associated with pathology, children's health and electronic medical records. These are rich assets that are currently underutilised by the research community.

The opportunity to fill gaps in areas such as clinical trials or biobanking should be embraced in a similar centralised manner.

The ongoing work in these areas along with the work in streamlining ethical and governance approval is a high priority for HTQ, its partners and the research community. Success in those domains should transfer into success in external grant applications.



# Priority 1 Strengthen the ecosystem (cont.)



# **Actions:**

precincts.

# 1.1

# Engaging all in the sector in a 'Team Queensland' approach

The problem to solve
Queensland does not capitalise
on existing capabilities or
prioritise health and medical
research opportunities in
some areas including joint
ventures, cross-institutional

collaborations and networked

# 1.1a.

Use the HTQ partnership as a peak body to bring all shareholders together to design collaborative structures to support action

#### 1.1b

Share best practice by establishing a Queensland-wide, crossinstitutional mentoring program for individuals and emerging institutions

#### 1.1c

Analyse the performance and research strategies of Queensland's healthcare and research institutes annually to identify and link areas of common interest

## 1.1d.

Establish and maintain databases of specialised equipment, skills and research projects to enable access and reduce duplication

# 1.2 Harnessing Queensland's competitive advantages

The problem to solve The strengths of Queensland's health system are not being leveraged.

# 1.2a.

Promote Queensland's health system strengths such as our state-wide pathology service, children's hospital and electronic medical records

## 1.2b

Identify and address barriers such as slow ethics and governance approvals to help research projects and clinical trials to get started safely, but quickly

## 1.2c

Embed informed brokers in the system to support linkages between researchers, clinicians and industry

## 1.2d.

Accelerate progress in areas such as data sharing and biobanks to create new Queensland assets

# 1.3 Investing in activities that support Queensland's medical research and translation competitiveness

The problem to solve
Queensland's health and
medical research systems
are rich in knowledge
and capability but there
are gaps in infrastructure
and incentives to share
information across entities for
collective benefit.

## 1.3a

Work with Queensland Health and the Hospital and Health Services to increase their investment in research, including an allocation goal of 3% of budgets (as proposed by the McKeon Report) and a requirement to publish the annual quantum of research investment and results.

## 1.30

Identify and implement practical steps for a state-wide biobanking system which supports precision health and diverse research areas

## 1.3c.

Identify and action areas to support Queensland's clinical trials capability

## 1.3d.

Build on existing knowledge and health precincts to achieve their full potential individually and collectively

## 1.3e.

Explore establishing virtual institutes that would focus on specific diseases to address significant health challenges

# Priority 2 Build workforce capability and capacity

# Goal:

Increase the number and diversity of active clinician researchers



# The amount of research funding available defines the size of the health and medical research workforce

Queensland needs more researchers if the data on securing federal funding and the consequent benefits for the community are to change for the better.

Queensland's medical research grant performance has stagnated for over a decade. It is not an issue of the quality of research funding applications – which aligns with the average of the five Australian states.

The data from the HTQ Funding Analysis points to fewer applications from clinician researchers in Queensland than is the case in other states. Queensland accounts for 20% of the Australian population yet submits just 15% of applications for NHMRC funding. Victoria submits more than 2000 applications for NHMRC funding annually, while Queensland submits approximately 800. Interestingly, the number of applications from Queensland and Victoria has been relatively constant over the past 10 years as has the share of the funding that each state receives annually (14% Queensland 40% Victoria).

This is part of a broader research workforce problem that seems to be specific to the health and medical sector as grants for non-medical research from the Australian Research Council (ARC) are in line with Queensland's population size.

The size, quality and scope of the health and medical research workforce are major factors that influence the quality and impact of research outcomes.





One of the primary aims of the Roadmap is to engage more clinicians in research. This includes nurses, allied health professionals, health economists and system experts.

To improve Queensland's funding performance through a stronger research workforce, the following activities should be undertaken:

- researchers in Queensland who are successful are retained;
- researchers who are on the brink of grant success are supported to improve their applications for future funding;
- there is a dedicated focus on nurturing younger research talent within the system; and
- more clinician researchers are engaged and are active applicants for federal funding.

# **Priority 2**

# Build workforce capability and capacity (cont.)

# Retention

Good researchers are an asset and should be considered as such by the State. Their contribution goes beyond the clinic and the difference they make for patients and health outcomes.

Good researchers contribute economically to Queensland – they provide valuable training for the workforce; they increase the reputation of Queensland; and they assist in attracting new talent. The movement of good researchers to other states is a significant loss to Queensland.

# On the brink of success

The margin between success and failure in NHMRC or MRFF funding (where awards are made to approximately 10% of applicants) is small. Those who are 'near misses' have a high chance of success in the future either by a small shift in their score or through the impact of extra supporting data.

Some universities and institutes have 'near miss' schemes to retain those research teams. However, these 'near miss' schemes are not consistently in place every year, even in those places that recognise their benefits.

'Near miss' schemes should be a predictable source of funding throughout the State. Western Australia has introduced an ongoing state-wide scheme to support 'near misses'. This Western Australia initiative could be replicated by Queensland. It would provide a predictable, equitable and transparent process for improving Queensland's research funding performance.

# Focus on early-stage researchers

Researchers at the early stage of their careers are in a particularly vulnerable position. There are many stars of the future in Queensland's institutions. However, the success rate for this cohort is less than 10% and the results are consistently worse for female applicants.

Investment in emerging research leaders will give a good return in the future. If those early-stage researchers are not supported and retained, then the health and medical research sector in Queensland will suffer from lack of diversity, a dwindling skills base and no succession plan.



# **Engaging clinicians in research**

Changes are needed across Queensland's hospital and health services to facilitate greater involvement of clinical staff in research. The benefits of having research active clinical staff needs to be highlighted, valued and measured. Career pathways should acknowledge research contributions.

Support provided through clinical trials nurses, research assistants and data analysts needs to be in place to ensure that clinicians' time is used efficiently and productively.

Anomalies, for instance, related to pay differentials for time spent in research settings, need to be addressed.

A single act to trigger these changes would be to ensure that leaders in the health system (hospital and health services, private hospitals, and Queensland Health) have KPIs specifically linked to research engagement and research output from their staff. This is particularly relevant to those hospitals that are classified as tertiary or quaternary and where the clinicians of the future are being trained.

# What are we missing out on?

The gap between the research funds awarded by the NHMRC and the MRFF and the amount of funds that would correspond to 20% (the normalising factor based on population or GDP) could support over 600 researchers or 60-70 research groups.

That extra investment into health research and translation would be a game changing opportunity that will require a collective effort. With a budget of over \$23 billion, Queensland Health could initiate some of the approaches outlined in the Roadmap.

A starting point worth considering is a commitment of 3% of the annual health budget to health research and implementation. This was proposed by the McKeon report to the Federal Minister of Health some 10 years ago.

Such an injection of funds into the health and medical research sector is also in line with specific goals of the *Advance Queensland: Innovation for a Future Economy 2022-2032 Roadmap.* 



# Priority 2 **Build workforce capability and capacity** (cont.)



# **Actions:**

# 2.1

Facilitating more research by clinicians and others in the health system

# The problem to solve

Our current health system does not have research embedded as a core activity within the overall service profile of hospital and health services. While excellence in research exists within some hospital and health services, it often operates in a siloed environment.

#### 2.1a

Embed dedicated funding for translational research and innovation activity in hospital and health services through Service Level Agreements ensuring the inclusion of:

- » protected time for clinician researchers; and
- » connections with research centres to support applications for federal research funding

# 2.1b.

Work with consumers and clinicians to promote the upstream and downstream benefits of translational research

## 2.1c.

Improve translational research enabling functions including human research ethics and governance, digital capability, evaluation and impact, workforce and consumer and community involvement

# 2.2

# Recognising and retaining talent and supporting them to flourish

The problem to solve
Queensland lacks a
systematic approach to
support and retain talented
researchers.

## 2.2a.

Implement a state-wide 'near miss' scheme to support researchers to improve unsuccessful NHMRC or MRFF funding applications for subsequent grant rounds

## 2.2b

Establish a Queensland Premier's research excellence awards program to celebrate researcher achievements

## 2.2c.

Remove financial disincentives for successful clinical grant applicants

## 2.2d

Engage with Research Translation Centres nationally for a coordinated approach to attracting and retaining a research workforce aligned to health needs and workforce gaps

## 2.3

# Improving the diversity of active clinician researchers

The problem to solve
We do not have a
workforce of researchers
commensurate with the
population of Queensland.
We need to increase
researcher numbers in the
system and diversity of their
skills and career stages.

# **2.3a.**

Prioritise efforts to increase the investment in schemes and initiatives that support, enhance and increase the capability and numbers of Aboriginal and Torres Strait Islander peoples active in health and medical research

# 2.3b.

Establish early and mid-career researcher retention strategies with tailored measures for researchers in rural and regional settings, and for female researchers in the health system

## 2.3c.

Work with clinician researchers from all disciplines to increase the number of applications for federal research funding

# Priority 3 Optimise funding

# Goal:





# Increased funding is needed

According to the 2018 AAMRI Report on the Economic Impact of Medical Research, every \$1 invested in medical research in Australia returns \$3.90 to the broader economy.

The benefits of improved success in securing research funding range from: better treatments for patients; improved health outcomes; greater commercialisation opportunities; rapid introduction of new discoveries; and an improved reputation for medical research that reflects positively on Queensland.

To achieve this, it is crucial that more funding is invested in strengthening the health and medical research sector and the ecosystem it operates in.

Success of the Roadmap will be measured by a demonstrable improvement in competitive research funding awarded to Queensland applicants.

This Roadmap builds on the <u>Health Translation</u> <u>Queensland Health and Medical Research Funding</u> <u>Analysis Report</u> which identified a deficit in NHMRC and MRFF funding for Queensland. The Roadmap articulates possible reasons for the deficit in research funding and actions for improvement. These actions were identified in discussions with the health and medical research community and a specially convened Health and Medical Research Taskforce.

# Working closely with Queensland Health

The MRFF funding program seeks to address gaps in the health system. It is reasonable to suggest that the same approach of promoting research to address gaps in the health system should be adopted by Queensland Health in its support of the health and medical research sector. Doing so would also strengthen Queensland's likely success in securing funding from the MRFF and the NHMRC.

Queensland Health's knowledge of system strengths and pressure points and the health conditions and needs of Queenslanders, should influence and direct the state's efforts in health and medical research. This could range from targeted areas such as the avoidance of severe illness and costs by early diagnosis, focusing on diseases that have a major burden on society or emerging areas of system efficiency through digital solutions.

When researchers align their skills with state priorities, significant progress can be made. This was demonstrated in the recent response to COVID-19.



# Priority 3 Optimise funding (cont.)



# Working together – clinicians, researchers and consumers

Involving clinical leads in identifying research opportunities will result in closer and more productive relationships between the 'bench and bedside'.

Queensland, with a strong and active health consumer organisation, is well poised to lead the way in co-designed research involving consumers, researchers and clinicians.

The outcome from this approach would go beyond the standard production of publications. It has the potential to fast track the translation of health and medical research into clinical practice and ultimately improve health outcomes.

# Attracting and increasing commercial opportunities

Although the phrase 'bench to bedside' is used universally, the mantra 'bench to business to bedside' has also been introduced to Queensland. It promotes the fact that products that start as research need to be refined and tested by biotech and pharmaceutical companies.

An outcome from this Roadmap of an informed, engaged and relevant research and medical community in Queensland should significantly increase commercialisation opportunities.

This will contribute to Queensland's economy directly and indirectly through financial gains for research organisations, commercialisation opportunities, a strengthened workforce, more support jobs in the community, and benefits to patients through the rapid implementation of cutting-edge treatments.

The potential for commercialisation needs to be promoted, encouraged and supported throughout Queensland's health and medical research ecosystem as specifically identified in the Advance Queensland: Innovation for a Future Economy 2022-2032 Roadmap.

# Raising awareness – research is an investment, not a cost

It is fair to assume that people who benefit from being involved in clinical trials would wish to have such opportunities available to others. People who have received an improved treatment usually know that it would not have happened without a starting point in a research laboratory.

These people are the best informed and well placed to bring the message to the health system; they understand that the work does not end until it is in a pipeline to implementation. Such messages will help drive change in attitudes and deliver broader engagement of clinicians and potentially improved investment in research.

# Applying philanthropic funding to support grant applications

Communities regularly donate to foundations that perform or use research. Often, these donations allow a research team to remain active at a time when funding is lean.

In addition, these donations can fund experiments to generate preliminary data that is a prerequisite for a successful funding application. Those responsible for allocating philanthropic funding should be encouraged to direct their funding towards applicants that are ready and in need of additional financial support to move from their preliminary data phase to a full NHMRC or MRFF grant application. In this way, community engagement will be leveraged to more federal funding.

The researchers seeking this funding support should, in turn, get the best advice on how to prepare grant applications and with whom they should collaborate to increase their chances of success.



# Priority 3 Optimise funding (cont.)



# **Actions:**

# 3.1

# Aligning medical research with health and economic opportunities

The problem to solve
Research activities are often
developed independently
from the needs of the end
users. This reduces the
impact and diminishes the
appeal of applications to
research funders.

# 3.1a.

Work with Queensland Health to identify key areas where research is needed to improve health outcomes

# 3.1b.

Connect research networks to health delivery networks (e.g., Queensland Health State-wide Clinical Networks) to embed translational research in the clinic

#### 3.1c

Leverage philanthropic funds to support researchers to prepare strong NHMRC and MRFF applications

#### 3.1d

Establish proof of concept funds to support researchers to perform crucial targeted experiments to generate preliminary data for funding applications or increase commercial relevance

#### 3.1e

Improve researchers' commercial acumen and include potential commercial outcomes as a key consideration for researchers

# 3.2

# Ensuring that quality is maintained as the number of funding applications is increased

The problem to solve
Clinician informed
applications are increasingly
required when presenting
research funding applications.
As new researchers come into
the system, it is essential to
maintain quality standards.

# 3.2a.

Support researchers with grant writing and emphasise impact

## 3.2b.

Connect researchers and clinicians from different institutions to support cross-institutional collaboration

# 3.3

Embed consumer and community involvement as standard practice in all stages of research, especially in the development of funding applications

The problem to solve
The approach to consumer engagement, particularly for people and groups who experience marginalisation and barriers to participation, is inconsistent and often compounded by researchers who are lacking in time and resources to ensure meaningful and sustained engagement.

## 3.3a

Build on HTQ's consumer and community involvement program to support consumers and researchers to work together in formulating research priorities, projects and funding applications

## 3.3b

Harness and support the efforts of those who are leading initiatives aimed at ensuring equity and inclusion of the needs and priorities of Aboriginal and Torres Strait Islander peoples in health and medical research

## 3.3c.

Connect researchers, clinicians and consumers to help guide translational research, with a particular emphasis on priority populations such as Aboriginal and Torres Strait Islander peoples.



# One strategy for the benefit of Queensland

The three priorities of this Roadmap – ecosystem, workforce and funding are interdependent.

Collectively, they combine to form actions that could be considered foundational to a Queensland Strategy for Health and Medical Research. A new Queensland Strategy for Health and Medical Research will help to improve Queensland's competitiveness with other states, particularly those states that have well-honed strategies and a highly engaged government and stakeholders.

With Queensland poised to be on the international stage in 2032 – the opportunity to showcase our expertise in health and medical research should not be missed.



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