

Victoria's Health and Medical Research Workforce Action Plan

2024



Acknowledgement of Country

The Department of Jobs, Skills, Industry and Regions (DJSIR) proudly acknowledges Victoria's First Nations peoples and their ongoing strength in practising the world's oldest living culture. We acknowledge the Traditional Owners of the lands and waters on which we live and work and pay our respect to their Elders past and present.

We acknowledge Aboriginal and Torres Strait Islander Peoples' continuing ways of knowing, being, and doing around health, wellbeing, and healing. As the first scientists, Aboriginal knowledge systems have sustained communities and cared for Country for tens of thousands of years. We honour the valuable contributions this wisdom continues to make to the health and wellbeing of today's society.

We are committed to advancing Aboriginal self-determination and supporting Aboriginal communities and Traditional Owners to realise self-determined health and economic development objectives.

We acknowledge the intersections of this Action Plan with *marra ngarrgoo, marra goorri*: the Victorian Aboriginal Health, Medical and Wellbeing Research Accord. *marra ngarrgoo, marra goorri* aims to increase self-determination in Aboriginal and Torres Strait Islander research conducted across the state.

Language statement

We recognise the diversity of Aboriginal people living throughout Victoria. Whilst the terms 'Koorie' or 'Koori' are commonly used to describe Aboriginal people of southeast Australia, we have used the term 'Aboriginal' to include all people of Aboriginal and Torres Strait Islander descent who are living in Victoria. The use of the words 'our' and 'we' throughout this document refers to the Victorian Government.

Acknowledgements

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Ministerial Foreword

Victoria's health and medical research workforce is delivering ground-breaking healthcare discoveries that are improving – and saving – lives locally and globally.

As Minister for Medical Research, I have seen first-hand how researchers across our state are advancing medical knowledge, driving innovation and improving patient care.

The Victorian Government values and supports our world-class health and medical research sector.

Our record investment of more than \$1 billion has cemented Victoria as a global hub for medical research, with a workforce of over 30,000 driving incredible breakthroughs in treatment and patient care.

With continued support for our talent, the possibilities for future advancements in health and medical research are truly limitless.

But we know that there is still more work to be done to ensure our workforce is well-equipped to drive the next generation of medical breakthroughs.

That is why I am pleased to present the Victorian Government's Health and Medical Research *Workforce Action Plan*, which sets out our roadmap to boost Victoria's workforce capabilities.

Developed in partnership with stakeholders across our state, this Action Plan will strengthen our workforce and empower the sector to make the discoveries of tomorrow.



Ben Carroll

The Hon Ben Carroll MP
Deputy Premier
Minister for Medical Research

It outlines a framework for stakeholders to unite to amplify the incredible efforts many are already making to support our researchers.

By working together, we can create a more supportive, collaborative and innovative environment so they can build long, successful and rewarding careers.

I look forward to continuing to support our workforce and nurture new, emerging and experienced medical researchers – now and into the future.

Introduction

Victoria's medical research sector is recognised as one of the state's most productive industries, making a significant contribution to the economy and playing a crucial role in our innovation landscape.

Over the past decade, the Victorian Government has invested over \$1 billion in medical research. This investment has fostered a diverse range of research skills, established national and international networks and facilitated the construction of world-class precincts that have set us apart on the global stage.

Victorian institutions are at the forefront of medical innovation, leading the way in ground-breaking research. From advancements in cancer therapies and children's health to breakthroughs in heart disease and neuroscience, Victoria is a hub for cutting-edge medical discoveries.

Examples of the remarkable work underway within Victoria's medical research institutes, universities and health services include the creation of 3D-printed medical implants

with the potential to regrow bones and tissues, research into an artificial pancreas for diabetes management and the development of a bionic eye to aid people with visual impairments.

In partnership with the sector, we need to support the research workforce with the skills, resources and opportunities they need to excel. We have worked with stakeholders across Victoria's health and medical research sector to better understand how we can achieve this based on key priorities and problem areas.

This Action Plan sets out Victorian Government initiatives, but also serves as a call for collaborative action across the sector to realise our shared vision and drive positive change for the health and medical research workforce.





Our Workforce Vision

Build a collaborative, equitable and highly skilled health and medical research workforce to improve people's health outcomes and drive economic growth in Victoria.

The *Workforce Action Plan* is the first Action Plan to be released under Victoria's *Health and Medical Research Strategy 2022–32* (the Strategy). Talent development is a core tenet of the Strategy because of the essential role the workforce plays in maintaining a robust and dynamic research sector.

The Strategy emphasises collaboration. A skilled workforce, strong partnerships and collaboration with academia, health services, research institutes and industry are essential to create an environment of shared knowledge which supports ground-breaking advancements in health and medical research.

Defining the Medical Research Workforce

References to the health and medical research workforce in this Action Plan have a broad interpretation and include relevant skills across:

- medical research institutes and precinct groups
- universities
- industry and manufacturing
- hospitals and health services
- peak bodies.

Victoria's Health and Medical Research Sector at a glance

SIGNIFICANT EXPORTS



Supports over

\$2.4 billion

in **exports** per year

TRIAL ACTIVITY



Recognised as an

international leader

in **clinical trials and research**

ECONOMIC IMPACT



Generates

\$3.90

of economic activity for every **\$1 of investment**

WORLD-CLASS INSTITUTES



Home to

18 world-class

medical research institutes which together employ over 6,000 people

COMPETITIVE FUNDING



Consistently attracts

over 40%

of Commonwealth funding for **medical research**

EMPLOYMENT



Employs over

30,000

people

Victoria's Health and Medical Research Sector is one of the top research and biotech hubs in the Asia-Pacific region.

INCOME



Total **annual salaries** worth over

\$2 billion

Developing the Workforce Action Plan

Workforce issues emerged as the sector's top priority during the development of Victoria's *Health and Medical Research Strategy*. Extensive consultation with the health and medical research sector provided insights into unique challenges and reform opportunities, shaping the development of this *Workforce Action Plan*.

The findings and perspectives revealed through this consultation have directly informed the priorities and actions in this document.

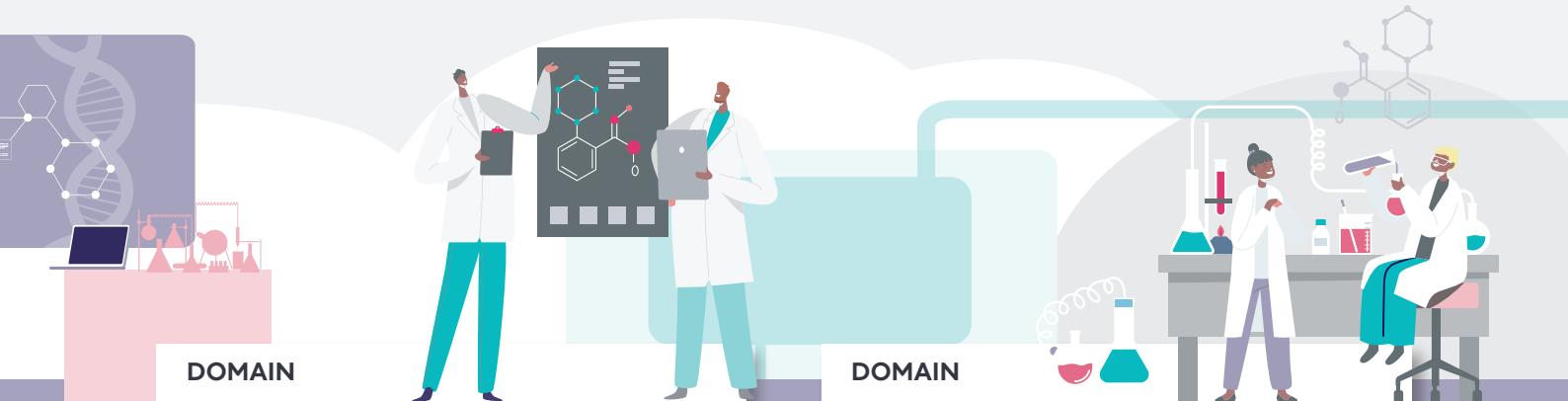
These actions will enable us to work collaboratively to:

- Foster a diverse, equitable and inclusive research workforce
- Gather reliable and comprehensive data on the health and medical research workforce
- Strengthen essential skills and capabilities to meet both current and future sector demands
- Retain and support talent within the sector
- Advocate for funding models that promote workforce growth, development, and long-term sustainability.



Workforce Priorities

The following priorities provide a roadmap for the Victorian Government in collaboration with the health and medical research sector to support a stronger workforce.



DOMAIN

1 Embed collaboration and information

Embed collaboration and information availability across the sector to support understanding of workforce needs and skill gaps, and to enable the design of effective interventions.

DOMAIN

2 Attract and retain talent

Attract and retain more talent by raising Victoria's profile as a world-class destination for medical research, building awareness of career pathways and addressing key barriers to working in the sector.



DOMAIN

3 Build skills and capability

Expand the skill base of the health and medical research workforce and address skill gaps, with a focus on programs that support emerging areas of opportunity and research translation and commercialisation.

DOMAIN

4 Drive diversity, equity and inclusion

Promote and embed diversity, equity and inclusion across all areas of the Action Plan to ensure that the health and medical research workforce is representative of and responsive to the diverse needs of the Victorian community.



Our Workforce Vision

Build a collaborative, equitable and highly skilled health and medical research workforce to improve people's health outcomes and drive economic growth in Victoria.

DOMAIN

1

Embed collaboration and information



Victoria is home to a rich and vibrant health and medical research ecosystem, comprised of professionals from universities, research institutions, industry and hospitals, each contributing a wealth of knowledge and skills. Victoria's diverse and dynamic sector fosters collaboration, innovation and competitiveness which underpins our global reputation for excellence.

There are opportunities to build on our strengths and improve engagement across the sector to enhance workforce coordination and planning. A collaborative, sector-wide approach will enable us to build and support the future workforce we need.

Better coordination of workforce data collection will enable us to develop more targeted policy and program responses. Understanding how professionals work across the sector, their skills needs, and diversity will provide a better understanding of workforce shortages and capability gaps that require greater support.

Action 1.1

Facilitate sector-wide collaboration and leadership opportunities.

We will facilitate these opportunities by:

- Expanding and developing networking opportunities to showcase the sector:
 - supporting industry-led events
 - maximising the impact of Victorian Government sponsored medical research events

- working with BioMelbourne Network to expand online networking opportunities
- Identifying strategic partnership opportunities that will strengthen Victoria's global reputation, creating greater workforce opportunities and attracting talent.

Action 1.2

Analyse workforce composition, needs and future priorities.

We are partnering with the Victorian Chapter of the Association of Australian Medical Research Institutes (AAMRI Vic) to understand critical skill gaps impacting sector growth, which will inform future priorities.

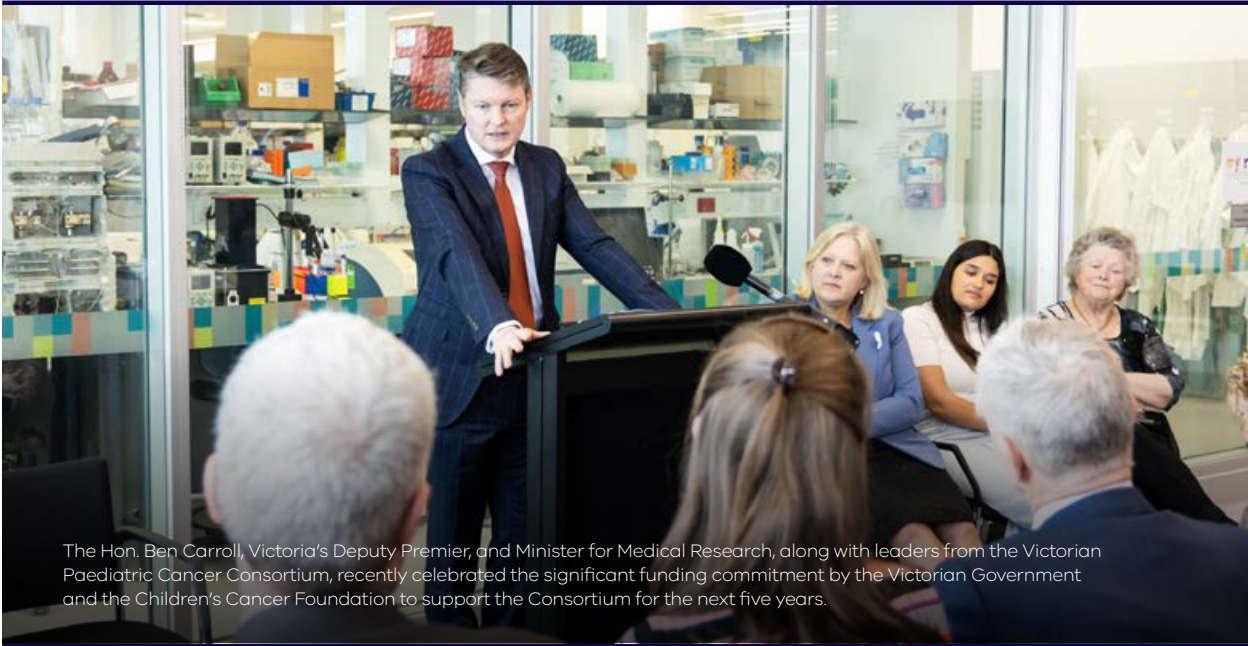
We will also explore methods to improve workforce data in Victoria, informed by the Commonwealth Government's work to audit Australia's health and medical research workforce and development of the National Strategy.

Case Study

The Monash University Clinical Trials Centre brings together researchers, clinicians, industry partners, and health services to streamline clinical trials and accelerate the development of innovative therapies.

The outcomes of the Centre's commitment to collaboration are exemplified through its leadership in two of Australia's largest community-based trials and its extensive network of 65,000 clinicians and healthcare professionals spanning metropolitan and regional areas.





The Hon. Ben Carroll, Victoria's Deputy Premier, and Minister for Medical Research, along with leaders from the Victorian Paediatric Cancer Consortium, recently celebrated the significant funding commitment by the Victorian Government and the Children's Cancer Foundation to support the Consortium for the next five years.

Case Study

Victorian Paediatric Cancer Consortium

The Victorian Paediatric Cancer Consortium (VPCC) unites leading researchers, academic and clinical organisations to collaborate in the fight against childhood cancer. Despite considerable progress and breakthroughs in adult cancers, cancer continues to kill more young Victorians than any other disease in Australia and one in five children diagnosed do not survive.

Before the creation of the VPCC, Victoria's top-tier hospitals, universities and research institutes dedicated to paediatric cancer operated independently, without a formal collaborative alliance to address their common objective.

The VPCC has established a central platform through which stakeholders can benefit from sharing knowledge, unifying the paediatric research community and promoting collaboration among diverse disciplines statewide. Funding supports dedicated paediatric oncology fellowships and PhD positions to build a skilled and sustainable workforce.

Through the work of the newly established VPCC Ltd, the consortium aims to revolutionise childhood cancer care and give more children the chance to grow up happy and healthy. Backed by \$35 million from the Victorian Government and \$10 million from the Children's Cancer Foundation, the consortium will support the development of novel cancer therapies through research and clinical programs, focusing on identifying safer therapies for children. As childhood cancer treatments can have significant long-term side effects, the VPCC will also help survivors to manage their health so they can lead long and fulfilling lives.

DOMAIN

2

Attract and retain talent



Victoria's ability to attract and retain a skilled health and medical research workforce is at the heart of the sector's research excellence. Our world-class universities, research institutes and industry partners draw talent from across the globe, creating a rich and diverse pool of researchers who drive innovation.

We can enhance Victoria's ability to attract and retain talent by strengthening support for early to mid-career researchers and increasing opportunities for women in leadership roles. The Victorian Government is working to improve pathways for women and researchers at risk of leaving the sector. We are also exploring training opportunities in areas with growing demand to enhance retention.

We will continue to engage closely with the Commonwealth, the primary public funder of medical research, and the sector, to address systemic funding issues. This will include advocating for reforms that better support the full costs of research, foster job security across the sector, and expand research investments. Such reforms will better support the sector and strengthen our research capabilities.

We are promoting Victoria's reputation as a premier hub for medical research to better attract and retain talent through events to celebrate the significant expertise within our workforce. We are also improving awareness of career pathways among school leavers, graduates and those considering a career change. By doing so, we can encourage skill development and movement across the sector rather than seeing talent leave.

Action 2.1

Advocate to the Commonwealth Government to address workforce challenges in national reforms.

The health and medical research sector have been instrumental in continuing to shape and inform recent Commonwealth reform opportunities. Many Victorian stakeholders participated in consultations to improve the alignment of national funding sources.

AAMRI Vic has championed the development of a National Health and Medical Research Strategy on behalf of Victoria's medical research institutes. We're pleased to see that the Commonwealth Government has announced its commitment to developing a National Strategy.

We will continue working closely with the sector and with the Commonwealth Government to ensure that Victoria's voice is heard in national reforms.

Action 2.2

Promote Victoria as a top destination for health and medical research, highlighting access to career and development opportunities.

We are supporting projects and events that raise the profile of Victorian health and medical research, highlight career opportunities across the sector and recognise talent. In 2024 alone, Melbourne has hosted some incredible events, including Biomolecular Horizons, AusBiotech 2024, and the Research Australia awards, drawing research talent from across Australia and the globe. We will also continue to support Victoria's long-standing awards for health and medical research, which celebrate our sector's talent and which in 2025 will mark their 30th year.

This action involves developing a dedicated information hub for Victoria's research workforce by expanding BioMelbourne Network's *Wilam* platform, an initiative seed-funded by the Victorian Government. The platform currently provides an online community through which the research workforce can collaborate and network. With our support, it will soon host a suite of workforce resources, including career mapping, mentoring opportunities, and information on training courses, sector events and jobs.

Action 2.3

Implement targeted programs to attract and retain talent, with a focus on fostering diversity and developing priority skills.

We are funding 13 *Fostering Achievement in Research Fellowships* to directly support the retention of talent and enhance diversity in Victoria's medical research sector.

These Fellowships support researchers who narrowly missed out on National Health and Medical Research Council funding.

We continue to work closely with the sector to determine which areas should be prioritised for further support.

Case Study

Fostering Achievement in Research Fellowships

The Victorian Government has provided \$1 million for Fostering Achievement in Research (FAIR) Fellowships, supporting early and mid-career researchers who narrowly missed out on national funding opportunities and ensuring that the state's world-class medical research sector continues to grow. These Fellowships, based off the successful 2022 Near-Miss pilot program, not only retain talented individuals but also promote workforce diversity and inclusivity, addressing inequities within the research funding system.

Assessment criteria prioritise researchers who may face additional barriers to success, including women, Aboriginal and Torres Strait Islander people, people with disability and the LGBTQIA+ community.

Under the current Australian funding landscape, early and mid-career researchers contend with a competitive grant pool with a 10 to 15 per cent success rate. The FAIR Fellowships recognise this challenging environment and enable scientists to continue delivering valuable research.



DOMAIN

3

Build skills
and capability



We must nurture the sector's skills and capabilities to produce innovative, high-quality research that can solve local and global health challenges. Victoria's world-class universities and institutes play a critical role in the ecosystem by producing the research skills and talent of tomorrow.

Victoria has world-class medical research talent across our state. We know persistent skill gaps remain in areas including research translation, manufacturing, commercialisation, clinician research and clinical trials. We must bridge the divide between discovery, translation and commercialisation, which is a key focus of the Generating Outcomes domain in Victoria's 10-year *Health and Medical Research Strategy*.

We are also exploring ways to support novel opportunities and technologies within the health and medical research sector. Medical research is a dynamic and fast-paced field. The sector needs to be ready and able to apply cutting-edge technologies including artificial intelligence, RNA, genomics and more.

By addressing skill gaps and enhancing workforce capabilities, the sector will continue to thrive, delivering life-changing innovations at every stage of the research pipeline.

Action 3.1

Support upskilling programs to address skill gaps and emerging opportunities.

This includes initiatives such as:

- Partnering with the Australian Clinical Trials Education Centre to provide training and upskilling programs which address skill gaps in clinical trials.
- Funding the Victorian Comprehensive Cancer Centre Alliance's 2024 SKILLED Clinical Trials Internship Program for rural and regional areas. The program has helped build the clinical trials workforce pipeline and worked to address key skill gaps.
- Identifying and investigating solutions to priority skill needs in Victoria (Action 1.2)

Action 3.2

Boost translation and commercialisation skills within the sector.

Examples include:

- Collaborating with AAMRI Vic, Swinburne University and MTP Connect to pilot and deliver a new upskilling program, supported by the *Skills Solutions Partnerships* Program. This will target the pre-seed investment stage and develop translation, commercialisation and entrepreneurial skills in early-mid career researchers.
- Expanding and developing the Western Alliance Regional Translation Coordinator (RTC) Program to build research capabilities in regional health services and support the translation of research from bench to bedside.

Case Study

Victorian Medtech Skills and Devices Hub

The Victorian Medtech Skills and Devices Hub (VMH) is an Australian-first medical technology (medtech) hub, supported by investment from the Victorian Government in 2023.

The VMH is a collaboration between industry and education partners, including the University of Melbourne, Swinburne University of Technology, RMIT University, and the Aikenhead Centre for Medical Discovery, which aims to position Victoria as a leader in medtech manufacturing capability. The VMH will develop new training pathways to enhance workforce skills and serve as a central point of contact for the medtech industry to promote sector capability and improve connectivity.

VMH delivers training to address skill gaps, building capabilities and addressing labour shortages in the local medtech workforce. This includes short courses, micro-credentials and workshops, which are designed to address knowledge gaps identified by the sector.

The hub also connects emerging professionals and businesses of all sizes to raise awareness of capability and training opportunities and facilitates industry placements with a broad range of small and medium-sized enterprises, healthcare service providers, biomedical research institutes and medtech companies.



DOMAIN

4

Drive diversity, equity and inclusion



Diverse perspectives and backgrounds foster creativity and new ideas, ensuring research addresses the needs of all populations. This strengthens the research community and enhances the quality and relevance of medical advancements to enable equity in access and care.

We are continuing the positive work underway to ensure that the medical research workforce reflects the diversity of Victoria's population, creating a work environment where everyone feels safe and respected.

This includes but is not limited to women, Aboriginal and Torres Strait Islander peoples, people from culturally diverse backgrounds, members of the LGBTQIA+ community and people living with disability.

Sector-led Initiatives for Workforce Diversity

The **Bionics Institute's Girls in STEM Mentoring Program** aims to inspire high school girls to study science, technology, engineering or mathematics at university.

The program partners Year 10 and 11 students who have a strong interest in STEM with leading female STEM professionals to learn more about their areas of expertise.

The **Respect in Research Project** is a collaboration between AAMRI Vic and the Women in Science Parkville Precinct (WiSPP), with support from the Victorian Government. The project supports medical research institutes to promote gender equity, prevent and respond to sexual harassment and address systemic issues.

Action 4.1

Embed community-led and culturally safe research, including implementation of *marra ngarrgoo*, *marra goorri*: The Victorian Aboriginal Health, Medical and Wellbeing Research Accord.

Implementing *marra ngarrgoo*, *marra goorri* is essential. Further information is provided overleaf.

We are also funding research into Aboriginal and Torres Strait Islander Community research priorities and building the capability and capacity of staff within Aboriginal Community Controlled Organisations to be able to conduct research into these priorities.

Action 4.2

Enhance support for women and underrepresented groups within Victorian Government medical research programs.

Victorian Government health and medical research programs will be structured to better support underrepresented groups. Program guidelines will be evaluated to consider inclusion, particularly barriers underrepresented groups face in accessing opportunities.

Support for underrepresented groups has been incorporated into initiatives across this Action Plan, including the Fostering Achievement in Research (FAIR) Fellowships (Action 2.3) and the development of the centralised information hub for medical research (Action 2.2) which will showcase career stories and perspectives from diverse researchers.



marra ngarrgoo, marra goorri: **The Victorian Aboriginal Health, Medical and Wellbeing Research Accord**

The Victorian Government has funded the Victorian Aboriginal Community Controlled Health Organisation (VACCHO) to implement *marra ngarrgoo, marra goorri*: the Victorian Aboriginal Health, Medical and Wellbeing Research Accord (*marra ngarrgoo, marra goorri*).

Launched in October 2023, *marra ngarrgoo, marra goorri* endeavours to improve the ethical standards of health, medical and wellbeing research that impacts Aboriginal and Torres Strait Islander peoples. The Accord will see that more research is led, co-led and governed by Aboriginal and Torres Strait Islander people through guiding and supporting researchers and organisations to work collaboratively, embed principles of self-determination, and collectively achieve enhanced research ethics and outcomes for Aboriginal and Torres Strait Islander peoples.

The Victorian Government continues to work with VACCHO to progress implementation of the Accord.

For further information on the Accord and how to be involved, please contact VACCHO at varap@vaccho.org.au

Action 4.3

Enable greater rural and regional participation in health and medical research.

We will work closely with the sector to investigate how we can support greater rural and regional participation in health and medical research. Proposed national reforms, including the *National One Stop Shop for Clinical Trials* and the *National Health and Medical Research Strategy*, are opportunities to advocate for more rural and regional participation in research.

Programs within this Action Plan are already expanding our regional research capabilities, including the *Regional SKILLED Internship Program* (Action 3.1) and the *Regional Research Translation Coordinator Program* (Action 3.2)

***marra ngarrgoo, marra goorri* is a Woi-wurrung language phrase that translates to: Community knowledge, Community health**

This phrase acknowledges the need to integrate Community knowledge in Aboriginal and Torres Strait Islander health, medical, and wellbeing research to realise Community health. It puts forward the vision that traditional ways of knowing, being and doing, and self-determination in research, are prerequisites to creating positive health outcomes for Community.

Conclusion and future outlook

The Workforce Action Plan outlines a series of targeted actions to address current and emerging workforce priorities, in partnership with the health and medical research sector. This framework will guide activity and foster a thriving health and medical research workforce equipped to tackle global health challenges.

This Action Plan is an initial step towards addressing the complex and multifaceted challenges and opportunities facing the sector. Ongoing engagement with stakeholders and improved data delivered under this Action Plan will guide future focus areas. This collaborative approach will ensure that the plan remains responsive and effective in meeting evolving workforce needs.

We encourage the sector to expand on the actions and initiatives outlined in this plan and consider how their own work can align with these priorities. Together, we can build an even more successful and innovative medical research workforce that not only meets today's demands, but paves the way for a healthier and brighter future for all Victorians.



