



Health Research Council  
of New Zealand

Te Kaunihera Rangahau Hauora o Aotearoa

# Te Ara Paerangi - Future Pathways submission

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## **Introduction**

In line with our obligations and responsibilities as a Tiriti partner, the Health Research Council of New Zealand (HRC) is making two submissions: one from the Māori Health Committee (a statutory committee of the HRC) and one from the HRC Council. This submission is complementary to that of the Māori Health Committee. Our submission places questions 12 (institution design and te Tiriti), 2 (priority setting process), 4 (Māori engagement) and 5 (Mātauranga Māori) first as we regard obligations under Te Tiriti as the foundation of all decision making.

We have not responded to all questions in the Te Ara Paerangi - Future Pathways paper, choosing to focus on those areas of the RSI sector we intersect with and are therefore best placed to respond to. To assist with consideration of the submission we have provided responses to each question individually as well as presenting the submission as a single document. This approach means there is a degree of duplication when read as a whole.

The HRC welcome this initiative by the Government to invest in a modern, fit for purpose and future-focussed research system. Health Research in Aotearoa New Zealand is fortunate to be in a position where there is a national Health Research Strategy and Research Prioritisation framework already in place. The strategy and framework provide clear and stable strategic signals to guide our investment priorities and decisions into the future.

The significant issues and opportunities outlined in Te Ara Paerangi concerning te Tiriti, equity, diversity, prioritisation, system design, collaboration, engagement, translation, workforce development and infrastructure, were comprehensively considered as part of the strategic refresh of the HRC and subsequent development of the strategy and prioritisation framework. In this regard, health research, and the role the HRC plays in leading, co-ordinating and overseeing this part of the research system is fit for purpose, strongly aligned, and already implementing many of the aspirations outlined in Te Ara Paerangi (please see Appendix 1 for an alignment summary).

## **Executive summary**

### **Te Tiriti**

The rights and responsibilities of Te Tiriti should be structurally embedded throughout the entire RSI system and reflected in the overarching policy framework and governance structures. Our aspiration should be for government funded research to be conducted in Tiriti-**led** research provider institutions, rather than Tiriti-**enabled** organisations. The only way to uphold tino rangatiratanga and kawanatanga, as guaranteed to Māori under Te Tiriti o Waitangi, is to ensure equal decision-making via a system of dual governance, supported by a transfer of power, independence and resource.

### **Equity**

Health, social and economic equity represent the greatest challenge and the greatest opportunity in determining the future wellbeing and prosperity of our country and our people. Following Te Tiriti, improving equity must be the second foundational principle embedded across all aspects of Aotearoa New Zealand's RSI system.

### **Diversity and Inclusion**

A rich, thriving, responsive and relevant RSI system is a diverse and inclusive one. Building a diverse and inclusive research workforce is critical for solving problems and finding

solutions that work well for everyone. This must be another core consideration and is a key enabler of a high-performing RSI sector that serves all New Zealanders.

### **Pacific peoples**

Pacific peoples and communities in Aotearoa New Zealand make a significant contribution to our society and way of life. The health and wellbeing of our populations, our countries, our climate, our physical environments, our water quality and our food security and supply are inextricably linked. What benefits Pacific peoples and communities both here and, in the Pacific, benefits us all. The RSI system must do more to support the research aspirations, needs and priorities of Pacific peoples and communities. We need to urgently address educational and institutional barriers for Pacific students, develop Pacific research capacity and capability, and strengthen research, relationships and knowledge exchange with our Pacific neighbours.

### **System Design and the Integrity of Aotearoa New Zealand's Research, Science and Innovation System**

Upholding and ensuring the excellence and integrity of Aotearoa New Zealand's RSI system into the future, from both a national and international perspective, is paramount. An RSI system that is Te Tiriti-led and focused on equity, diversity and inclusion will be one that is responsive to need and capable of delivering outcomes that will enhance our health, wellbeing and prosperity.

The design of our RSI system needs to start with and be continuously shaped by the outcomes we're seeking to achieve. A high-performing RSI system is one that:

- values and rewards excellence (broadly defined), incentivises innovation, effectively balances competition and collaboration, is nationally and internationally connected, and attracts, develops and retains research talent.

An impactful RSI system is one that:

- values and rewards engagement, connection, and knowledge exchange; resources the infrastructure and skill sets needed to support research and innovation translation, uptake and spread; and encourages a culture where research is valued, and end-users or adopters are research savvy and ready.

A sustainable RSI system is one that:

- values, grows and develops people, plans for career path transitions and succession, balances investment between the core elements of workforce, research and infrastructure, and ensures investment at levels that will maintain integrity and attain excellence.

A credible RSI system is one that:

- is founded upon and maintains political independence and has clear boundaries between its policy, funding and provider arms.

Political independence and clear separation between those responsible for setting national RSI policy and those who receive funding to implement it is essential. There are existing areas of strength and models of success that can be drawn upon to inform the wider RSI system design, and the HRC makes recommendations in this regard in Q 3.

## **Research Priorities**

Te Tiriti must be the foundational starting point for any priority setting process. Prioritisation is vital to directing Aotearoa New Zealand's research investment towards those activities and domains that have the greatest value and benefit for our society. Providing adequate resource to both identify, respond to and implement core research priorities is essential. Important principles to determine the scope and focus of national research priorities include Te Tiriti at the core; independence and transparency; inclusivity; flexibility and agility. Consideration should also be given to the leadership and stewardship that will support priority setting processes and implementation. There is an opportunity to determine workforce and infrastructure priorities in parallel. Priority setting also provides an additional opportunity for the RSI system to establish what we value and how this can be reflected in *what we research, and how we undertake research* in Aotearoa New Zealand (please see our response to Q 2 for more detail).

## **Knowledge and workforce**

Areas that currently need strengthening and embedding as part of core functions include research translation and implementation, impact, knowledge sharing and innovation. Research dissemination, translation and the systems, processes, people skills and infrastructure needed to facilitate research and innovation uptake, diffusion and spread require urgent attention and investment. We need to actively incentivise and reward the activities, behaviours and relationships that strengthen knowledge exchange and impact generation.

Similarly, a new approach and commitment to developing and retaining people across the research career path is urgently needed. People are the research engine and are our most valuable resource. The current balance between investment in research projects versus people requires closer scrutiny and greater investment and commitment if we are to provide more stable, attractive and rewarding career opportunities for the research workforce - especially for those who experience the greatest degree of precarity in our current system, i.e., Māori, Pacific, women, emerging, and mid-career researchers. Also needed is a systematic way of identifying critical gaps which would trigger a targeted capacity and capability building response.

## **Infrastructure**

investment in infrastructure is identified as the biggest priority for the health research sector and urgent investment is essential for enabling transformation of the health research and healthcare delivery sectors. Sound governance and co-ordinated management of both soft and hard infrastructure is needed to ensure the best value for public investment, enhance research performance and impact, and ensure equity and sustainability.

The HRC looks forward to contributing to and participating in a redesigned research system that upholds Te Tiriti o Waitangi and as a consequence, benefits all of Aotearoa New Zealand.

## The HRC council response to individual questions

### **12. Institution design and Te Tiriti: How do we design Tiriti-enabled institutions?**

The Health Research Council of New Zealand (HRC) supports the intention to design Tiriti enabled institutions. However, our aspiration **should be higher than Tiriti-enabled institutions. Our aspiration should be to establish Tiriti-led research provider institutions.** This will necessitate change of culture and a commitment to actively uphold tino rangatiratanga within institutions. This means changes in power sharing, resource sharing, and decision making at all levels.

Te Tiriti, equity and diversity considerations regarding power-sharing, partnership, dual governance and collaborative decision making must underpin institutional design. The HRC is currently moving towards a dual governance model. The purpose of the shift to dual governance is to ensure that everything we do upholds our obligations and commitments under Te Tiriti.

### **2. Priority setting process: How can the process best give effect to Te Tiriti? What principles should guide a national research Priority-setting process?**

Te Tiriti has to be the foundational starting point for any priority setting process. The **HRC recommends implementing a dual governance model** for priority setting to give effect to Te Tiriti. We are currently developing options for our own transition to a dual governance model. This will enable us to advance our work in meeting Te Tiriti obligations as a Crown Agent.

### **4. Māori engagement: How would you like to be engaged?**

**Māori should determine how they want to be engaged.**

Engagement with our Tiriti partners not only needs to be tangible and meaningful, but consideration needs to be given to the stages at which engagement begins. **Engagement should take place as early as possible to inform the approach and direction.**

**It is important that engagement reflects the diversity of Māori communities** to ensure that a range of voices are heard. Furthermore, there is a significant difference between passive engagement and actively seeking to engage kanohi ki te kanohi.

**Consideration needs to be given to ensuring transparency for the consultation process with Māori and how any responses provided will inform next stages.** For example, how will Māori input into the consultation and how will these contributions be interpreted or weighted against contributions from non-Māori? It is also not clear how it will be determined if the responses to these consultation questions are indeed from Māori as the questions are open for all to respond.

## **5. Mātauranga Māori: What are your thoughts on how to enable and protect mātauranga Māori in the research system?**

The **consultation questions and solutions posed in this chapter do not adequately reflect the discussion points around Te Tiriti being the foundation of the system.** Te Tiriti is not only historical, but also future focused and outlines how Māori and the Crown should work together.

Māori have had to adapt to a system that does not suit their knowledge systems or ways of knowing and working. This deters Māori from entering the system and for those in it, it can be a very difficult working environment.

Equally, it is not about fitting Te Ao Māori knowledge into existing systems or mātauranga Māori being validated by the current RSI system, which is grounded in a particular knowledge system, but rather **creating a new system where Te Ao Māori is a legitimate and equal world view.** Central to fulfilling our commitment to Te Tiriti o Waitangi is supporting research that values Māori worldviews and builds Māori research capacity and leadership.

Currently, RSI funding primarily goes to Pakeha institutions not Māori communities or knowledge holders. The system is not well equipped to get funding to Māori knowledge holders who are found both in research provider organisations and communities. **Regional hubs could be one mechanism for doing this, but this should not be in place of partnership with Māori at the system design and governance level.**

### **1. Prioritisation: What principles could be used to determine the scope and focus of national research Priorities?**

Prioritisation is vital to directing Aotearoa New Zealand's research investment towards those activities and domains that have the greatest value and benefit for our society. The HRC is supportive of prioritisation processes that uphold our Te Tiriti obligations and are inclusive of our communities, encourage interdisciplinary research and have societal benefit as the ultimate goal.

Unlike other areas of research, priorities for health research have recently been established through a national prioritisation setting consultation process (the *New Zealand Health Research Prioritisation Framework 2019*). This Prioritisation Framework was developed as part of the implementation of the New Zealand Health Research Strategy 2017–2027. It prioritises why and how health research needs to be done in New Zealand to drive high level health and social outcomes and ensure maximum impact from the government's investment in health and health research. The Health Research Prioritisation Framework reflects the attributes of giving effect to te Tiriti, excellence, impact and connectivity, which are proposed in Te Ara Paerangi.

The HRC recommends that **health and social equity are considered top priorities.** Further priorities include bridging the gap between biomedical, clinical, public health and health delivery research to ensure better, more equitable health outcomes.

Principles we believe are important to inform the development of research priorities include<sup>1</sup>:

- **Te Tiriti at the core:** we strongly support the proposal to co-develop research priorities with Māori underpinned by Te Tiriti. However, this work must be done in a true partnership of equals. It is important to acknowledge that Māori in the research, science and innovation sector experience a high burden of ‘cultural tax’ and this needs to be appropriately compensated for and resourced.
- **Independence and transparency:** the priorities themselves should be identified based on extensive consultation and engagement and set by an independent body with the breadth of expertise, experience and sector knowledge to make sound judgements and effectively balance needs. To ensure public trust in the Health Research Priority setting process, the HRC convened an independent development group and made all decision-making transparent and available on our website (<https://www.hrc.govt.nz/grants-funding/research-priorities>).
- **Flexibility and agility:** the need to set priorities that are stable, consistent, and give the research workforce time to respond must be balanced against the need for funding to be responsive to changes in context and the emergence of critical evidence needs. Furthermore, there may need to be incentives to encourage research providers and the workforce to adapt more quickly than would occur if they were left to set the pace.
- **Granularity:** a key challenge identified in running the HRC’s national priority-setting process was getting agreement on the desired balance between high-level system priorities, and more specific, granular priorities.
- **Inclusivity:** the framework must be inclusive and developed for all who have the capacity to contribute to, influence or advance research, science and innovation in Aotearoa New Zealand. The NZ Health Research Prioritisation Framework outlined distinct roles and expectations for government agencies, research funders, research providers, researchers, research teams, and communities. Setting clear expectations for the different contributors to the RSI system is advisable.
- **Leadership and stewardship:** Te Ara Paerangi presents an important opportunity to reinstate a coherent unitary function that maintains a high-level overview of the research, science and innovation system, capability which has been lost through a series of reforms over some years.
- **The ‘how’ is as important as the ‘what’:** through consultation and development of the *New Zealand Health Research Prioritisation Framework* it became apparent that *how* we conduct research, what we value, and the principles we want to underpin and drive research, are just as important as *what* our research effort is focused on. This led to the development of the *Health Research Attributes* – a set of core characteristics that consider our unique context and provide guidance on how health research should be conducted in Aotearoa New Zealand. There is an opportunity to establish these core characteristics, standards and values for the wider RSI sector. This could include defining what excellence is and means in different contexts, domains and disciplines.

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<sup>1</sup> The HRC is already communicating with a Policy Advisor in the MBIE Te Ara Paerangi - Future Pathways team to offer detailed information about the process of developing the NZ Health Research Prioritisation Framework. Therefore only a high-level response is included here.

### **3. Operationalising Priorities: How should the strategy for each national research Priority be set and how do we operationalise these?**

**The strategy for each national research priority needs to be endorsed by government.**

Government needs to set clear expectations for how the sector will respond; how progress will be monitored and evaluated; and how priorities will be updated and refreshed.

Government agencies then need to ensure a clear focus on addressing priorities in organisational level strategic and operational plans and establish meaningful accountability, implementation and progress measures that are routinely reported on.

**Provision of funding and resources is the most important consideration.** Resource is needed to address the priorities identified *and* to implement the structural and process changes required to implement them. Even re-allocating within existing funding requires resource to implement in a coherent, consistent, and considered way.

The importance and potential impact of the resourcing implications should not be underestimated. A significant constraint in operationalising both the New Zealand Health Research Strategy and the New Zealand Health Research Prioritisation Framework has been that there is no new operational or research funding to support implementation.

**Understanding what is needed for institutions, community groups, and organisations to adequately address and implement the identified priorities is essential.**

Consideration as to who will be responsible for oversight of the research priorities needs to be clearly defined. Also, **paramount is the importance of ensuring separation and independence between those responsible for setting national RSI policy and those who receive funding to implement it.** Combining these functions serves to create conflicts of interest, inequities in access to resource, and a lack of oversight, accountability and engagement with all parts of the sector.

The **political independence** of research funders and provider institutions is essential to ensure a RSI system that is stable and well positioned to respond to short, medium and long-term research horizons, beyond more immediate contextual and political considerations.

The HRC recommends consideration is given to **establishing a small number of specialist, independently governed agencies to lead development and fund key strategic research domains**, such as the HRC does for health and wellbeing research (see Q7 for further detail).

It is important to distinguish between research and evidence needs which require **new knowledge generation and the surveillance and information data** needed by government. The approach to prioritising and funding these distinct activities needs to be different, with the latter best supported by base funding.

**Opportunity costs also need to be systematically identified and considered transparently.**

### **7. Core functions: How should we decide what constitutes a core function and how do we fund them?**

There needs to be a **high bar for the definition of a core function in the scoping exercise.** The core functions should be identified once the outcomes we're seeking to achieve, have been defined.



**Core functions could be decided in parallel to the prioritisation process.** The choices should be based on previously **agreed principles and values that align with the chosen outcomes.** There are some core functions for which importance has already been well established, for example, Mātauranga Māori, climate change mitigation, and infectious diseases.

Identification of core functions could be based upon the outcomes New Zealand's research system is seeking to deliver, such as a system that:

- embeds and upholds Te Tiriti obligations and opportunities
- improves equity
- meets priority knowledge and evidence needs
- supports excellence and advances science and innovation
- develops and retains the research capability NZ needs now, and for the future
- enables connection, collaboration, and access to international advances
- benefits a broad range of research/researchers across the sector.

**The allocation of funds to support core functions must be principles-based with as little political influence as possible to ensure Aotearoa New Zealand's long-term needs are met.**

**Appropriate resource must be provided for each core function** and the best mechanisms or mix of approaches utilised to achieve the outcome, e.g., investigator-led; targeted mission-led; comprehensive and targeted career development pathway opportunities; international funding agreements, etc.

**Areas that currently need strengthening and embedding as part of core functions include research translation and implementation, impact, knowledge sharing and innovation.**

The provision of stable funding for core functions and capability is important. However, **contestable funding is also a valuable tool in driving innovation, research quality and advancing knowledge.** Getting the balance between these elements right is essential.

Institutions should be considered within the realm of core functions. For example, the HRC is a Crown Agent and a national funding body which invests independently in health research on behalf of government. **Independence in funding and investment decision is key to successfully maintaining oversight, coherence and direction of funds to support immediate, medium and longer-term priorities and research capability.** The HRC model has recently been recognised in the Upton report, "Environmental research funding review"<sup>2</sup>. The report indicates that this model could be used to set domain level priorities and distribute funds for more efficient outcomes and with less fragmentation. Upton asserts that the single, national funding agency approach for health research is the reason health research is performing better than other areas. The report goes on to recommend developing an 'ERC' for environmental research.

**8. Establishing a base grant and base grant design: Do you think a base grant funding model will improve stability and resilience for research organisations,**

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<sup>2</sup> A review of the funding and prioritisation of environmental research in New Zealand, p.64-65 [report-environmental-research-funding-review-pdf-82mb.pdf \(pce.parliament.nz\)](https://www.pce.parliament.nz/report-environmental-research-funding-review-pdf-82mb.pdf)

## **and how should we go about designing and implementing such a funding model?**

Base grants could serve to strengthen the system if research organisations **invest in improving conditions and opportunities for the research workforce and meeting Tiriti obligations**. A priority for base grant funding could be **creating more secure and sustainable research career opportunities for early-to-mid-career researchers** who demonstrate potential and are committed to a career in research.

However, there must be **clear expectations that base grant funding will be used for research and workforce development and retention**. The funds would need to be clearly tagged to supporting research and researchers so as not to be absorbed into a research provider institution's base funding.

**There are benefits and risks to the proposed base grant funding model**. It may provide greater stability and resilience for research provider organisations, but unless there is new funding to support this, it will likely have a detrimental impact on the government's ability to influence, position and incentivise the research sector to be strategic and address priorities.

There is also a **risk that base grants could further lock in historical funding resulting in greater inflexibility, inefficiency, and inequity in both distribution and access** - especially for those areas that are less well established or emerging, those who are new to the system, and those who are already poorly served. Any transition to a base funding model will require skilful design to avoid unintended consequences and prolongation of inequities.

## **10. Role of institutions in workforce development: How can institutions be designed to better support capability, skills and workforce development?**

**A new approach and commitment to developing and retaining people across the research career path is urgently needed**. People are the research engine and are our most valuable resource.

There needs to be a **movement away from short term project-based funding of research and early career awards to the establishment of stable and attractive career pathways to better support, transition and retain our research talent**.

### **Diversity and inclusion**

Research provider institutions have an important leadership role in society with respect to diversity and inclusion. The **research workforce needs to be a mirror on society** and as employers, research provider organisations can actively lead on this.

### **Māori**

**The current workforce development trajectory does not always best suit the needs of Māori** or reflect te ao Māori worldviews of how Mātauranga Māori is produced and who are the holders of Mātauranga. In addition, Māori training and working in research provider organisations often encounter institutional racism, carry disproportionate responsibility and burden for cultural responsiveness within their organisations, and experience a lack of institutional support, mentoring and networks. This needs to be actively considered and addressed.

## Pacific

Similar challenges exist for the Pacific research workforce. At present, the **HRC is the only research funding agency in Aotearoa New Zealand running dedicated health research training programmes across the career spectrum for Māori and Pacific.**

### **13. Knowledge exchange: How do we better support knowledge exchange and impact generation? What should be the role of research institutions in transferring knowledge into operational environments and technologies?**

These are key questions for the health research sector and essential for ensuring success of the health system reforms. Health care delivery needs to be based on evidence of what works, and operational environments must know how to access robust evidence and how to effectively implement it.

The HRC agrees that **enhancing connections between researchers and the potential users of that knowledge is an area that requires strengthening** and should be an area of strategic focus. For example, knowledge exchange between health care providers and health researchers needs improving so that the research undertaken is focused on clinical and public health need, and the research results can be readily accessed and adopted by those responsible for providing healthcare.

Relationships are essential to support a more connected system. **We need to see the activities that build connections, relationships, and networks as part of what makes research excellent**, rather than an optional, additional extra.

Missing from the consultation document is **consideration of dissemination, translation and the systems, processes and infrastructure needed to facilitate research and innovation uptake, diffusion and spread.**

**We need to incentivise and reward the activities, behaviours and relationships that strengthen knowledge exchange and impact generation.** The HRC's pathway to impact assessment criterion requires researchers to provide a realistic line of sight to the impact their research might have, and crucially, to articulate actions within their direct influence they can take to improve the likelihood of research uptake and impact.

Similarly, the **HRC's Māori health advancement criterion has a focus on the need for host institutions and researchers to engage in meaningful, collaborative, and reciprocal relationships.** All HRC funding opportunities now include expectations to build new, or enhance existing relationships with Māori, for collaboration to inform the planned focus and conduct of the research, and for the research team and host institutions to support strong, mana-enhancing and enduring relationships.

**A whole-of-research-system approach to open access and data sharing is another key consideration** that would better support knowledge exchange and impact generation. As fellow research funders, we would welcome working alongside MBIE and the Royal Society Te Apārangi to develop this.

As an overarching observation, some of the **barriers to greater connection are inherent in the way the RSI system is configured and the competition it drives.** Addressing this will strengthen the quality, reach and impact of research through providing greater opportunities for researchers to collaborate across disciplines, institutions, organisations, companies, and countries. We also **need to enhance Aotearoa New Zealand's access to global infrastructure, populations and communities, industry, and larger markets for our innovations.**

#### **14. Workforce and research Priorities: How should we include workforce considerations in the design of national research Priorities?**

The inclusion of workforce considerations in the design of national research priorities needs to allow for ways to identify current areas of national and international research strength that we want to maintain, alongside areas we have urgent capacity and capability needs. **This could form a key component of the proposed prioritisation process.** Workforce considerations were factored into the priority setting process the HRC ran and are represented in the final Prioritisation Framework.

Overall, there is a **notable lack of career development opportunities for researchers** in Aotearoa New Zealand. New Zealand needs a workforce development scheme for mid-career researchers (see Q12).

Fostering a strong and diverse research workforce is a key priority and a core area of focus for the HRC. However, building critical capability requires commitment and sustained investment over a significant period of time. Our funding has provided stepped career development opportunities from Masters through to advanced post-doctoral fellowships for Māori since our establishment in 1990. **Currently, 17 percent of research positions supported by the HRC are held by Māori, and 18% of HRC contracts are led by Māori.** As a Tiriti partner, much more is needed and developing, supporting and retaining Māori research capacity needs to be an enduring workforce development priority.

Efforts to build critical Pacific health research capacity have been slower. The HRC is continuing to develop capacity and capability in the Pacific health research workforce with approximately 4% of research positions supported by the HRC held by Pacific researchers and over \$4.2m awarded to Pacific research in our most recent funding rounds. Building Pacific research capacity and capability is another important priority for workforce development.

There is also a critical gap and **lack of research training opportunities for people living with and working in disability.**

Also needed is a **systematic way of identifying critical gaps** which would trigger a targeted capacity and capability building response. Understanding where the critical capacity and capability gaps lie in relation to improving health outcomes led to the introduction of targeted clinical awards. These career development opportunities enable clinicians at the frontline of health services to pursue research opportunities, not only improving the quality of health clinical practice in Aotearoa New Zealand but enabling clinicians to fulfil career goals domestically. Our current **HRC-supported workforce includes 1485 health professionals, of which 1165 are in clinical practice** – nearly a third of the total HRC-funded workforce.

#### **16. Better designed funding mechanisms: How do we design new funding mechanisms that strongly focus on workforce outcomes?**

**Identify the workforce outcomes you want your investment to achieve;** actively build appropriate workforce development considerations into each funding opportunity; monitor and evaluate progress towards priority workforce targets; evaluate outcomes and refresh the approach on that basis.

Prioritisation processes provide opportunities to identify not just *what* we focus on and *how* we do it, but **who** is needed to deliver these outcomes for our RSI system and how best to

support them. **Our research system needs to provide attractive and secure opportunities for the research workforce.**

**Determining the appropriate balance of investment between funding research and people is key**, although there are opportunities through good system design to use both pathways to develop, grow and retain vital workforce capacity and capability.

**Transition to independence as a researcher is a big gap in our system currently.** There are good international examples we can learn from, such as the National Institutes of Health Research (NIH) K99 grant, which funds post-doctoral opportunities for four years at a specific institution, leading to a faculty position at that institution.

### **17. Funding research infrastructure: How do we support sustainable, efficient and enabling investment in research infrastructure?**

Nationwide consultation undertaken for both the New Zealand Health Research Strategy (NZHRS) and the Prioritisation Framework, identified **investment in infrastructure as the biggest priority for the health research sector. DHBs also identified a lack of infrastructure to support research as a key barrier to their participation.** The HRC and the Ministry of Health agree that investment in infrastructure is critical to enable transformation of the health research and delivery sectors.

Our consultation for the NZHRS identified the following priority infrastructure needs:

1. better use of existing data and evidence
2. clinical trial infrastructure
3. data infrastructure for longitudinal studies
4. integration of health data
5. data sharing and open access

There is considerable opportunity to create more value for public investment in research through **better leveraging health research data to improve health and wellbeing outcomes.** Health research will increasingly rely on the integration of large datasets for evidence. Efficient use of big data requires interoperability and standardisation. This will require resource and a well-co-ordinated, systematic approach.

**There are key questions that need to be resolved concerning the governance and guardianship of health data.** The HRC has an important role in providing ethical advice and there are several complex ethical issues involved in the use and sharing of data, such as:

- data sovereignty
- issues of privacy, participation, and confidentiality
- new methodological paradigms
- emerging technologies
- changes in the regulatory environment
- the training and conduct of researchers

These are all issues an effective, efficient and ethical RSI system will need to appropriately consider and manage.

Internationally, data sharing policies outlining requirements and standards for how data will be shared, housed and curated are commonplace. **Aotearoa New Zealand has fallen behind in not having a national policy to provide guidance and generate greater value**

**for public investment in research.** We would welcome the development of national data sharing and open access policies. Resource will be needed to provide training and access to suitable data repositories and open access platforms for smaller research providers who do not have the infrastructure available in larger institutions.

As a small country, we **need to ensure our research system is well connected with global research efforts.** As most research knowledge is generated offshore, we need to be adept at applying and adapting international knowledge to the Aotearoa New Zealand context as research conducted offshore will not always generate the evidence and insight needed for our population and context.

**Connecting innovative research with commercial opportunities is an important aspect of a thriving research system.** We are fortunate in Aotearoa New Zealand to have government and tertiary agencies that are skilled at realising the commercial benefits of health research and innovation. The HRC is working hard to actively increase system connectivity and coordination with these agencies to strengthen the early stages of the innovation pipeline and further support researchers to translate their discoveries into real-world health and economic benefits.

**Investment in infrastructure is critical. Appropriate governance and management** of the infrastructure to ensure **equitable** and ease of **access** for a range of users from multiple institutions, is a key issue to be addressed. Infrastructure is not well resourced, and it is challenging to identify where to invest and when to disinvest. There is pressure to fund the latest technology rather than modifying or updating ageing infrastructure as this is not seen as innovative.

There needs to be **a nationally coordinated programme to transparently determine Aotearoa New Zealand's infrastructure needs, reduce duplication, and ensure continuity and sustainability.** As part of this process consideration should be given to devising a system for decommissioning infrastructure that has outlived its utility and processes for establishing or maintaining access to infrastructure that already exists but is no longer accessible due to privatisation.

## Appendix 1: HRC Alignment with key aspirations of Te Ara Paerangi

Te Ara Paerangi aspirations	HRC Alignment	Examples of Te Ara Paerangi aspirations in practice
Te Tiriti	The Māori Health Committee is a statutory committee of the HRC who provide advice on health research issues that affect Māori along with other roles as outlined in the Health Research Council Act 1990 <sup>3</sup> .	The HRC Council is currently moving towards a dual governance model to give better effect to our obligations and responsibilities as a Tiriti partner.
Mātauranga Māori	The HRC ring fences funding for investment in by Māori for Māori research; community research grants; stepped career development opportunities from Masters through to advanced post-doctoral fellowships; and awards an annual research honours medal to recognise and reward significant contributions to Mātauranga Māori.	Rangahau Houora Māori Research Investment Stream; Ngā Kanohi Kitea research grants; career development awards and fellowships; Te Tohu Rapuora medal.
Research priorities	Development of the New Zealand Health Research Prioritisation Framework.	Nationwide consultation and engagement undertaken to identify health research priorities for Aotearoa New Zealand. The HRC is currently implementing the framework which guides our investment opportunities, assessment processes and decisions.
Funding system	The significant issues raised in Te Ara Paerangi concerning Te Tiriti, equity, diversity, prioritisation, system design, collaboration, engagement, translation, workforce development and infrastructure, were comprehensively considered as part of the strategic refresh of the HRC and subsequent development of the strategy and prioritisation framework. In this	Implementation of the Strategic Refresh of the HRC; development of the NZ Health Research Strategy and NZ Health Research Prioritisation Framework; the HRC Act, 1990, which establishes our purpose, role and responsibilities, including the requirement to advise Ministers on health research needs and priorities.

<sup>3</sup> The Health Research Council Act 1990, s21.

<b>Te Ara Paerangi aspirations</b>	<b>HRC Alignment</b>	<b>Examples of Te Ara Paerangi aspirations in practice</b>
	regard, health research, and the HRC is fit for purpose.	
Research workforce	The HRC seeks to balance investment between projects and people and provide essential support to develop a diverse, inclusive and innovative health research workforce. Targeted career development awards support critical workforce gaps, including dedicated health research training opportunities across the career spectrum for Māori and Pacific peoples; clinicians and allied health professionals; emerging researchers; and future research leaders.	At any given time, our funding supports more than 3000 research positions across the country. Currently, 17 percent of research positions supported by the HRC are held by Māori, and 18% of HRC contracts are led by Māori, with approximately 4% of research positions held by Pacific researchers.