## HRC RESEARCH INVESTMENT STREAMS



Discovering a healthier tomorrow
<u>NewZealand</u> Government



## **Health and Wellbeing in New Zealand**

**Research Investment Stream** 

The purpose of this Research Investment Stream is to fund high-quality, investigator-initiated research projects that can contribute to keeping people healthy and independent throughout life.



All research for which there is a clear link between the knowledge generated and improving the health and wellbeing of individuals and populations is within scope for this Research Investment Stream.

All aspects of enhancing health and wellbeing are covered, from understanding normal human biological processes and development, to policy and interventions to reduce the impact of social and environmental determinants of disease. Research to understand the biological, behavioural, social, cultural, environmental and occupational processes that underpin health and wellbeing is included, as is research on fundamental biological processes underpinning the development of multiple diseases. Health promotion, health protection and the primary prevention of disease and injury through identification and mitigation of risk factors is in scope.

No research is excluded from this Research Investment Stream on the basis of methodological approach. Applicants who believe their proposal is in scope for more than one Research Investment Stream should choose the stream in which their research will make the greatest contribution to the goals. Box A provides **examples** of research areas in scope for this Research Investment Stream.

The HRC encourages research that can contribute to a National Science Challenge, as well as research on any other health priority, provided it is within the scope of this Research Investment Stream.

Applicants are advised to read the <u>National Statement of</u> <u>Science Investment</u>, the <u>New Zealand Health Strategy</u> and the <u>New Zealand Health Research Strategy</u>.



The HRC has set the following goals for research funded through this Research Investment Stream. All applications will be assessed on science quality *and* the extent to which the application has impact. The goals are:

- Understanding, maintaining and enhancing the health and wellbeing of all people throughout life;
- Preventing disease and injury;
- Understanding and reducing inequities in risk factors and determinants for disease and injury;
- Driving innovation through the creation of new knowledge relating to health and wellbeing<sup>[i]</sup>, and
- Delivering direct economic benefits for New Zealand, in addition to achieving a primary outcome of health benefit.

### Research priorities

The HRC expects that applicants will demonstrate how their research will bring benefit to New Zealanders in terms of the goals for investment outlined in the previous section. Priorities for this Research Investment Stream are:

- Research that has potential for substantial improvements in outcomes or advances in knowledge relevant to health and wellbeing.
- Prevention of disease or injury that is associated with substantial mortality, morbidity or social cost in New Zealand.
- Research to reduce inequalities and enhance health and wellbeing for Māori, who have poorer health status and outcomes compared to non-Māori, and are more likely to be exposed to risk factors for poor health<sup>[ii]</sup>.
- 4. Research to reduce inequalities and enhance health and wellbeing for Pacific peoples in New Zealand, who have poorer health status than the general population across a wide variety of measures, including risk factors leading to poor health<sup>[iii]</sup>.
- Health and wellbeing for vulnerable populations (including children, youth and older adults) and those with impairment living in a disabling society.

2

The research methodology should be designed to maximise the relevance, use and impact of the research findings.

#### Box A: Examples of areas in scope for this **Research Investment Stream**

Research within scope includes, but is not limited to, that which seeks to understand and/or improve:

- Pathological processes relevant to a number of diseases or conditions;
- The development of animal models or technology platforms to underpin research on enhancing health and wellbeing or investigating multiple diseases;
- Primary prevention of any disease or injury, including communicable and noncommunicable diseases, mental health conditions, suicide, addiction and prevention of violence;
- Population health interventions such as screening or immunisation;
- Health throughout life, including normal development, reproductive, maternal and early childhood health, child and adolescent health, and health in ageing;
- Social and cultural determinants of health, wellbeing, disease and injury;
- Harmful behaviours, such as smoking, excess salt or alcohol consumption, poor nutrition and physical inactivity, and the societal conditions and industry practices that may contribute to them;
- Health system and health service contribution to maintaining and enhancing health and wellbeing, or preventing disease and injury;
- Occupational and environmental health; .
- Social context of disability, disease and injury;
- Policy, health promotion and intervention programmes;
- Consequences of global health and environmental conditions (for example, climate change);
- Links between global and local influences on . health, and
- Risks to the health of emerging population groups, for example, Asian communities in New Zealand.

#### What research is better aligned with other Research Investment Streams?

Research area	Relevant investment stream
Research that generates knowledge on the diagnosis, treatment and management of people with specific conditions/diseases. Biomedical research	Improving Outcomes for Acute and Chronic Conditions in New Zealand
to understand the pathology of a specific acute or chronic condition.	
Māori health research may <u>also</u> be eligible for the Rangahau Hauora Māori stream if it meets the six goals specified in this stream.	Rangahau Hauora Māori
Research intended to generate improvements in health service delivery in the short-to- medium term.	New Zealand Health Delivery

The information provided in this table is a general guideline only. Researchers are advised to review all Research Investment Streams to establish which one is the best fit for their proposed research.

Applicants are advised to review the <u>Vision Mātauranga Policy</u> which focuses on unlocking the science and innovation potential of Māori knowledge, resources and

people. [ii] Ministry of Health. 2015. Tatau Kahukura: Māori Health Chart Book 2015, 3rd Edition. Wellington: Ministry of Health. [iii] Ministry of Health. 2012. *Tupu Ola Moui: Pacific Health Chart Book 2012.* Wellington:

Ministry of Health.

# **Improving Outcomes for Acute and Chronic Conditions in New Zealand**

### **Research Investment Stream**

The purpose of this Research Investment Stream is to fund highquality, investigator-initiated research projects that can contribute to improving the understanding and management of disease and disability in New Zealand.



All research for which there is a clear link between the knowledge generated and a specific disease state, condition or impairment is within scope for this Research Investment Stream. Conditions may be communicable or non-communicable. Biomedical research to understand an infectious agent or the pathology of a specific disease entity or organ system is included. All aspects of health improvement are covered, including diagnosis, development and optimisation of treatments, clinical management, prevention of complications and co-morbid conditions, patient self-management, rehabilitation, and palliative or end-of-life care.

No research is excluded from this Research Investment Stream on the basis of methodological approach. Applicants who feel that their proposal is in scope for more than one Research Investment Stream should choose the stream in which their research will make the greatest contribution to the goals. Box A provides **examples** of research areas in scope for this Research Investment Stream.

The HRC encourages research that can contribute to a National Science Challenge, as well as research on any other health priority, provided it is within the scope of this Research Investment Stream.

Applicants are advised to read the <u>National Statement of</u> <u>Science Investment</u>, the <u>New Zealand Health Strategy</u> and the <u>New Zealand Health Research Strategy</u>.



The HRC has set the following goals for research funded through this Research Investment Stream. All applications will be assessed on science quality *and* the extent to which the application has impact. The goals are:

- Improving understanding of the molecular, cellular or pathological basis of acute and chronic health conditions;
- Contributing to improved outcomes for individuals and populations with disease or injury;
- Driving innovation through the creation of new healthrelated knowledge<sup>[i]</sup>;
- Contributing to cost-effective economically sustainable solutions;
- Reducing inequalities in health-related outcomes, whether these relate to gender, ethnic, socioeconomic, geographic or other disparities, and/or
- Delivering direct economic benefits for New Zealand, in addition to achieving a primary outcome of health benefit.

## Research priorities

The HRC expects that applicants will demonstrate how their research will bring benefit to New Zealanders in terms of the goals for investment outlined in the previous section. Priorities for this Research Investment Stream are:

- Research that has a significant and demonstrable impact on knowledge, clinical practice, patient outcomes or policy. Where relevant, the pathway through which this impact will be achieved should be described.
- Research to reduce inequalities and improve health outcomes for Māori, who have higher rates of many health conditions and chronic diseases than non-Māori, and poorer health outcomes<sup>[ii]</sup>.
- Research to reduce inequalities and improve health outcomes for Pacific peoples in New Zealand, who have poorer health status across a variety of measures, including child and youth health and long-term conditions<sup>[iii]</sup>.

4

The research methodology should be designed to maximise the relevance, use and impact of the research findings.

### Box A: Examples of areas in scope for this Research Investment Stream

Research within scope includes, **but is not limited to**, that which seeks to develop, understand and/or improve:

- Animal models or technology platforms intended to support research on a specified disease state or condition;
- The biological origins of an acute or chronic condition;
- Epidemiology as a guide to the management of patients in whom disease has already developed;
- Health technology that will be used to diagnose or treat specific acute or chronic conditions, including diagnostic or prognostic markers, the development of laboratory or clinical tests and equipment/devices;
- Specific treatments, including drug development, clinical trials of new and existing agents, gene therapy and immunotherapy;
- Health delivery research likely to impact on clinical practice or treatment guidelines, but not within the timeframe specified in the New Zealand Health Delivery stream;
- Screening for co-morbid or secondary conditions in an individual with an existing disease/condition;
- Rehabilitation from a specific disease, injury or mental illness, and
- Palliative and end-of-life care.

## What research is better aligned with other Research Investment Streams?

Research area	Relevant investment stream
Research focused solely on the primary prevention of acute or chronic conditions. Biomedical research to understand normal development and biological processes relevant to multiple disease processes.	Health and Wellbeing in New Zealand
Māori health research may <u>also</u> be eligible for the Rangahau Hauora Māori stream if it meets the six goals specified in this stream.	Rangahau Hauora Māori
Research intended to generate improvements in health service delivery in the short-to- medium term.	New Zealand Health Delivery

The information provided in this table is a general guideline only. Researchers are advised to review *all* Research Investment Streams to establish which one is the best fit for their proposed research.

Applicants are advised to review the <u>Vision Mātauranga Policy</u> which focuses on unlocking the science and innovation potential of Māori knowledge, resources and people.

 <sup>[</sup>ii] Ministry of Health. 2015. Tatau Kahukura: Māori Health Chart Book 2015, 3rd Edition.
 Wellington: Ministry of Health.

Winington, winds y of realth.
 Ministry of Health. 2012. Tupu Ola Moui: Pacific Health Chart Book 2012. Wellington: Ministry of Health.

## Rangahau Hauora Māori

**Research Investment Stream** 

#### Kaupapa (Purpose)

To build an evidence base which contributes to Māori health gains, derived from high-quality Māori health research that upholds rangatiratanga and uses and advances Māori knowledge, resources and people.



The Rangahau Hauora Māori Research Investment Stream will support health research that values Māori worldviews and builds Māori research capacity and leadership. Research funded through this stream is expected to demonstrate rangatiratanga (Māori leadership), a commitment to the core values of mana, tika, manaakitanga and whakapapa[<sup>i</sup>], and will recognise that Māori health research teams operate within the broader context of their communities.

Research that contributes to improving Māori health outcomes can be funded through any HRC Research Investment Stream; this document outlines the distinctive features of research in scope for Rangahau Hauora Māori.

Strategies that provide context for the scope, goals and research characteristics of this Research Investment Stream include *He Korowai Oranga: Māori Health Strategy* (Ministry of Health, 2002)<sup>[ii]</sup>, *Vision Mātauranga* (Ministry of Research, Science and Technology, 2005)<sup>[iii]</sup>, and the HRC strategy *Ngā Pou Rangahau: The Strategic Plan for Māori Health Research 2010 – 2015*<sup>[iv]</sup>.

The HRC encourages research that can contribute to a National Science Challenge, as well as research on any other health priority, provided it is within the scope of this Research Investment Stream.

Applicants are advised to read the <u>National Statement of</u> <u>Science Investment</u>, the <u>New Zealand Health Strategy</u> and the <u>New Zealand Health Research Strategy</u>.

## Goals (including research characteristics)

All applications will be assessed on science quality and the extent to which the application has impact<sup>[v]</sup>. The research methodology should be designed to maximise the relevance, use and impact of the research findings. To score highly against assessment criteria, proposals must explicitly demonstrate **all** of the following characteristics.

#### 1. Contribute to the creation of Māori health knowledge

The last five years have seen the broadening of Māori health knowledge. Research funded through this stream should build upon and extend existing understandings related to the improvement of Māori health outcomes, in the form of original, high-quality contributions.

### 2. Contribute to the translation of research findings into Māori health gains

The definition of 'health gain' is broad, and includes expansion of health and research knowledge. Research findings may contribute to health outcomes in the short-, medium-, or long-term. Translating research findings into health gains acknowledges the importance of the progression along the research pathway from the creation to the application of knowledge. As well as demonstrating plans for effective dissemination of results, proposals must identify an audience who will collaborate in the research process and use the research findings.

#### 3. Incorporate Māori health research processes

Including, but not limited to, methodologies inspired by Māori world views and/or forms of mātauranga Māori (distinctive knowledge traditionally held within Māori communities). Proposals should demonstrate and affirm best practice application of Māori research principles, for example, kaupapa Māori methodology as described by the HRC<sup>[vi]</sup>, or other culturally appropriate methodologies. All projects funded under this stream should value tikanga (processes and protocol), engage the knowledge of iwi, hapū, whānau and Māori communities, and be responsive to Māori. The research process must be mutually beneficial for researchers and their communities and research results must be appropriately reported back to Māori communities.

#### 4. Incorporate Māori ethics processes

Proposals must demonstrate understanding of tikanga Māori and its contribution to research. Proposals should be informed by guidelines provided by the HRC for researchers undertaking Māori health research<sup>[vi, vii]</sup>.

#### 5. Contribute to building a highly skilled Māori health research workforce

The HRC recognises the important contribution that the Māori health research workforce makes to Māori health gains. Research funded through this stream is expected to be Māori led – that is, to have significant involvement of Māori as part of the research leadership and established mechanisms/processes for receiving significant, ongoing Māori advice. It is also expected to provide opportunities for capacity building of the Māori health research workforce.

### 6. Respond to the needs of, and work in partnership with, Māori stakeholders and communities

Māori have unique health needs<sup>[viii]</sup> and the HRC recognises the importance of Māori identifying their own research priorities and undertaking research in diverse Māori communities. Proposals should recognise the importance of iwi, hapū, whānau and other Māori involvement in improving health and contributing to health research both as researchers and in partnership with researchers. Community-initiated research opportunities are encouraged.

### What research is better aligned with other Research Investment Streams?

Research that does not have significant Māori involvement or research leadership and/or that involves Māori **only** as participants or a cohort group.

- [i] The Health Research Council of New Zealand acknowledges that there are a diverse range of definitions of these terms and takes an open approach to their interpretation.
- [ii] Ministry of Health. 2013/14. *He Korowai Oranga Māori Health Strategy*. Wellington: Ministry of Health. health.govt.nz/our-work/populations/maori-health/he-korowaioranga)
   [iii] Ministry of Business, Innovation and Employment. (2007). *Vision Mātauranga*.
- [iii] Ministry of Business, Innovation and Employment. (2007). <u>Vision Mātauranga.</u> Wellington: Ministry of Research, Science and Technology.
- [iv] Health Research Council of New Zealand. 2010. Ngā Pou Rangahau: The Strategic Plan for Māori Health Research 2010-2015. Auckland: Health Research Council of New Zealand.
- [v] Applicants are strongly advised to review the Assessment Criteria. Impact on the Research Investment Stream goals (including research characteristics) is one component which makes up the score for impact, worth 25 per cent of the overall score.
- [vi] Health Research Council of New Zealand. 2010. Guidelines for Researchers on Health Research Involving Māori. (Version 2) Auckland: Health Research Council of New Zealand.
- [vii] Pūtaiora Writing Group. 2010. Te Ara Tika: Guidelines for Māori Research Ethics: A framework for researchers and ethics committee members. Auckland: Health Research Council of New Zealand.
- [viii] Ministry of Health. 2015. Tatau Kahukura: Māori Health Chart Book 2015, 3rd Edition. Wellington: Ministry of Health.

## **New Zealand Health Delivery**

**Research Investment Stream** 

The purpose of this Research Investment Stream is to fund highquality, investigator-initiated research projects that position research within practice or service delivery and provide innovative and workable solutions to New Zealand's health and disability challenges in the shortto-medium term. The initiative seeks to strengthen the use of evidence to inform decision-making in health practice or improve the health system.



All research that can contribute to a primary outcome of improved health service delivery over the short-to-medium term is within scope for this Research Investment Stream.

The scope includes the full range of health care delivery (such as prevention, intervention, detection, diagnosis, prognosis, treatment, care and support), at all levels of care (i.e. primary through to tertiary), by all those who work in health and disability service settings. It includes improvements at a local, regional and/or national level.

A wide range of health care delivery improvements are within scope, such as advancements in productivity, performance, organisation, sustainability, costeffectiveness, equity and quality and efficacy of care and support. Research on innovations (such as technologies, tools and devices) is included if likely to impact on clinical practice, health care, service provision or health systems in the short-to-medium term.

To be considered in scope for this Research Investment Stream, clinical trials of new or existing interventions (such as new treatment regimens, technologies, diagnostic aids and information management systems) must meet the goal and research characteristics described in this stream. In addition, clinical trials must demonstrate that they are intended for the health benefit of the New Zealand population (including providing results that can be applied in multiple regions or settings) and that study protocols and/or interventions have been adapted to New Zealand populations or conditions.

Funded research projects are likely to comprise applied research and fall into the areas of health services, health economics, clinical research, health technologies and social science, although other areas that fit within the scope are not excluded. As an HRC public good investment, the primary focus and outcome sought is health benefit, although some projects may have a complementary outcome of economic gain.

No research is excluded from this Research Investment Stream on the basis of methodological approach. Applicants who believe their proposal is in scope for more than one Research Investment Stream should choose the stream in which their research will make the greatest contribution to the goals. The research themes section and Box A (page 10) provide **examples** of research areas in scope for this Research Investment Stream.

The HRC encourages research that can contribute to a National Science Challenge, as well as research on any other health priority, provided it is within the scope of this Research Investment Stream.

Applicants are advised to read the <u>National Statement of</u> <u>Science Investment</u>, the <u>New Zealand Health Strategy</u> and the <u>New Zealand Health Research Strategy</u>.



The HRC has set the following goal for research funded through this Research Investment Stream. All applicants will need to outline how their proposal addresses this goal for the purposes of assessment. The goal is:

• The New Zealand health and disability sector (at a local, regional or national level) will be able to make informed decisions or valuable changes to its policy or practice, expenditure, and/or systems as a direct result of the research in the short-to-medium term.

8

## Besearch characteristics

Proposals are more likely to realise the goal of the Investment Signal if they include the research characteristics listed below. Therefore, all proposals will be assessed<sup>[i]</sup> on science quality and the extent to which they demonstrate:

- Change orientation: Research objectives and methodology must be oriented towards identifying opportunities for, and approaches to, change and improvement (rather than solely focusing on describing existing systems/issues). Proposals must identify and demonstrate how the research findings are likely to make a difference, have utility or produce tangible deliverables.
- End-user engagement: The research methodology should include a strong component of service-user, clinical, health provider, support worker, community or population collaboration, and/or partnership. The patient, community, or population group who will be affected by, and benefit from, the research should be actively involved in the research from the outset.
- **Knowledge transfer:** The methodology should include appropriate processes and steps to support the uptake of research findings. Evidence of strong collaborative and strategic alliances with health service providers should be provided, as should an appropriate, tailored, research dissemination plan describing how findings will be fed back to interested parties during the course of, and at the completion of, the research.

To credibly demonstrate the characteristics listed above and meet the Research Investment Stream goal, proposals must engage the right team and mix of expertise. This could involve collaborating with clinicians, service providers, health and disability support workers or consumers, or consulting with them for advice on research design and methods, to ensure that results will achieve impact.

Where possible, research proposals **should:** 

Demonstrate meaningful consideration of health equity issues and the specific health and healthcare needs of Māori and Pacific peoples within the context of this Research Investment Stream.

Contribute to health sector research capacity and capability development, foster leadership in the health and disability sector, and engender a culture of research and innovation in the area of health delivery<sup>[ii]</sup>.

#### **Research themes**

This signal identifies research themes that the HRC expects the research will contribute to. The themes are not intended to be exhaustive, rather they identify some key issues facing the health sector where research is needed and can make an important contribution.

- Clinical decision making (at the patient and systems levels).
- Patient-centred care, self-care and integrated care.
- Appropriate application of medical and information technology (e.g. e-medicine, telemedicine, information systems, new medical products etc.)
- Quality, safety and accessibility of services.
- Health sector productivity, performance and sustainability.
- Policy and management that has direct impact on health systems and service delivery.
- Workforce capacity and capability.

## What research is better aligned with other Research Investment Streams?

Research area	Relevant investment stream
Research that generates knowledge on the diagnosis, treatment and management of people with specific conditions/diseases.	Improving Outcomes for Acute and Chronic Conditions in New Zealand
Biomedical research to understand the pathology of a specific acute or chronic condition.	
Research focused solely on the primary prevention of acute or chronic conditions.	Health and Wellbeing in New Zealand
Biomedical research to understand normal development and biological processes relevant to multiple disease processes.	
Māori health research may <b>also</b> be eligible for the Rangahau Hauora Māori stream if it meets the goals specified in the Research Investment Stream.	Rangahau Hauora Māori

The information provided in this table is a general guideline only. Researchers are advised to review all Research Investment Streams to establish which one is the best fit for their proposed research.

#### Box A: Examples of areas in scope for the Research Investment Stream

Research within scope includes, but is not limited to, research<sup>[iii]</sup> on:

- Promoting access to successful interventions through new policies, programmes or organisational change, or providing new evidence that will directly improve an intervention and demonstrates high likelihood of uptake;
- Evaluations that are independent, have a research focus, are not part of routine operational practice, and have the potential to make a tangible contribution to heath gain or benefit by informing health care, service provision or health systems;
- The application, deployment, cost adaptation, utility and effectiveness of technologies, devices and diagnostics to increase health benefit for all;
- The quality, safety, accessibility, responsiveness, timeliness, relevance, cost-effectiveness and sustainability of health care and disability support services;
- The productivity, efficiency, planning, management, organisation, financing, purchasing, delivery and design of health care and disability support services;
- Models of care that provide continuity for consumers and better integrate primary, community and social care;
- Innovation in the management of health and disability and improvement in service delivery;
- Experimental development that directly relates to health and disability services or systems; .
- Information and evidence needs of consumers and health service providers; .
- Practice-oriented research that enhances clinical decision making;
- Non-commercial applications of pharmaceuticals approved for use in New Zealand;
- Clinical trials of new or existing interventions that meet the goal and research characteristics described in this Research Investment Stream;
- Patient-centred care and self-care;
- End-user and cultural perspectives on health and disability service delivery;
- Current health and disability systems and services challenges (e.g. workforce issues, barriers to adoption etc.);
- Policy that has a direct impact on, or application to, health and disability services, systems or practice, and
- The adaption and application of international research findings that are directly relevant to improving health and disability service delivery.

Research areas **not funded** under this Research Investment Stream include:

- Service development or implementation that should be funded by health delivery organisations themselves (although these elements may be part of an integrated research proposal);
- The commercial development of new technologies, devices or diagnostics (although research supported through this Research Investment Stream may contribute to later commercial development);
- The preclinical or clinical development of unapproved pharmaceuticals, and
- The infrastructure to support research units or centres.

[iii] Note: Proposals must include a hypothesis or clear research question.

Applicants are strongly advised to review the relevant Assessment Criteria. Applicants are advised to read the <u>Vision Mātauranga Policy</u> which focuses on unlocking the science and innovation potential of Māori knowledge, resources and people.





© Health Research Council of New Zealand

Published by the Health Research Council of New Zealand PO Box 5541, Wellesley Street, Auckland 1141, New Zealand Telephone 09 303 5200, Email info@hrc.govt.nz

This document is available on the Health Research Council of New Zealand Website http://www.hrc.govt.nz