Health Research Council of New Zealand
Te Kaunihera Rangahau Hauora o Aotearoa

Research Impact Assessment

Guide for Applicants and Reviewers

This slideshow has been created to assist applicants and reviewers in their interpretation of the HRC's Research Impact assessment, which has been further revised for the Annual Funding Round.

Why must the HRC demonstrate research impact?

The New Zealand public wants:

- Excellent value for the New Zealand public’s investment in health research.
- Measurable improvements in health outcomes.
- Effective and efficient healthcare delivery.

The HRC wants:

- To increase timely access to quality healthcare for all New Zealanders.
- Evidence-based, cost-effective healthcare solutions that utilise the benefits of innovation and technology.
- To harness research and innovation to drive economic growth.

We have clear direction from:

- New Zealand Health Research Strategy (2017-2027)
- New Zealand Health Research Prioritisation Framework
- Government Policy Statement on Health (2024-2027)
- Going for Growth.

Why must the HRC demonstrate impact from the research that it funds?

The need for health research funders to demonstrate return on investment is imperative.[1]

As the primary agency for publicly funded health research in New Zealand, the HRC has a responsibility to deliver excellent value for money for New Zealanders, and to demonstrate to the public that the health research the HRC funds saves lives, leads to measurable improvements in health and improved quality of life for all New Zealanders. It is critical to demonstrate that publicly funded research reduces health care costs through enhancing the efficiency and effectiveness of healthcare delivery, generates revenue from innovation, and upskills the health research and health workforce.

This is aligned with the **New Zealand Health Research Strategy (2017-2027),**[2] whose vision is to ensure that New Zealand has a world-leading health research and innovation system that, through excellent research, improves the health and wellbeing of all New Zealanders.

The **New Zealand Health Research Prioritisation Framework**[3] prioritises **how and why** health research needs to be done in New Zealand with the aim of driving high-level health outcomes and ensuring maximum impact from the government’s investment in health research.

The **Government’s Policy Statement on Health (2024-2027)**[4] vision is to increase life expectancy with quality of life, and a health system that provides all New Zealanders with timely access to quality health care. The policy statement identifies access, timeliness and quality as priorities for the health system; identifies five targets for health and mental health; outlines five non-communicable health issues and five modifiable behaviours as priorities; considers workforce and infrastructure as priority enablers.

The **Going for Growth** report[5] sets out the Government's approach to economic growth to increase living standards and opportunities for all New Zealanders. There are five pillars to drive economic growth, with innovation, technology and science one of them. This includes using new ideas, knowledge and technology to develop better ways of doing things.

The HRC works in partnership with our researchers to capture the results of completed research and ensure that our best examples of research use and benefits along the pathway to impact are apparent.

We also incorporate prospective assessment of research impact at an individual grant level, to encourage applicants to consider and realise all potential ways in which their proposal can add value for New Zealand, and ultimately, to increase the collective benefits and impacts from the portfolio of research that we fund.

[1] MBIE (2017). The Impact of Science: discussion paper, available at: https://www.mbie.govt.nz/science-and-technology/science-and-innovation/funding-information-and-opportunities/national-statement-of-science-investment/impact-of-science
[2] New Zealand Health Research Strategy, 2017-2027, available at: https://www.health.govt.nz/publications/new-zealand-health-research-strategy-2017-2027
[3] New Zealand Health Research Prioritisation Framework available at: https://www.hrc.govt.nz/resources/new-zealand-health-research-prioritisation-framework
[4] Government Policy Statement on Health (2024-2027) available at: https://www.health.govt.nz/publication/government-policy-statement-health-2024-2027
[5] Going for Growth available at: https://www.mbie.govt.nz/assets/going-for-growth.pdf

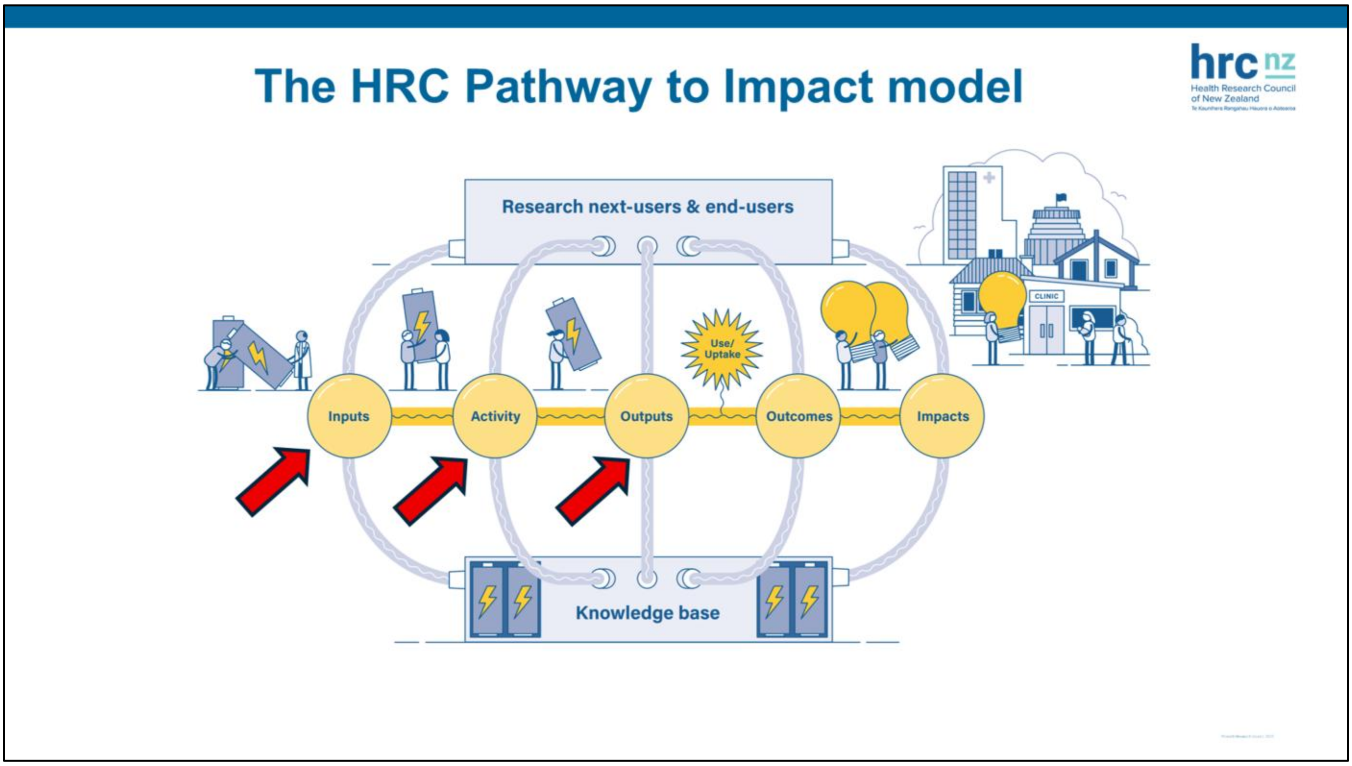
What is research impact?

HRC Definition: The direct and indirect influence of excellent and innovative research on individuals, communities or society, including improvements to health and other social, economic, cultural or environmental benefits for New Zealand.

***Key message*:** Research impact is generated or enhanced by communication, relationships and actions that connect quality research to fields, people or organisations beyond academia.

The HRC's definition of research impact is focused on the creation of real-world benefits for non-academic end users. The inclusion of excellence and innovation signals our ongoing commitment to fund high-quality research, which is a prerequisite for research impact, but not sufficient to maximise the benefit derived from the research.

Our key message is that research impact is not created by researchers alone; but rather, requires communication, relationships and actions that connects research and researchers to people from organisations beyond research providers



The HRC Pathway to Impact model

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Our definition of research impact is part of the **Pathway to Impact** model, which sets out a chain of linked steps to describe how impact can be generated from research inputs.

The pathway to impact recognises and acknowledges the creation of **interim benefits** for New Zealand, including development of human capital, and allows producers of research for use *within academia* to plot their course to impact, describe how they add value along the chain and how they can realistically plan to maximise the benefits of their research.

The red circles describe how research is resourced, conducted, and the resulting knowledge codified into specific outputs. Further definitions are provided below.

Each of these steps has feedback loops to the future users of research, indicating the importance of their involvement at the planning/scoping stages. **Early engagement** or **collaboration from the outset** with end users or the next users of the research ensures that users' needs are taken into account; that joint efforts are made for practical solutions; and shows **genuine consideration** for maximising the potential use and benefits of the research. Feedback loops also indicate how results can feed back into the wider research environment, building the existing knowledge and evidence base.

The pathway to impact is a conceptual model - a simplified representation of a complex and dynamic science system. This conceptualisation highlights the non-linear, cyclical nature of research, including constant feedback and reflection.

Definitions:

Research users

Research users or those who will benefit from the research are agents along the pathway to impact that utilise the research outputs (in conceptual or instrumental ways), including members of the community, the public sector, industry and other researchers. As such, this definition includes both next and end users.

Inputs

Not limited to only the money/resources put in from funder(s) or institution(s). Inputs includes the existing knowledge base that has led to the research question being asked. This might include discipline-specific knowledge, government policies/priorities, public/community/iwi knowledge, and clinical need. Research inputs includes this existing knowledge alongside the addition of:

- funding/financial resources
- infrastructure, facilities and materials
- people, skills, relationships and networks.

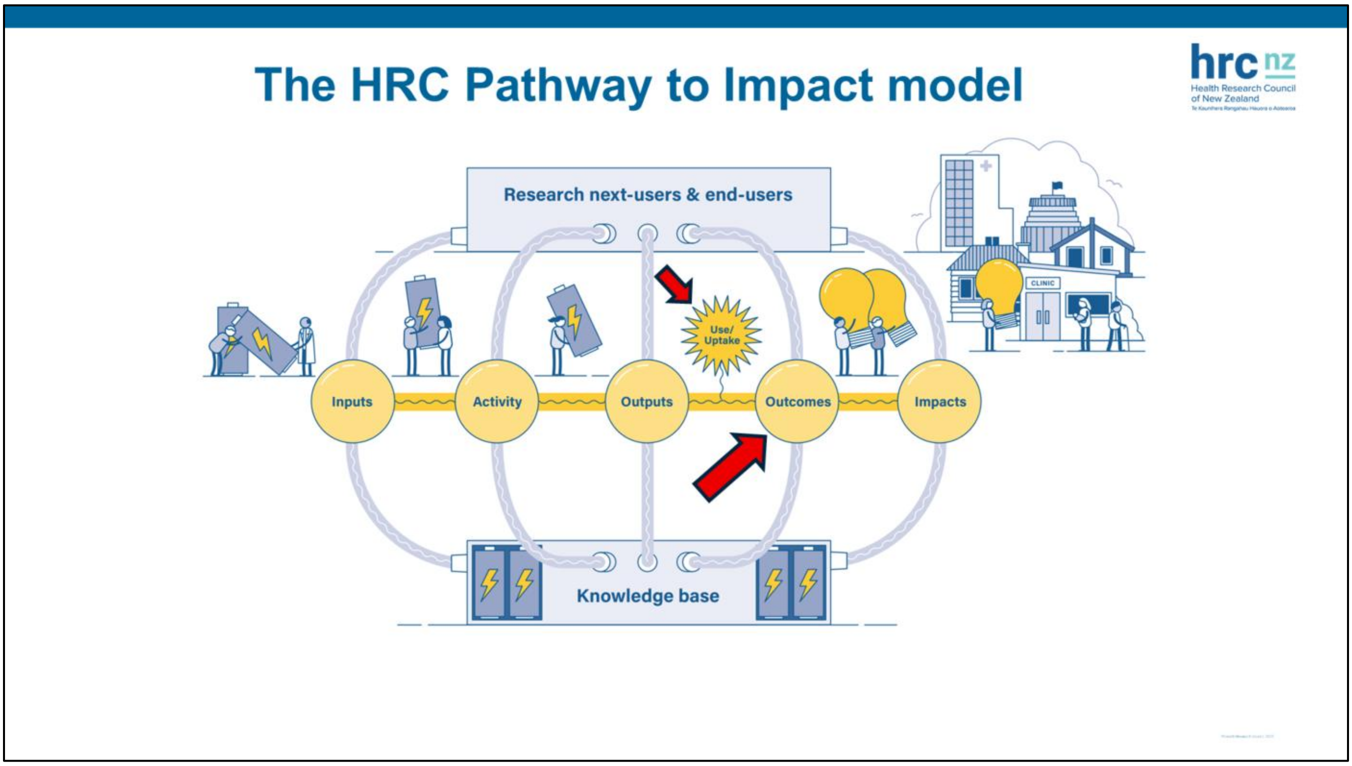
Activity

Generating new knowledge through conducting research usually involves collaboration between researchers and research end users (or next users) and training of post-graduate students, post-doctoral researchers and sometimes includes involvement and training of non-researchers (e.g. clinical professionals or community co-producers of research).

Outputs

Any form of demonstrable output embodying the findings generated by the research. For example, outputs can include direct products and/or services such as new tools, technologies or devices, new drugs or biologics, new or updated health policies or guidelines, educational materials, journal articles, conference presentations, hui, media engagements, consultation or advisory services, reports, manuals, prototypes, patents, software, or datasets.

The outputs of research can also include tacit knowledge exchanged between collaborators, and the training of students and postgraduate researchers, leading to increases in human capital (an intermediate mechanism for impact).



The HRC Pathway to Impact model

The HRC's impact assessment is primarily focused on the next part of the chain – how outputs are transformed to outcomes, representing the utilisation / uptake / adoption / implementation of the research findings. This is a key interim step between the generation of knowledge deliverables (outputs) and the generation of tangible benefits to New Zealanders (impacts).

While knowledge is often used to advance future research opportunities, it can also be taken up by research users to influence decisions outside of research provider institutions, such as changing clinical practice or policy decision-making. Over time, these outcomes can progressively transform to impacts – measurable health, social, economic and other gains for New Zealand.

The uptake of negative results is an important component of the model – "honourable dead-ends" that lead to disinvestment in a field of research, or evidence to inform the discontinuation of a policy or practice.

However, research doesn't speak for itself. Utilisation requires action on behalf of researchers to engage the next users of the research (if not already involved through co-design and co-production of the research) – fostering relationships/networks through continued communication, engagement and feedback. We encourage you to explore, from the outset, throughout the life of your project and beyond who could potentially use or benefit from your research and what you can do to facilitate this.

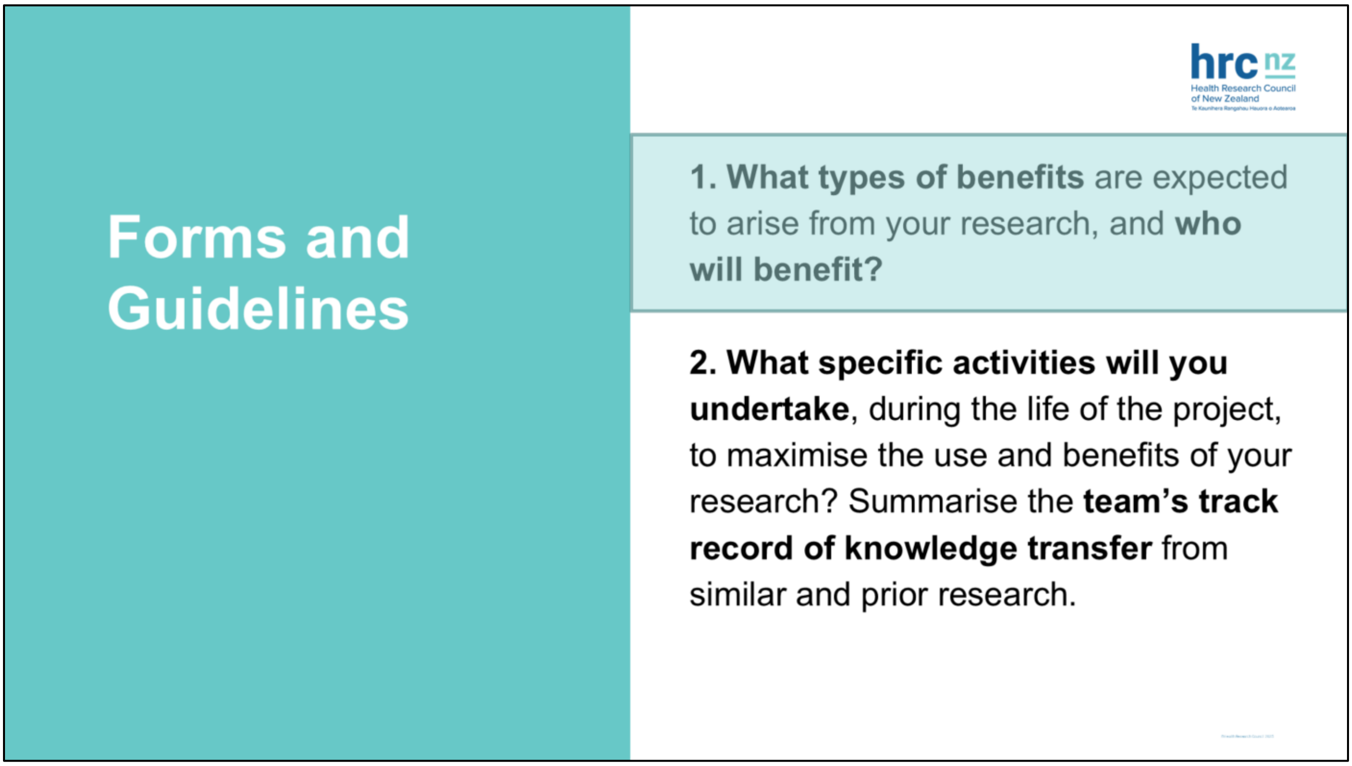
Definitions:

Outcomes

Research outputs transform to research outcomes/interim benefits following utilisation by a research user along the pathway to final impact.

Impact

The direct and indirect influence of excellent and innovative research on individuals, communities or society as a whole, including improvements to health, and other social, economic, cultural or environmental benefits for New Zealand.



Forms and Guidelines

1. What types of benefits are expected to arise from your research, and **who will benefit?**

2. What specific activities will you undertake, during the life of the project, to maximise the use and benefits of your research? Summarise the **team's track record of knowledge transfer** from similar and prior research.

The Forms and Guidelines for Project and Programme applications centre around two components needed for the research impact section: 1) a **description** of the anticipated benefits for New Zealand, and 2) an **action plan** to maximise the use and benefits of research.

1. **What types of benefits** are expected to arise from your research, and **who will benefit?**

This section should provide a realistic description of how research findings will contribute to advancing the HRC's priorities, clear potential for measurable improvements in health outcomes and contributing to wider health and science system goals and achieve maximum value for public investment in health research (a potential 'line of sight' or pathway to impact). Importantly, it should also identify the more immediate benefits, and users of the research who will form a focal point for your Action Plan.

Answer this question as appropriate to your research context. The balance between describing short-term benefits and potential longer-term impact will be dependent on the specific context of the research, with emphasis on considerations within your sphere of influence throughout the life of the research project.

The next slides discuss elements that should be covered in this section, including types of impacts, types of outcomes and benefits, identifying who benefits, and the geographical distribution of benefits.

Types of research impact

- Measurable improvement in health outcomes
- Health system changes
- Economic growth (generation of revenue or cost savings)
- Utilising the benefits of innovation and technology
- Other environmental, social or cultural impacts
- International collaborations that enhance New Zealand’s global science leadership or maximise research impact and capture the benefits of the global research effort for New Zealand.

Applicants should give a broad perspective of the potential value added for New Zealand by the proposed research. Include possible spillover effects to other sectors where relevant. Examples below:

Health, health system and health need impacts

- Improvements in accessibility, safety, effectiveness, efficiency, cost-effectiveness, cost-containment, and responsiveness of health services.
- Achievement of measurable health gains with respect to life expectancy, burden of disease and quality of life measures.

Broader social, Economic, cultural or environmental impacts

- Enhance New Zealand’s reputation in global science leadership by advancing international science, achieving a unique competitive advantage and/or contributing to economic gain.
- Improved wellbeing (interaction of natural, human, social, cultural and financial/physical capital) and quality of life for New Zealanders.
- Creation of a thriving commercialisation environment, growing economic gains by catalysing private sector investment, both national and international, in the medical and biotechnology innovation sector.

Types of research outcomes

Interim uses for, and benefits from, research along the pathway to eventual impact:

- Health knowledge that results in measurable health gains.
- Influence on policy, practice, decision-making, or agenda-setting
- Contribution to improvement in health services and health system
  - For example: cost-effective health and disability services or public health interventions
- Improved exercise of professional skill
  - For example: research-based improvements in healthcare practice
- Industrial innovation (services, products, processes)
- Builds the critical health research capability NZ needs to address health and health system priorities.

While line of sight to eventual potential impact is important, in many cases applicants should maintain focus on the outcomes of their research – how their research findings can realistically make a difference in the short-to-medium-term. This could be by influencing decision-makers, and/or contributing through these intermediate mechanisms for impact, proposed by the OECD[1]. Examples below:

- Influence on, or contribution to, decision-making
- Collaboration with Health New Zealand or PHO networks leads to development or updating of clinical/best practice guidelines
- New devices or techniques lead to changes in treatment or management protocols
- Extension of researcher expertise beyond academia with involvement, consultation or representation in government policy-setting forums
- Amplification of international perception of New Zealand’s research capability and expertise
- Development of partnerships and networks to offer coordinated approaches across multiple organisations or agencies (e.g. Councils, schools, marae, church) to introduce responsive and appropriate local policies to specific communities.
- Empowered communities who drive research focused specifically on actions for local or national change.

[1] OECD (2015), *What is Impact Assessment? Mechanisms*, available at: https://web-archive.oecd.org/2015-06-04/364092-Mechanisms-OECDImpact.pdf

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Types of research-related benefits

- Building capacity and capability for a stronger, responsive research sector
- Improve research capacity of health sector
- Enduring benefits from international engagement
- Enduring benefits from collaboration (national or international)
- Generate resource of value for research community
- Potential for research findings to advance the research field.

More basic research proposals, where the pathway to impact is typically longer and less certain, should also include consideration of *research-related benefits* that can be realistically achieved in the shorter term. This includes benefits related to the conduct of the research, as well as the knowledge deliverables.

- Will your research generate capacity and capability gains for a stronger and more responsive research sector to address current and future health research challenges in New Zealand? (e.g. provide opportunity for developing the critical health research skills NZ needs and can benefit)
- Will it improve the capacity of our health sector to generate and implement research findings, or contribute to the training or professional development of health professionals or health delivery staff as part of a learning health system?
- Will opportunities be created through international or national collaborations, such as access to overseas funding streams or markets, or research resources unavailable in New Zealand?
- Will it create enduring connectivity, develop partnerships or strengthen networks between research teams and industry, policy or community organisations?
- Will your research generate tools, platforms, or other knowledge resources (e.g. datasets) that can be used by a wider group beyond your immediate field of research?
- How could research findings influence future research agendas or decision-making, and to what extent?
- Will there be opportunity for broader societal impacts (e.g. through public engagement)?

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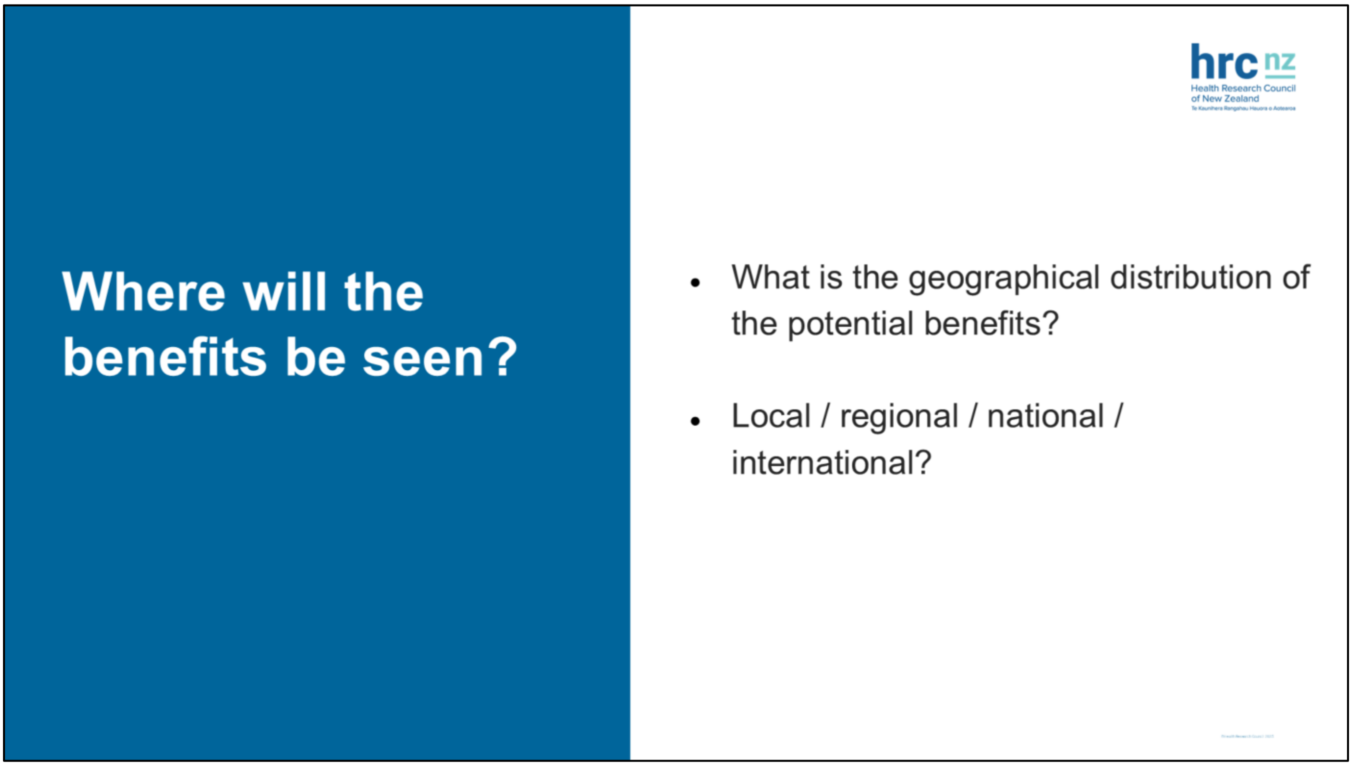
Who benefits from your research?

Identify the research next-users or end-users. They may be in:

- Government policy
- Clinical practice or healthcare delivery provision
- Industry or business
- Community, iwi, NGO, or charity organisations
- Patient/consumer representation or advocacy groups
- Other research disciplines

Applicants should identify those who will use or benefit from their research in the immediate, interim or longer-term, as appropriate to the context. These could include decision-makers in policy, healthcare, industry, or communities; patients or the general public/consumer organisations; or for more basic research, other researchers who can benefit from removal of knowledge barriers or from improved capacity for research in New Zealand.

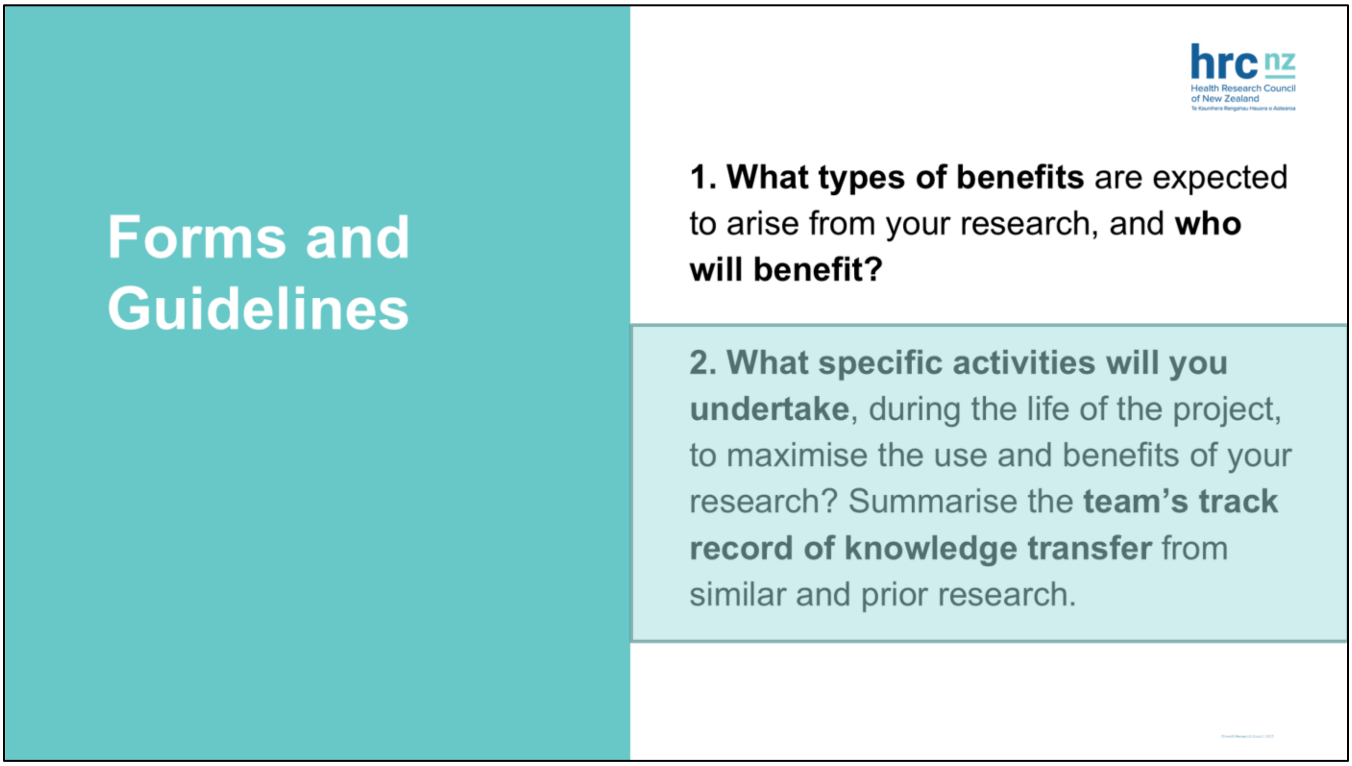


Where will the benefits be seen?

- What is the geographical distribution of the potential benefits?
- Local / regional / national / international?

How will benefits be distributed in New Zealand? For example, will they be applicable locally, or can they be scaled up to have regional or national impact? If research findings will contribute to the international health research effort, describe how New Zealand will benefit from this in the short- and longer-term. There should be a focus on research that needs to be done in New Zealand and therefore can be supported by public funds, with consideration to the international context.

What existing networks will assist the potential reach of research findings?



Forms and Guidelines

1. **What types of benefits** are expected to arise from your research, and **who will benefit?**

2. **What specific activities will you undertake**, during the life of the project, to maximise the use and benefits of your research? Summarise the **team's track record of knowledge transfer** from similar and prior research.

2. **What specific activities will you undertake**, during the life of the project, to maximise the use and benefits of your research?

Research teams should be undertaking steps to maximise the likelihood of impact beyond the production of knowledge (as appropriate to the context of the research) and have the necessary skills, networks and experience to achieve this. Summarise the **team's track record of knowledge transfer** from prior and similar research.

Describe what targeted actions have been or will be taken[1] to improve the likelihood of research uptake and impact, and to ensure that the next users or end users (identified in the previous section) can meaningfully contribute to, and/or benefit from, the research. This could include meaningful, context-appropriate engagement with potential research-users at the beginning of the grant (co-design), throughout the grant (co-production) and at the end of the grant. Some activities and stakeholders need to be engaged from the start (e.g. if they have a stake in the research design or if they hold critical data), others will only be engaged later when you have something to show them. Describe other planned dissemination activities that are designed to reach broader audiences.

The HRC acknowledges that impact isn't generated by researchers alone. Who can **enable the uptake** of your research, and how have they been involved in your research? **Identify uncertainties to uptake or systematic/institutional barriers**, and your mitigation strategies (where relevant).

What elements of the **team's track record of knowledge transfer** provide confidence in the likelihood of research uptake? For example: existing links, relationships, or networks with relevant research next users or end users; demonstrable examples of knowledge mobilisation or changes in health outcomes or societal impact generated from similar research. This component is considered relative to opportunity.

Researchers undertaking basic research are encouraged to conduct meaningful stakeholder engagement and emphasise their track record for knowledge mobilisation.

[1] Consult HRC Guidelines and funding rules for information on support of knowledge transfer activities and include these activities in objectives/milestones where appropriate. Progress against implementing the action plan will form part of the milestones HRC monitors with respect to contractual compliance and delivery.

Pathway to impact principles

- All applications must articulate a line-of-sight to impact
- There are many potential pathways to impact
- The timeframe and pathway to impact are usually uncertain
- Focus on benefits and use within your direct influence
- Early and genuine engagement and collaboration with research users is encouraged
- All applications must add value for New Zealand
- Descriptions should be realistic and credible.

The following principles underpin our assessment of research impact using the Pathway to Impact model:

All applications to the HRC must provide a clear, credible description of a ‘line of sight’ from the current research to impact. Why is what you’re doing important? And what might change as a result? Once you’ve established your line-of-sight, emphasise the pathway to impact – what are you going to do to maximise the chance that your research will get there?

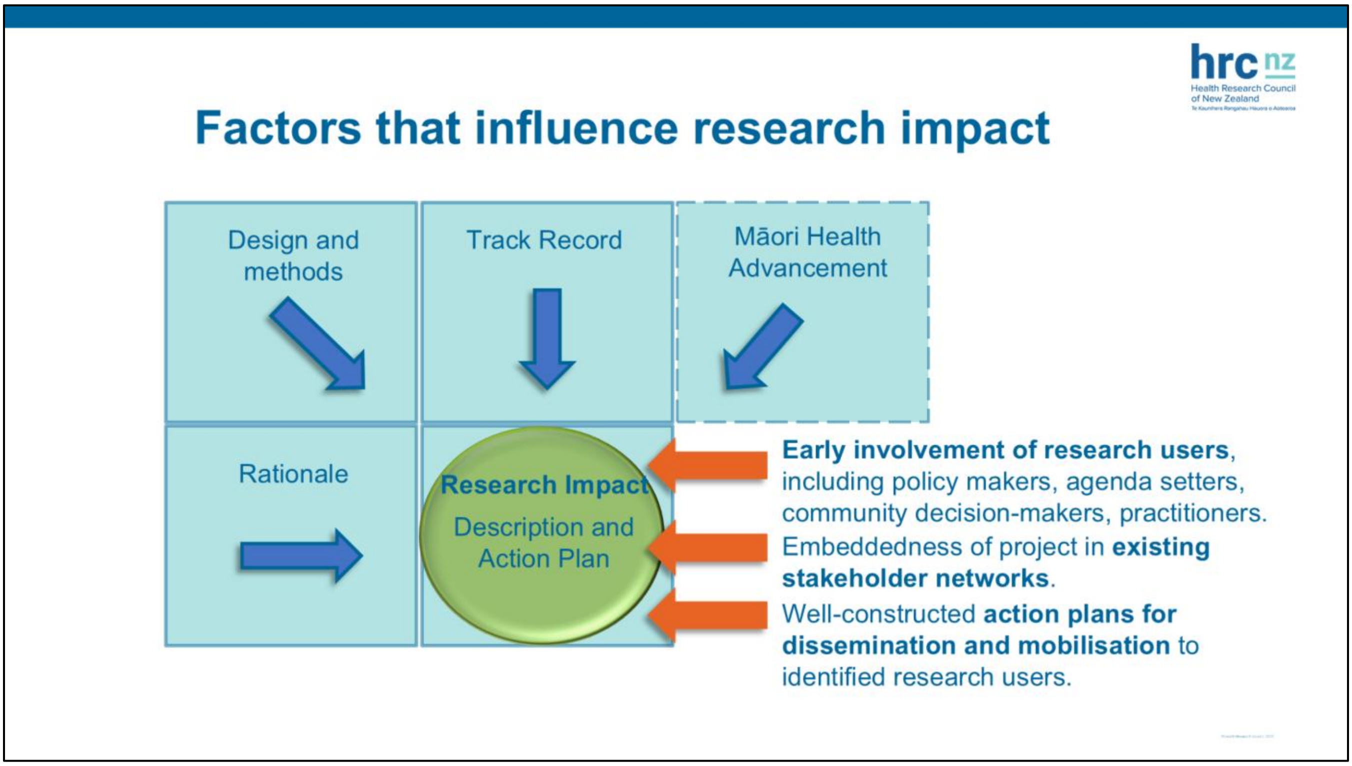
There are many different potential interim uses and benefits that can be generated from health research, and thousands of unique pathways to achieve impact.

Future impact is inherently uncertain; the full extent of impact is often unknowable at the time the research is conducted and may take decades to be fully realised.

Generally speaking, impact that takes more time to be realised becomes increasingly moderated by external factors, beyond the research team’s direct influence. It’s important that we don’t incentivise over-promising and under-delivery with regard to impact, but focus on short-to-medium-term use and benefits that are more within the research team’s direct influence. We understand that there are many external factors that are outside of your control and that delivery of wider, long-term impacts is not down to your actions alone. This is about recognising the potential impact of your research and planning for how you might maximise that. While it may not end up going to plan, if you’ve considered the potential use and benefits of the research at this prospective planning stage, then you'll be better placed to create and respond to opportunities to generate impact during the research process.

Clearly identify the target audience for your research (e.g. not the general public), why is it relevant to them and how you have involved them in the research. All health researchers in New Zealand should be encouraged (and supported) to consult with non-academic end users for whom your research has relevance, at regular intervals during the course of developing the research programme, and throughout the research process (e.g. genuine inclusion of appropriate collaborators on the research team and the establishment of meaningful relationships for enduring connectivity). This is to help identify what research is needed and increase the likelihood of its use and influence.

The most important considerations for the HRC's assessment is that value is added for each proposal, appropriate to the specific context of the research.



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Factors that influence research impact

Early involvement of research users, including policy makers, agenda setters, community decision-makers, practitioners.

Embeddedness of project in **existing stakeholder networks**.

Well-constructed **action plans for dissemination and mobilisation** to identified research users.

The HRC has prepared guidelines to improve the consistency of research impact assessment; however, these are generic around consideration of factors that influence research impact, rather than prescriptive around the weighting of different types and timescales to impact. Science Assessing Committee membership draws on a range of expertise and a fair and balanced in-committee discussion on the types and timescales to impact, and the appropriateness of the action plan, is essential to a robust assessment.

Research impact is one of five assessment criteria used by HRC to assess research proposals, alongside rationale for research, design and methods, Māori health advancement and expertise and track record of the research team.

The likelihood of impact is influenced by multiple factors. Some factors are assessed within the other three criteria (blue arrows), while other factors are distinct to consideration of impact (orange arrows).

Our assumption is that for research to have potential to generate high health impact specific to New Zealand settings, scientific quality is paramount but not sufficient.

The research impact criterion should be considered distinct from science quality, and potential impact should be discussed based on the assumption that the aims of the research will be met (scientific uncertainty is reflected in the scores against other criteria). However, if the science quality is fundamentally flawed to the extent that impact will be unlikely, the research impact score should reflect this.

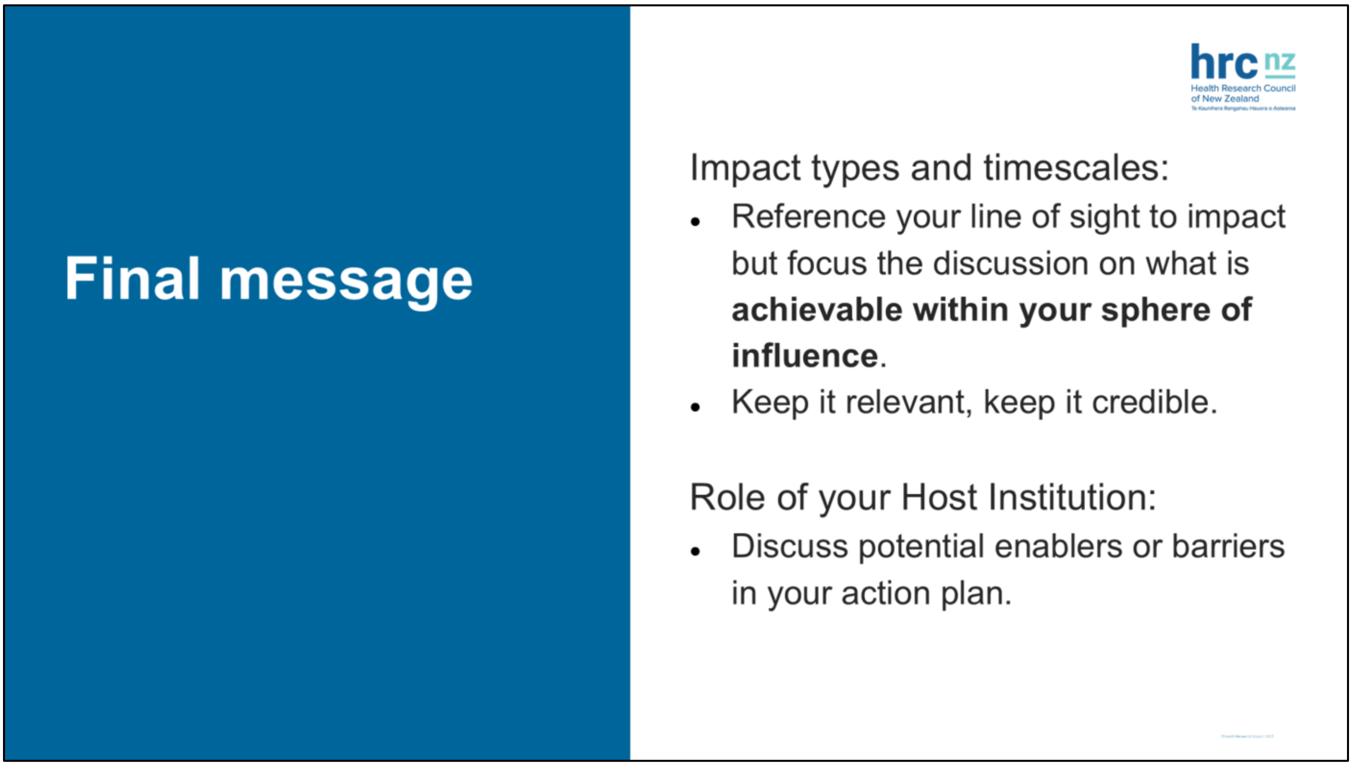
Design and methods may not necessarily have the qualities of being novel or original to meet the aims of the research project and achieve potential impact.

The importance of research gaps/significance of knowledge barriers set out in the rationale, provides a good starting point for description of potential research impact, but must be expanded upon to provide a broader perspective of benefit and value. Description of potential research impact may focus not just on the value of the research findings, but also from the conduct of research itself in terms of capacity and capability building and networking for enduring connectivity.

Engagement activities should be realistic, meaningful, and appropriate to the context of the research; yet all researchers are challenged to look for research users outside their immediate research and professional circle.

Assessment of the Action Plan should also consider the research team’s track record and existing networks for mobilising the knowledge generated and increasing the likelihood and rate of potential impact. Reviewers who represent next users or future users of research are encouraged to share their perspective on the potential benefit and value added by the research.

Overall assessment of research impact should focus on quality, credibility, value added and appropriateness of the action plan within the specific context of use.



Final message

Impact types and timescales:

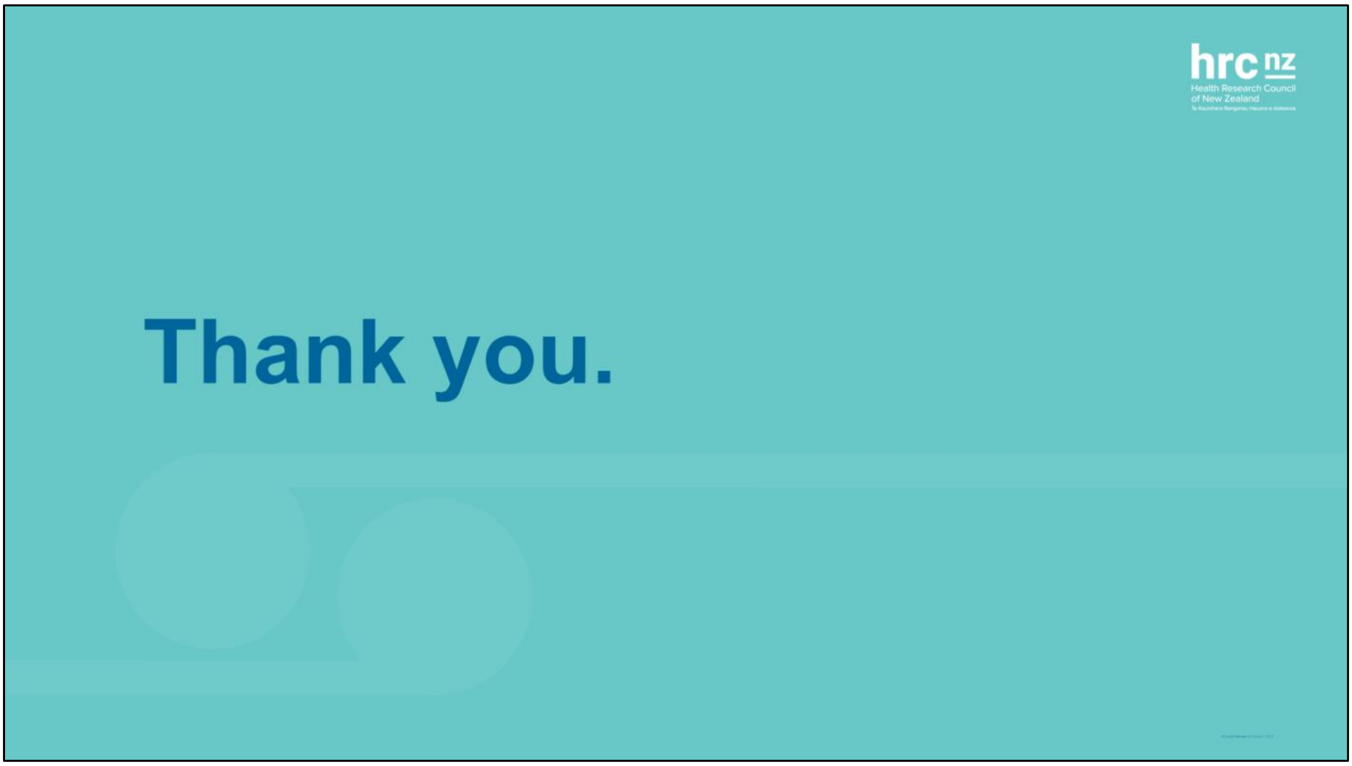
- Reference your line of sight to impact but focus the discussion on what is **achievable within your sphere of influence**.
- Keep it relevant, keep it credible.

Role of your Host Institution:

- Discuss potential enablers or barriers in your action plan.

The research provider (host institution) is held responsible in the research contract with providing an appropriate research environment within which research material is assessed for any potential value beyond peer review publication. Specifically, the Fifth Schedule states in section 2.2.3 in relation to the Research Material, the Research Provider acknowledges that it is expected to generally, **maximise the impact of any new IP on health and economic outcomes, for the benefit of New Zealand**.

If you believe that specific research outcomes may be significantly enhanced or constrained by your host organisation, please discuss this as part of your action plan.



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Thank you.