

Australian Government National Health and Medical Research Council

SYNERGY GRANTS 2019 GUIDE TO APPLICANTS ON PREPARING AN APPLICATION

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1. INTRODUCTION

The objective of the Synergy Grant scheme is to support outstanding multidisciplinary teams of investigators to work together to answer major questions that cannot be answered by a single investigator.

The expected outcomes are:

- multidisciplinary research that addresses major problems in all areas of human health and medical research, from discovery to translation
- highly collaborative teams of diverse researchers including by gender, career stage and cultural background, working together to address major problems in human health.

This document provides guidance to Synergy Grant applicants on preparing an application and must be read in conjunction with the *Synergy Grants 2019 Guidelines*.

2. PROFILE REQUIREMENTS

Within an applicant's profile, there is mandatory information that will need to be completed and/or updated prior to submitting an application. This information includes personal details, academic/research interests and peer review information.

Applicants are also required to complete the sections outlined below. Should more information be entered than is required, only the required information will be imported into the application.

It is important that relevant profile information is up to date at the time of application submission as it is imported into the application and used by peer reviewers. Any changes made to the profile after Chief Investigator A (CIA) certification will not appear in the submitted application.

2.1. Career Disruption (within the last 10 years)

NHMRC is committed to ensuring that every applicant is treated fairly, and this means that it recognises some applicants will have had career disruptions that should be considered when evaluating their track record. If applicable, applicants should use this opportunity to declare any career disruptions that may be relevant to their career history. This will ensure that applications are assessed objectively, and with all relevant factors taken into account.

2.1.1. Career Disruption

A career disruption is defined as a prolonged interruption to an applicant's capacity to work due to pregnancy, major illness/injury and/or carer responsibilities. For guidance on what constitutes a career disruption and how it is considered, refer to the *Synergy Grants 2019 Guidelines*.

2.1.2. Impact

Applicants are required to provide a brief explanation of the impact the career disruption(s) has had on their research, research achievements and associated productivity relative to their career stage. Applicants should not describe the nature of the career disruption in this field. Note that the information in this field will be provided to peer reviewers (maximum of 2000 characters including spaces and line breaks).

2.1.3. Dates

Applicants are required to nominate the periods when they have had a disruption (approximate dates).

2.2. Relative to Opportunity (within the last 10 years)

If applicable, the applicant should use this section to provide details on any relative to opportunity considerations and the effect they have had on their research and research achievements (see *Synergy Grants 2019 Guidelines* for further information).

2.2.1. Circumstance

Provide a brief explanation of the type of relative to opportunity circumstance (maximum of 200 characters including spaces and line breaks).

2.2.2. Impact

Applicants are required to provide a brief explanation of the impact this has had on their research, research achievements and associated productivity relative to their career stage (maximum of 1500 characters including spaces and line breaks).

2.2.3. Date

Applicants are required to nominate the periods when they have had a disruption (approximate dates).

2.3. Publications

Publication information can be uploaded by exporting an EndNote® Library as an .xml file.

NHMRC accepts nine types of publication: Journal Articles (Original Research), Journal Articles (Review), Books/Chapters, Research Report – commissioned by Government, industry or other, Technical Report, Text Book, Accepted for Publication, Editorials and Letters to the Editor.

Publications will be grouped together by the type of publication. They will also automatically be given an Identification Number (ID). DO NOT use the ID number to refer to specific publications in other sections of the application.

2.4. Minimum Data Requirements

Minimum data must be entered in NHMRC's granting system by the specified due date to allow NHMRC to start identifying suitable peer reviewers. <u>Applications that fail to satisfy this requirement will not be accepted</u>. Applicants must complete the required fields with correct information. Using placeholder text such as "text", "synopsis" or "xx" etc. is not acceptable as minimum data.

Minimum data fields for Synergy Grants will be communicated when the Grant Opportunity is published on GrantConnect.

Failure to meet this deadline will result in the application not proceeding.

Research Administration Officers are not required to certify applications for the purpose of minimum data. Applications should only be certified once complete and ready for submission.

3. ADDRESSING THE ASSESSMENT CRITERIA

Applications for Synergy Grants 2019 will be assessed by peer reviewers on the extent to which they address the assessment criteria¹ listed below.

- Track Record, relative to opportunity (40%)
- Knowledge Gain (30%)
- Synergy (30%)

Applications are assessed relative to opportunity, taking into consideration any career disruptions, where applicable.

The following advice should be considered when preparing applications.

3.1. Track Record, relative to opportunity (40%)

All CIs will have their Track Record assessed, comprising the consideration of:

- Publications (20%)
- Research Impact (15%)
- Leadership (5%)

¹ It is recognised that Aboriginal and Torres Strait Islander applicants make additional valuable contributions to policy development, clinical/public health leadership and/or service delivery, community activities and linkages, and are often representatives on key committees. If applicable, these contributions will be considered when assessing research output and track record.

Each CI will have to provide the following information.

3.1.1. Publications

Applicants will be assessed based on their publications from the past 10 years (taking into account career disruptions) as recorded in the applicant's profile within NHMRC's granting system. Applicants will be required to nominate their five best publications from those 10 years and provide explanations of why these publications have been selected, outlining the quality of the publications selected and their contribution to science (maximum of 2000 characters including spaces and line breaks).

The assessment of publications will be against the category descriptors at Table 1 of Attachment A.

3.1.2. Research Impact

Applicants will be assessed based on:

- The significance and reach of their claimed research impact
- The contribution of their research program to the research impact
- The contribution of the applicant to the research program.

NHMRC defines the impact of research as the verifiable outcomes that research makes to knowledge, health, the economy and/or society. Impact is the effect of the research after it has been adopted, adapted for use, or used to inform further research.

Research impact is the verifiable outcomes from research and *not the prospective or anticipated effects of the research*.

Research impact also includes research that leads to a decision not to use a particular diagnostic, treatment or health policy.

Research Impact

The verifiable outcomes that research makes to knowledge, health, the economy and/or society. Impact is the effect of the research after it has been adopted, adapted for use, or used to inform further research.

Research Program

A cohesive body of research by the applicant, not limited to an individual case study (as used in a clinical context) or a single publication. It may be recent or in the past.

Research program's contribution to the research impact

The degree to which the applicant's research program was necessary to achieve the impact(s) (knowledge, health, economic, and/or social impact).

Applicant's contribution to the research program

The level of the applicant's contribution (e.g. leadership, intellectual and/or technical input) to the research program.

Figure 1: Key definitions for the assessment of Research Impact

NHMRC identifies four specific types of impact (Table 1).

Examples of evidence are listed in Table 1. Evidence examples may be relevant to **more than one research impact type**.

Type of	es of Research impact and Examples of	
impact	Description of research impact	Examples of evidence (not exhaustive)
Knowledge impact	New knowledge, demonstrating the benefits emerging from adoption, adaption or use of new knowledge to inform further research, and/or understanding of what is effective.	 recognition of research publications (e.g. citation metrics, particularly field weighted) data sharing contribution to registries or biobanks prizes and conference presentations uptake of research tools and techniques evidence of uptake of the research by other disciplines
Health impact	Improvements in health through new therapeutics, diagnostics, disease prevention or changes in behaviour; or improvements in disease prevention, diagnosis and treatment, management of health problems, health policy, health systems, and quality of life.	 policy or program adopted a clinical guideline adopted international or national practice standards adopted improved service effectiveness Phase I, Phase II and Phase III clinical trials underway or completed improved productivity due to research innovations (e.g. reduced illness, injury) Quality-Adjusted Life Years, Disability-Adjusted Life Years, Potential Years of Life Lost, Patient Reported Outcome Measure and other relevant indicators relative stay index for multi-day stay patients, hospital standardised mortality ratio, cost per weighted separation and total case weighted separation reports (including community and government)
Economic impact	Improvements in the nation's economic performance through creation of new industries, jobs or valuable products, or reducing health care costs, improving efficiency in resource use, or improving the welfare/well-being of the population within current health system resources. An economic impact may also contribute to social or health impacts, including human capital gains and the value of life and health.	 Health Care System Savings relative stay index for multi-day stay patients, hospital standardised mortality ratio, cost per weighted separation and total case weighted separation reduction in Medicare Benefits Scheme costs improved productivity due to research innovations (e.g. reduced illness, injury) improved service effectiveness Product Development a research contract with an industry partner and an active collaboration granting of a patent execution of a licensing agreement with an established company income from intellectual property raising funding from venture capital or other commercial sources or from government schemes that required industry co-participation successful exit from start-up company (public market flotation, merger or acquisition) development of pre-good manufacturing practice prototype successful generation or submission of: a regulatory standard data set a regulatory standard data set a new drug or device for registration (e.g. by Food and Drug Administration, European Medicines Agency, Therapeutic Goods Administration)

Table 1: Types of Research Impact and Examples of Evidence of Research Impact

Type of impact	Description of research impact	Examples of evidence (not exhaustive)
Social impact	Improvements in the health of society, including the well-being of the end user and the community. This may include improved ability to access health care services, to participate socially (including empowerment and participation in decision making) and to quantify improvements in the health of society.	 uptake or demonstrated use of evidence by decision makers/policy makers qualitative measures demonstrating changes in behaviours, attitudes, improved social equity, inclusion or cohesion improved environmental determinants of health improved social determinants of health changes to health risk factors

3.1.2.1. Demonstrating Research Impact

Applicants should only include **one** research program to demonstrate research impact(s) across one or more of the four types of impact. Applicants will be asked to indicate in the application which of the research impact types they would like considered in the assessment of their application. If the research program can be used to demonstrate multiple impacts, the overall research impact score is determined holistically and on balance across the four types (it is not additive). This means that an applicant with one type of impact can score as well as or better than an applicant with multiple types of impact.

Whilst it is expected that the research impact is recent, the research program that contributed to the research impact may be from any time in a researcher's career – there are no time limits on when a researcher made a contribution to the research program or when the research program contributed to the research impact.

Applicants should note that there is no requirement for their research impact to align with the research proposal/vision in their application – these are assessed independently against separate assessment criteria and category descriptors.

The assessment of research impact will be against the category descriptors at Tables 2, 3 and 4 of Attachment A.

The following is provided to assist applicants to complete the application form in NHMRC's granting system. Applicants should provide robust, verifiable evidence (qualitative and/or quantitative, see Table 1) to support the claimed research impact that can be independently assessed by peer reviewers.

FIELD 1 – Reach and significance of the research impact (maximum of 2000 characters including spaces and line breaks)

Describe the research impact and outline with corroborating evidence its reach and significance.

Reach is the extent, spread, breadth, and/or diversity of the beneficiaries of the impact, relative to the type of research impact.

Significance is the degree to which the impact has enabled, enriched, influenced, informed or changed the performance of policies, practices, products, services, culture, understanding, awareness or well-being of the beneficiaries (not the prevalence or magnitude of the issue).

FIELD 2 – Research program's contribution to the research impact (maximum of 2000 characters including spaces and line breaks)

Outline with corroborating evidence how the research program contributed to the research impact.

A *research program* is a cohesive body of research by the applicant. It is not limited to an individual case study (as used in a clinical context) or a single publication. A research program may be recent or in the past. Applicants need to outline the research program with corroborating evidence that can be independently assessed by peer reviewers.

Research program's contribution to the research impact is the degree to which the applicant's research program was necessary to achieve the impact(s) (knowledge, health, economic, and/or social impact) based on robust and verifiable evidence. The relationship between the applicant's research program (including related activities) and the impact may be foreseen or unforeseen, and may be an end product or demonstrated during the research process. Research impact examples may include the adoption or adaptation of existing research.

FIELD 3 – Applicant's contribution to the research program (maximum of 2000 characters including spaces and line breaks)

Outline with corroborating evidence your contribution to the research program.

An *applicant's contribution to the research program* is, relative to opportunity and to the applicant's field of research, the level of the applicant's contribution (e.g. leadership, intellectual and/or technical input) to the research program based on robust and verifiable evidence.

3.1.3. Leadership

For the assessment of leadership, applicants are required to outline their outputs over the past 10 years (taking into account career disruptions) across each of the four leadership elements:

- 1. Research Mentoring
- 2. Research Policy and Professional Leadership
- 3. Institutional Leadership
- 4. Research Programs and Team Leadership.

Each element will be addressed by applicants in separate fields within NHMRC's granting system (maximum of 2000 characters including spaces and line breaks per field).

The assessment of leadership will be against the category descriptors at Table 5 of Attachment A.

3.2. Knowledge Gain (30%) and Synergy (30%)

3.2.1. Knowledge Gain

NHMRC defines "Knowledge Gain" for the Synergy Grant scheme as the quality of the proposed research and significance of the knowledge gained. It incorporates theoretical concepts, hypothesis, research design, robustness and the extent to which the research findings will contribute to the research area and health outcomes (by advancing knowledge, practice or policy).

3.2.2. Synergy

The "Synergy" criterion will consider the quality of the diverse team's multidisciplinary and collaborative approach to solving a major health and medical research question, as well as the capacity-building/workforce development outcomes.

Successful Synergy Grant proposals will have an outcomes focus, demonstrating the skills essential to solve the research question, and will provide evidence of a discernible benefit over homogenous research teams.

The Synergy criterion assesses the merits of an applicant team's multidisciplinary approach, the diversity of the research team and its collaborative gain. Applicants should refer to NHMRC's 'Concept of Synergy' provided in Appendix D of the Synergy Grants 2019 Guidelines.

Diversity

Diversity includes gender, cultural backgrounds, skills, expertise and career stages.

Multidisciplinarity

Multidisciplinary research covers research by teams that integrate information, data, techniques, tools, perspectives, concepts, methodologies and/or theories from two or more disciplines or bodies of specialised knowledge to advance fundamental understanding or to solve questions whose solutions are beyond the scope of a single discipline or area of research practice.

Collaborative Gain

Collaborative gain reflects the ability to achieve goals that could otherwise not be achieved by the team pursuing components as separate projects

Figure 2: Key definitions for the assessment of Synergy

3.3. Grant Proposal

The grant proposal must be written in English and submitted in a Portable Document Format (PDF) file, using the NHMRC's Grant Proposal template, which will be available within the Grant Opportunity on GrantConnect closer to the opening date. Applicants must use this template. The grant proposal must then be uploaded into NHMRC's granting system.

Naming and formatting requirements for the grant proposal are listed in Table 2. Applications that fail to comply with these requirements may be excluded from consideration.

Details to be addressed in the grant proposal and associated page limits are set out in Table 3. Applicants should note that peer reviewers will, as part of their assessment, consider the reproducibility and applicability of the proposed research and research design. Within the experimental design of the proposal, applicants should include sufficient information to demonstrate that robust and unbiased results will be produced.

Component	Component Requirements
File format	The grant proposal must be saved and uploaded as a PDF file
File size	The PDF file MUST NOT exceed 2MB in size
File name	The PDF file must be named using the following:
	APP ID_Applicant's Surname_Document Type/Name.pdf
	E.g.: APP1234567_Smith_Grant Proposal.pdf
Page size	A4
Header	Application ID and Applicant surname must be included in the header
Footer	Page number must be included in the footer
Font	NHMRC recommends a minimum of 12 point Times New Roman font. Applicants must
	ensure the font is readable
Line spacing	Single
Language	English

Table 2: Formatting requirements

Table 3: Grant proposal details

Со	mponent	Page Limit
Α.	Response to the Knowledge Gain criterion (Research	8 pages
	Proposal)	
В.	References	2 pages
С.	Response to Synergy criterion	3 pages
D.	Indigenous Research Excellence Criteria, if applicable	2 pages

A. Research Proposal – 8 pages

Response to the Knowledge Gain criterion

When drafting the response to the Knowledge Gain criterion applicant teams should:

- describe the applicant teams' research strategy for the next five years
- outline the proposed research objectives, basic methodologies and expected outcomes
- describe the importance of the problem to be researched, the planned outcome of the research plan, and the potential significance of the research
- outline how the proposed research integrates complementary information, data, tools, perspectives, concepts and/or theories
- describe the support for the proposed research (e.g. access to technical resources, infrastructure, equipment and facilities and, if required, access to additional expertise necessary to achieve proposed outcomes).

The significance of the study is not a measure of the prevalence/incidence of the health issue (e.g. cancer versus sudden infant death syndrome).

The assessment of knowledge gain will be against the category descriptors at Table 6 of Attachment A.

B. References – 2 pages

References for the Research Proposal must:

- not exceed 2 pages
- provide a list of all references cited in the application in an appropriate standard journal format; NHMRC prefers the Author-date (also known as the Harvard System), Documentary-note and the Vancouver Systems
- list authors in the order in which they appear in PubMed
- only include references to cited work
- be written in English.

C. Response to Synergy criterion – 3 pages total

Synergy is assessed against the category descriptors provided at Table 6 of Attachment A.

Diversity (1 page)

For the purposes of Synergy Grants, diversity includes gender, cultural backgrounds, skills, expertise and career stages. NHMRC recognises the need to foster diversity in health and medical research teams beyond multidisciplinarity.

Health and medical research, from basic science to clinical and translational research, and policy formation, requires creativity and a diverse range of skillsets and viewpoints.

Applicants should justify the diversity within the proposed research team by outlining:

- the type(s) of diversity fostered and how it will enhance the outcomes of the research and its scientific quality, including why the research question cannot be addressed without the proposed personnel
- how the team will contribute to the capacity building, mentoring, career development and diversification of the research workforce.

Multidisciplinarity (1 page)

For the purposes of Synergy Grants, "multidisciplinary research" covers research by teams that integrate information, data, techniques, tools, perspectives, concepts, methodologies and/or theories from two or more disciplines or bodies of specialised knowledge to advance fundamental understanding or to solve questions whose solutions are beyond the scope of a single discipline or area of research practice.

As part of the Research Proposal, applicants will have identified a major health and medical research related question. To address the multidisciplinary approach of the Synergy criterion, the response must demonstrate:

- why the research question requires the integration of knowledge from multiple disciplines or bodies of specialised knowledge
- how the multiple disciplinary approach can provide novel solutions and insights that would not be achieved with a single discipline or traditional approaches
- how the research question is operationalised and addressed using different disciplines complementarily.

Collaborative Gain (1 page)

Synergy Grant research teams will foster both collaborative gain and capacity building through the recruitment of talented researchers from diverse backgrounds and groups. Collaborative gain reflects the ability to achieve goals that could otherwise not be achieved by the team pursuing components as separate projects.

The response should describe:

- the methods that will keep the team focused, integrated and cohesive and that will drive outcomes, e.g.:
 - o how performance will be monitored
 - o how milestones will be evaluated
 - o how the grant funds and other resources will be shared, deployed, and redeployed if required
- strategies for the sustainability of the research collaboration and scope for long term outcomes extending beyond the life of the project.
- how the strategy will support intellectual exchange during and beyond the life of the research project
- what mentoring, professional and personal development opportunities will be provided and how they will help increase capability of under-represented groups and researchers.

Indigenous Research Excellence Criteria, if applicable – 2 pages

To qualify as Aboriginal and Torres Strait Islander health research, at least 20% of the research effort and/or capacity building must relate to Aboriginal and Torres Strait Islander health.

Applicants should complete this section if at least 20% of the research effort and/or capacity building relates to Aboriginal and Torres Strait Islander health and they answered 'yes' to the Aboriginal and Torres Strait Islander Research question within NHMRC's granting system.

Applicants should ensure that they address each Indigenous Research Excellence Criterion as set out in section 6.1 of the *Synergy Grants 2019 Guidelines* and demonstrate:

- what proportion of the research effort will be directed to Aboriginal and Torres Strait Islander health
- that the Indigenous community was instrumental in identifying and inviting further research into the health issue and that the research outcomes will directly benefit the 'named' communities
- that there is a history of working together with the 'named' communities e.g., co-development of the grant, involvement in pilot studies or how the 'named' communities will have input/control over the research process and outcomes across the life of the project
- that there is opportunity for two-way capacity development for both non-Indigenous and Indigenous investigators
- that the above points are explicit throughout the application and not just addressed separately within the Indigenous Research Excellence Criteria section of the grant proposal.

4. ATTACHMENTS

Attachment A: Synergy Grants 2019 Category Descriptors

Attachment A – Synergy Grants 2019 Category Descriptors

The following category descriptors are used as a guide to scoring an application against each of the assessment criteria.

While the category descriptors provide peer reviewers with some benchmarks for appropriately scoring each application, it is not essential that all descriptors relating to a given score are met.

The category descriptors are a guide to a "best fit" outcome. Peer reviewers will consistently refer to these category descriptors to ensure thorough, equitable and transparent assessment of applications.

Assessing Aboriginal and Torres Strait Islander Contributions

It is recognised that Aboriginal and Torres Strait Islander applicants make additional valuable contributions to policy development, clinical/public health leadership and/or service delivery, community activities and linkages, and are often representatives on key committees. If applicable, these contributions should be considered when assessing research output and track record.

Track Record, relative to opportunity (40%)

Publications (20%)

Table 1: Publications

Score	Performance Indicator	Category Descriptors
7	Exceptional	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates: an exceptional record of publications in terms of quality and contribution to science
6	Outstanding	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates: an outstanding record of publications in terms of quality and contribution to science
5	Excellent	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates: an excellent record of publications in terms of quality and contribution to science
4	Very Good	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates: a very good record of publications in terms of quality and contribution to science
3	Good	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates: a good record of publications in terms of quality and contribution to science
2	Satisfactory	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates: a satisfactory record of publications in terms of quality and contribution to science
1	Weak or limited	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates: a weak or limited record of publications in terms of quality and contribution to science

Research Impact (15%)

Table 2: Reach and significance of the research impact

Less than 10 years post-	Category Descriptors			More than 10 years post-
PhD (taking into account career disruptions)	There is robust, verifiable evidence of:	Note: Applicants do not need to demonstrate all types of research impact	There is robust, verifiable evidence of:	PhD (taking into account career disruptions)
	an exceptional knowledge, health,	 Knowledge: a paradigm changing development that has led to (a) new knowledge within the field that is recognised across multiple countries, (b) significant influence beyond the specific field of research or (c) the development of a new field(s) of research that has been recognised across multiple countries/beneficiaries Health a paradigm changing development that has improved health or health systems, services, policy, programs or clinical practice that (a) had a significant impact on health with an extensive reach, (b) had a profound impact on health with a modest reach, (c) profoundly improved the health of Australia's Indigenous people or (d) led to a significant, scalable and 	an exceptional knowledge, health, economic and/or social impact	7
7	economic and/or social impact	 Inproved the health of Adstraid's indigeneous people of (d) led to a significant, solidate and sustainable change in health systems and services in a large number of communities development of a service delivery or system change, prevention program, intervention, device, therapeutic or change in clinical practice that led to (a) the generation of significant commercial income or (b) a profound reduction in healthcare costs Social changes in policy that have had (a) a significant impact on the social well-being, equality or social inclusion of very large numbers of people at a national level or across multiple countries or (b) a profound impact on the social well-being of the end-user, public and community of a smaller number of individuals at a national level or across multiple countries 	an outstanding knowledge, health, economic and/or social impact	6
7	an exceptional knowledge, health, economic and/or social impact	 Knowledge: a major development that has led to (a) new knowledge within the field that is recognised nationally or across multiple countries, (b) a major influence beyond the specific field of research or (c) a major influence on the development of a new field(s) of research that has been recognised nationally or across multiple countries/beneficiaries Health an important development that has improved health or health systems, services, policy, programs or clinical practice that (a) had a major impact on health with an extensive reach, (b) had a significant impact on health with a modest reach, (c) led to a significant 	an excellent knowledge, health, economic and/or social impact	5

Less than 10 years post-	Category Descriptors			More than 10 years post-
PhD (taking into account career disruptions)	There is robust, verifiable evidence of:	Note: Applicants do not need to demonstrate all types of research impact	There is robust, verifiable evidence of:	PhD (taking into account career disruptions)
6	an outstanding knowledge, health, economic and/or social impact	 improvement in the health of Australia's Indigenous people or (d) led to major scalable and sustainable change in health systems and services in a number of communities Economic development of a service delivery or system change, prevention program, intervention, device, therapeutic or change in clinical practice that led to (a) the generation of considerable commercial income or (b) a major reduction in healthcare costs Social changes in policy that have either had (a) a major impact on the social well-being, equality or social inclusion of very large numbers of people at a local, state/territory or national level or (b) a significant impact on the social well-being of the end-user, public and community of a smaller number of individuals at a local, state/territory or national level 	a very good knowledge, health, economic and/or social impact	4
5	an excellent knowledge, health, economic and/or social impact	 Knowledge: a change that has led to (a) new knowledge within the field that is recognised nationally or across multiple countries, (b) had some influence beyond the specific field of research, or (c) some influence on the development of a new field(s) of research that has been recognised nationally or across multiple countries/beneficiaries Health 	a good knowledge, health,	3
4	a very good knowledge, health, economic and/or social impact	 a development that has improved health or health systems, services, policy, programs or clinical practice that (a) had some impact on health with an extensive reach, (b) had a major impact on health with a modest reach, (c) led to a major improvement in the health of Australia's Indigenous people, or (d) led to some scalable and sustainable change in health systems and services in a small number of communities 	economic and/or social impact	5
3	a good knowledge, health, economic and/or social impact	 development of a service delivery or system change, prevention program, intervention, device, therapeutic or change in clinical practice that led to (a) the generation of some commercial income or (b) some reduction in healthcare costs Social changes in policy that have had (a) some impact on the social well-being, equality or social 	a satisfactory knowledge, health, economic and/or social impact	2

Less than 10 years post-	Category Descriptors			More than 10 years post-
PhD (taking into account career disruptions)	There is robust, verifiable evidence of:	Note: Applicants do not need to demonstrate all types of research impact	There is robust, verifiable evidence of:	PhD (taking into account career disruptions)
2	a satisfactory knowledge, health, economic and/or social impact	inclusion of very large numbers of people at a local, state/territory or national level or (b) an impact on the social well-being of the end-user, public and community of a smaller number of individuals at a local, state/territory or national level		
1	a weak or limited knowledge, health, economic and/or social impact	 There is limited or weak evidence of: the development of new knowledge improved health systems and services reductions in health care costs or economic growth improvements in social well-being, equality or social inclusion. 	a weak or limited knowledge, health, economic and/or social impact	1

Table 3: Research Program's contribution to the Research Impact

Score	Performance Indicator	Category Descriptors
7	Exceptional	 Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant's research program made: an exceptional contribution to the knowledge, health, economic and/or social impact
6	Outstanding	 Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant's research program made: an outstanding contribution to the knowledge, health, economic and/or social impact
5	Excellent	 Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant's research program made: an excellent contribution to the knowledge, health, economic and/or social impact
4	Very good	 Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant's research program made: a very good contribution to the knowledge, health, economic and/or social impact
3	Good	 Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant's research program made: a good contribution to the knowledge, health, economic and/or social impact
2	Satisfactory	 Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant's research program made: a satisfactory contribution to the knowledge, health, economic and/or social impact
1	Weak, Limited or No	 Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant's research program made: a weak, limited or no contribution to the knowledge, health, economic and/or social impact

Table 4: Applicant's contribution to Research Program

Score	Performance Indicator	Category Descriptors		
7	Exceptional	 Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made: an exceptional contribution to the research program that led to a knowledge, health, economic and/or social impact 	Leadership AND/OR instrumental role in a research	
6	Outstanding	 Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made: an outstanding contribution to the research program that led to a knowledge, health, economic and/or social impact 	program	
5	Excellent	 Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made: an excellent contribution to the research program that led to a knowledge, health, economic and/or social impact 	Leadership of a component AND/OR collaborative role (e.g.	
4	Very Good	 Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made: a very good contribution to the research program that led to a knowledge, health, economic and/or social impact 	co-investigator) in a research program	
3	Good	 Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made: a good contribution to the research program that led to a knowledge, health, economic and/or social impact 	Contribution to a research	
2	Satisfactory	 Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made: a satisfactory contribution to the research program that led to a knowledge, health, economic and/or social impact 	program	
1	Weak, Limited or No	 Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made: a weak, limited or no contribution to the research program that led to a knowledge, health, economic and/or social impact 	Limited or no contribution to a research program	

Leadership (5%)

Table 5: Leadership

	Performance	
Score	Indicator	Category Descriptors
7	Exceptional	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates exceptional performance in: supervision, mentoring, training and/or career development of staff and/or students within and/or beyond their research group experience and contribution to the peer review of publications and grant applications, nationally and/or internationally contribution to community engagement, public advocacy, government advisory boards or committees, professional societies at a local, national and/or international level non-research contribution(s) to department, centre, institute or organisation e.g. leadership or membership of committee conception and direction of a research project or program building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond institution.
6	Outstanding	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates outstanding performance in: supervision, mentoring, training and/or career development of staff and/or students within and/or beyond their research group experience and contribution to the peer review of publications and grant applications, nationally and/or internationally contribution to community engagement, public advocacy, government advisory boards or committees, professional societies at a local, national and/or international level non-research contribution(s) to department, centre, institute or organisation e.g. leadership or membership of committee conception and direction of a research project or program building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond their institution.
5	Excellent	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates excellent performance in: supervision, mentoring, training and/or career development of staff and/or students within and/or beyond their research group experience and contribution to the peer review of publications and grant applications, nationally and/or internationally contribution to community engagement, public advocacy, government advisory boards or committees, professional societies at a local, national and/or international level non-research contribution(s) to department, centre, institute or organisation e.g. leadership or membership of committee conception and direction of a research project or program building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond their institution.

	Performance			
Score	Indicator	Category Descriptors		
4	Very Good	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates very good performance in: supervision, mentoring, training and/or career development of staff and students within and/or beyond their research group experience and contribution to the peer review of publications and grant applications, nationally and/or internationally contribution to community engagement, public advocacy, government advisory boards or committees, professional societies at a local, national and/or international level non-research contribution(s) to department, centre, institute or organisation e.g. leadership or membership of committee conception and direction of a research project or program building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond their institution. 		
3	Good	 Building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond their institution. Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates good performance in: supervision, mentoring, training and/or career development of staff and/or students within and/or beyond their research group experience and contribution to the peer review of publications and grant applications, nationally and/or internationally contribution to community engagement, public advocacy, government advisory boards or committees, professional societies at a local, national and/or international level non-research contribution(s) to department, centre, institute or organisation e.g. leadership or membership of committee conception and direction of a research project or program building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond their institution. 		
2	Satisfactory	Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates satisfactory performance in: supervision, mentoring, training and/or career development of staff and/or students within and/or beyond their research group experience and contribution to the peer review of publications and grant applications, nationally and/or internationally contribution to community engagement, public advocacy, government advisory heards or committees, professional societies at a 		
1	Weak or limited	 Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates weak or limited performance in: supervision, mentoring, training and/or career development of staff and/or students within and/or beyond their research group experience and contribution to the peer review of publications and grant applications, nationally and/or internationally contribution to community engagement, public advocacy, government advisory boards or committees, professional societies at a local, national and/or international level non-research contribution(s) to department, centre, institute or organisation e.g. leadership or membership of committee conception and direction of a research project or program building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond their institution. 		

Knowledge Gain (30%) and Synergy (30%)

Table 6: Category Descriptors for Knowledge Gain and Synergy

CATEGORY	Knowledge gain	Synergy
7 Exceptional	 The proposed multidisciplinary research: Comprehensively integrates complementary information, data, techniques, tools, perspectives, concepts and/or theories, from two or more disciplines or bodies of specialised knowledge, that are essential to solve a major research question that is beyond the scope of a single discipline or 	 Synergy The proposed research team provides exceptional synergy (diversity, multidisciplinarity and collaborative gain) as it: Diversity Comprises a diverse team (in terms of gender, career stage and/or researchers from different cultures) that will provide expertise and build capacity aligned to the research question
	 area of research practice: is supported by an extremely well justified and reasoned hypothesis/rationale the scientific framework, design, methods and analyses are flawless, highly developed, completely complementary and integrated and highly appropriate 	 Provides investigators diverse experience and vital perspectives, without which the research question cannot be addressed. AND Multidisciplinarity
	 the integration of research components is extremely likely to result in novel conceptual approaches and insights. Demonstrates to an extremely high level that the research proposal tackles a major question addressing an issue of critical importance to advance the research or health area (not prevalence or magnitude of the issue) Collectively has or has access to exceptional technical resources, infrastructure, equipment and facilities, and if required, has access to additional expertise necessary to achieve project outcomes Will result in extremely significant and transformative changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues 	 Comprehensively demonstrates why the research requires the integration of knowledge from multiple disciplines and has processes to ensure the research question is addressed using these different disciplines complimentarily Integrates researchers with highly complementary expertise and insights across disciplines necessary and sufficient to address the major research question and lead to transformative outcomes Achieves integration of the various researchers' skills and perspectives that is extremely likely to produce sustainable synergy and novel outcomes, which would not be possible by the CIs pursuing the components as separate projects.
	 Will lead to extremely significant research outputs (e.g. intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spinoffs, licensing etc.) Would be extremely competitive with the best, similar, research proposals internationally. 	 Collaborative gain Demonstrates to an extremely high degree, comprehensive and suitable plan(s) for the research team to work synergistically, including milestones and evaluation measures and strategies for intellectual exchange, governance, grant sharing and resources
		Demonstrates sustainable collaborations that are highly likely to

CATEGORY	Knowledge gain	Synergy
		 extend beyond the life of the project Incorporates comprehensive and exceptional strategies to integrate, provide mentoring and development opportunities and increase capability of under-represented groups/researchers (e.g. health professionals, consumers, community groups, policy makers and people from different cultures).
6 Outstanding	 The proposed multidisciplinary research: Integrates complementary information, data, techniques, tools, perspectives, concepts and/or theories, from two or more disciplines or bodies of specialised knowledge, that are essential to solve a major research question that is beyond the scope of a single discipline or area of research practice: is supported by a very well justified and reasoned hypothesis/rationale the scientific framework, design, methods and analyses are well developed, complementary and integrated and highly appropriate with only a few minor weaknesses the integration of research components is highly likely to result in novel conceptual approaches and insights. Demonstrates to a very high level that the research proposal tackles a major question addressing an issue that is very important to advance the research or health area (not prevalence or magnitude of the issue) Collectively has or has access to outstanding technical resources, infrastructure, equipment and facilities, and if required, has access to additional expertise necessary to achieve project outcomes Will result in very highly significant research outputs (e.g. intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin- 	 The proposed research team provides outstanding synergy (diversity, multidisciplinarity and collaborative gain) as it: Diversity Comprises a diverse team (in terms of gender, career stage and/or researchers from different cultures) that will provide expertise and build capacity aligned to the research question Provides investigators diverse experience and vital perspectives, without which the research question cannot be addressed. AND Multidisciplinarity Demonstrates to a very high degree why the research requires the integration of knowledge from multiple disciplines and has processes to ensure the research question is addressed using these different disciplines complimentarily Integrates researchers with complementary expertise and insights across disciplines necessary and sufficient to address the major research question and lead to substantial outcomes Achieves integration of the various researchers' skills and perspectives that is highly likely to produce sustainable synergy and novel outcomes, which would not be possible by the CIs pursuing the components as separate projects. AND

CATEGORY	Knowledge gain	Synergy
	 offs, licensing etc.) Would be highly competitive with the best, similar, research proposals internationally. 	• Demonstrates to a very high degree , comprehensive and suitable plan(s) for the research team to work synergistically, including milestones and evaluation measures and strategies for intellectual exchange, governance, grant sharing and resources
		• Demonstrates sustainable collaborations that are highly likely to extend beyond the life of the project.
		• Incorporates comprehensive and outstanding strategies to integrate, provide mentoring and development opportunities and increase capability of under-represented groups/researchers (e.g. health professionals, consumers, community groups, policy makers and people from different cultures).
5 Excellent	The proposed multidisciplinary research:	The proposed research team provides excellent synergy (diversity,
	• Integrates complementary information, data, techniques, tools, perspectives, concepts and/or theories, from two or more disciplines or bodies of specialised knowledge, that are essential to solve a major research question that is beyond the scope of a single discipline or area of research practice:	 multidisciplinarity and collaborative gain) as it: Diversity Comprises a diverse team (in terms of gender, career stage and/or researchers from different cultures) that will provide expertise and build capacity aligned to the research question
	 is supported by a well justified and reasoned hypothesis/rationale the scientific framework, design, methods and analyses are well developed, complementary and integrated and highly appropriate with several minor weaknesses the integration of research components is likely to result in novel conceptual approaches and insights. 	 Provides investigators diverse experience and vital perspectives, without which the research question cannot be addressed. AND Multidisciplinarity Demonstrates to a high degree why the research requires the integration of knowledge from multiple disciplines and has
	• Demonstrates to a high level that the research proposal tackles a major question addressing an issue that is of considerable importance to advance the research or health area (not prevalence or magnitude of the issue)	 processes to ensure the research question is addressed usin these different disciplines complimentarily Integrates researchers with complementary expertise and
	 Collectively has or has access to excellent technical resources, infrastructure, equipment and facilities, and if required, has access to additional expertise necessary to achieve project outcomes 	 insights across disciplines necessary and sufficient to address the major research question and lead to substantial outcomes Achieves integration of the various researchers' skills
	 Will result in highly significant and substantial changes/outcomes in the scientific knowledge, practice or 	and perspectives that is likely to produce sustainable synergy and novel outcomes, which would not be possible by the CIs pursuing the components as

CATEGORY	Knowledge gain	Synergy
	 policy underpinning human health issues Will lead to highly significant research outputs (e.g. intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spinoffs, licensing etc.) Would be competitive with the best, similar, research proposals internationally. 	 separate projects. AND Collaborative gain Demonstrates to a high degree, comprehensive and suitable plan(s) for the research team to work synergistically, including milestones and evaluation measures and strategies for intellectual exchange, governance, grant sharing and resources Demonstrates sustainable collaborations that are likely to extend beyond the life of the project Incorporates comprehensive and excellent strategies to integrate, provide mentoring and development opportunities and increase capability of under-represented groups/researchers (e.g. health professionals, consumers, community groups, policy makers and people from different cultures).
4 Very Good	 The proposed multidisciplinary research: Integrates broadly complementary information, data, techniques, tools, perspectives, concepts and/or theories, from two or more disciplines or bodies of specialised knowledge, that are essential to solve a major research question that is beyond the scope of a single discipline or area of research practice: is supported by a well justified and reasoned hypothesis/rationale the scientific framework, design, methods and analyses are well developed, broadly complementary and integrated and highly appropriate with a few minor concerns the integration of research components is likely to result in novel conceptual approaches and insights. Demonstrates that the research proposal tackles a major question addressing an issue that is of importance to advance the research or health area (not prevalence or magnitude of the issue) Collectively has or has access to very good technical 	 The proposed research team provides very good synergy (diversity, multidisciplinarity and collaborative gain) as it: Diversity Comprises a diverse team (in terms of gender, career stage and/or researchers from different cultures) that will provide expertise and build capacity aligned to the research question Provides investigators diverse experience and vital perspectives, without which the research question cannot be addressed. AND Multidisciplinarity Broadly demonstrates why the research requires the integration of knowledge from multiple disciplines and has processes to ensure the research question is addressed using these different disciplines complimentarily Integrates researchers with complementary expertise and insights across disciplines necessary and sufficient to address the major research question and likely lead to substantial outcomes

Knowledge gain	Synergy
 resources, infrastructure, equipment and facilities, and if required, has access to additional expertise necessary to achieve project outcomes Likely to result in significant and substantial changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues 	 Achieves integration of the various researchers' skills and perspectives that could produce sustainable synergy and novel outcomes, which would not be possible by the CIs pursuing the components as separate projects. AND
 Likely to lead to significant research outputs (e.g. intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spinoffs, licensing etc.) Would be likely to be competitive with high quality, similar research proposals internationally. 	 Collaborative gain Demonstrates comprehensive and suitable plan(s) for the research team to work synergistically, including milestones and evaluation measures and strategies for intellectual exchange, governance, grant sharing and resources Demonstrates sustainable collaborations that could extend beyond the life of the project Incorporates comprehensive and very good strategies to integrate, provide mentoring and development opportunities and increase capability of under-represented groups/researchers (e.g. health professionals, consumers, community groups, policy makers and people from different cultures).
 The proposed multidisciplinary research: Integrates broadly complementary information, data, techniques, tools, perspectives, concepts and/or theories, from two or more disciplines or bodies of specialised knowledge, essential to solve a major research question that is beyond the scope of a single discipline or area of research practice: is supported by a justified and sound hypothesis/rationale the scientific framework, design, methods and analyses are developed, broadly complementary and integrated and appropriate with several minor concerns the integration of research components could result in novel conceptual approaches and insights. Demonstrates that the research proposal tackles a major 	 The proposed research team provides good synergy (diversity, multidisciplinarity and collaborative gain) as it: Diversity Comprises a diverse team (in terms of gender, career stage and/or researchers from different cultures) that will provide expertise and build capacity aligned to the research question Provides investigators diverse experience and vital perspectives, without which the research question cannot be addressed. AND Multidisciplinarity Largely demonstrates why the research requires the integration of knowledge from multiple disciplines and has processes to ensure the research question is addressed using these different
	 resources, infrastructure, equipment and facilities, and if required, has access to additional expertise necessary to achieve project outcomes Likely to result in significant and substantial changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues Likely to lead to significant research outputs (e.g. intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spinoffs, licensing etc.) Would be likely to be competitive with high quality, similar research proposals internationally.

CATEGORY	Knowledge gain	Synergy
	 advance the research or health area (not prevalence or magnitude of the issue) Collectively has or has access to good technical resources, infrastructure, equipment and facilities, and if required, has access to additional expertise necessary to achieve project outcomes Could result in significant and substantial changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues Could lead to significant research outputs (e.g. intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing etc.) Would be somewhat competitive with high quality, similar research proposals internationally. 	 disciplines complimentarily. Integrates researchers with expertise and insights across disciplines necessary and sufficient to address the major research question and could lead to substantial outcomes Achieves integration of the various researchers' skills and perspectives that could in general produce sustainable synergy and novel outcomes, which would not be possible by the CIs pursuing the components as separate projects. AND Collaborative gain Demonstrates suitable plan(s) for the research team to work synergistically, including milestones and evaluation measures and strategies for intellectual exchange, governance, grant sharing and resources Demonstrates collaborations that could extend beyond the life of the project Incorporates clear and good strategies to integrate, provide mentoring and development opportunities and increase capability of under-represented groups/researchers (e.g. health professionals, consumers, community groups, policy makers and people from different cultures).
2 Satisfactory	 The proposed multidisciplinary research: Integrates broadly complementary information, data, techniques, tools, perspectives, concepts and/or theories, from two or more disciplines or bodies of specialised knowledge, essential to solve a major research question that is beyond the scope of a single discipline or area of research practice: is supported by a reasoned hypothesis/rationale the scientific framework, design, methods and analyses are generally sound, complementary and integrated but may lack clarity in some aspects and/or may contain 	 The proposed research team provides moderate synergy (diversity, multidisciplinarity and collaborative gain) as it: Diversity Comprises a diverse team (in terms of gender, career stage and/or researchers from different cultures) that will provide expertise and build capacity aligned to the research question Provides investigators diverse experience and vital perspectives, without which the research question cannot be addressed. AND

CATEGORY	Knowledge gain	Synergy
	notable weaknesses/concerns	Multidisciplinarity
	 the integration of research components could result in some novel conceptual approaches and insights. Demonstrates that the research proposal tackles a major question addressing an issue that is of marginal importance to advance the research or health area (not prevalence or magnitude of the issue) Collectively has or has access to some/most but not all of the technical resources, infrastructure, equipment and facilities, and if required, has access to additional expertise necessary to achieve project outcomes Could result in appreciable improvements/outcomes in the scientific knowledge, practice or policy underpinning human health issues Could lead to moderately significant research outputs (e.g. intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spinoffs, licensing etc.) Would be marginally competitive with high quality, similar research proposals internationally. 	 Demonstrates to some degree why the research could require the integration of knowledge from multiple disciplines and has processes to ensure the research question is addressed using these different disciplines complimentarily, but poses some concerns. Integrates researchers with expertise and insights across disciplines that are relevant to the major research question and may lead to improved outcomes: Achieves integration of the various researchers' skills and perspectives that could produce some synergy and novel outcomes, which would not be possible by the Cls pursuing the components as separate projects. AND Collaborative gain Demonstrates to some extent collaborations that may extend beyond the life of the project. Incorporates moderate strategies to integrate, provide mentoring and development opportunities and increase capability of under-represented groups/researchers (e.g. health professionals, consumers, community groups, policy makers and people from different cultures).
1 Marginal to Poor	 The proposed multidisciplinary research: Does not integrate information, data, techniques, tools, perspectives, concepts and/or theories, from two or more disciplines or bodies of specialised knowledge, essential to solve a major research question that is beyond the scope of a single discipline or area of research practice: has a weak hypothesis/rationale 	 The proposed research team provides limited synergy (diversity, multidisciplinarity and collaborative gain) as it: Diversity Does not comprise a diverse team (in terms of gender, career stage and/or researchers from different cultures) or the proposed team is diverse but investigators do not provide diverse experience and vital perspectives aligned to the research

CATEGORY	Knowledge gain	Synergy
	 the scientific framework, design, methods and analyses have significant shortcomings and may contain major weaknesses. 	question. AND
		 AND Multidisciplinarity Does not demonstrate why the research requires the integration of knowledge from multiple disciplines and has no processes to ensure the research question is addressed using these different disciplines complimentarily Does not integrate researchers with expertise and insights across disciplines necessary to address the major research question. AND Collaborative gain Does not demonstrate suitable plan(s) for the research team to work synergistically, including milestones and evaluation measures and strategies for intellectual exchange, governance, grant sharing and resources Does not demonstrate collaborations that are likely to extend beyond the life of the project Does not incorporate strategies to integrate provide mentoring and development opportunities and increase capability of underrepresented groups/researchers (e.g. health professionals, consumers, community groups, policy makers and people from different cultures).