Australian Government
National Health and Medical Research Council

Outcomes of the Review of the NHMRC Research Translation Centre Initiative

September 2021

Background and purpose

The National Health and Medical Research Council (NHMRC) initiated a review of NHMRC's Research Translation Centre Initiative (the Initiative) in 2019. The purpose of the Review was to consider its design and operation and advise the CEO about whether the Initiative could be modified or reformed to strengthen research-based health care and training to improve the health and well-being of patients and communities, and the integration of research into multiple health services.

The Review considered the aims and objectives of the Initiative and the appropriateness of the current accreditation model (Terms of Reference at Attachment A.) It was not a review of the progress or outcomes of individual centres that NHMRC has accredited.

Review process

NHMRC engaged the Nous Group (Nous) in 2019 to assist with the Review. In its report (December 2019), Nous made 14 recommendations (Attachment B). NHMRC has outlined its consideration of these recommendations at Attachment C.

The Review paused during 2020 due to NHMRC involvement in COVID-19 related priorities. NHMRC then undertook targeted consultations between late 2020 and mid-2021 about possible revisions to the Initiative.

Stakeholders consulted by Nous and NHMRC were:

- Commonwealth and state and territory health departments
- International counterparts with similar initiatives or objectives
- NHMRC Research Translation Centre Review Panel
- Personnel from NHMRC accredited Research Translation Centres
- Regional, rural and remote stakeholders.

Advice was also sought from NHMRC's Council and Health Translation Advisory Committee.

Key issues

Key issues identified by the Review:

- *Value of NHMRC recognition*

  Nous and many stakeholders expressed the view that funding should be provided for accredited centres, with some noting that, without funding, there is reduced incentive to collaborate. On the other hand, some stakeholders considered that there is value in accreditation of itself – that it attracts partners, quality researchers and funding.

- *Focus of the Initiative*

  Nous and many stakeholders suggested that the focus of the Initiative be more clearly on high-quality research translation rather than research excellence and that this would be one of the biggest potential benefits for regional, rural and remote centres.

- *Types of centres*

  Under the current model (the model reviewed), NHMRC recognises two types of centres – Advanced Health Research and Translation Centres (AHRTCs) and Centres for Innovation in Regional Health (CIRHs).

  Nous recommended accrediting a single type of centre with one set of criteria that would be flexible enough to accommodate a diversity of centres. Stakeholders consulted by NHMRC had mixed views about moving to this model. Some considered that non-urban areas have unique needs and called for the distinction between centres to be clearer, whereas others considered that having one type of centre will avoid any perception of hierarchy between the centres. However, many who supported having one type of centre did so only if it did not disadvantage the competitiveness of regional, rural and remote centres (that is, their ability to meet the assessment criteria) and they could reflect the unique needs of their populations. Several stakeholders indicated that, while the desired outcomes may be the same, the challenges and context are very different between metropolitan and regional, rural and remote areas. NHMRC did not hear major concerns from stakeholders about the AHRTC model.

- *National coverage*

  The Nous review considered that the Initiative should aim for national geographical coverage of centres. Some stakeholders supported this view, as they considered that national coverage is critical to equity. However, others pointed out that a balance would be needed to ensure an acceptable standard of academic rigour against a goal of national coverage.

- *Accreditation process and status*

  Some stakeholders suggested a stepped accreditation process, where an applicant that does not meet the assessment criteria could be recognised as 'developing' or 'emerging'.

  It has previously been suggested to NHMRC that existing centres should receive a one-year accreditation extension, with an opportunity to re-apply, if unsuccessful in seeking re-accreditation for five years. This was suggested because of the potentially significant impact on existing centres of losing accreditation, e.g. it could affect employment contracts and funding granted on the basis of NHMRC accreditation.

Key outcomes

- NHMRC will continue to accredit existing partnerships in Australia that meet its criteria to be designated as a Research Translation Centre. Accreditation will remain a recognition initiative; it is not a funding initiative. NHMRC's recognition provides centres with the opportunity to demonstrate their value to potential funders – that is, to demonstrate their impact in improving the health and wellbeing of Australians and bringing benefits to health services. NHMRC does not set prescriptive accreditation

rules for partner contributions. However, it will strengthen the criteria relating to the centres' governance, including consideration of partner contributions.

- The objectives of the Initiative will be updated to emphasise the ultimate objective of improving the health and wellbeing of patients and communities through the translation of research.
- NHMRC will continue to accredit two types of centres under revised designations. The change is intended to reflect the same aim for both types of centre whilst acknowledging their different contexts. There is no hierarchy between the two types of centres. Centres that meet the assessment criteria will be accredited for five years under one of the following streams:
    - Research Translation Centre, formerly designated Advanced Health Research and Translation Centres
    - Research Translation Centre (Regional, Rural and Remote), formerly designated Centres for Innovation in Regional Health.
- The main changes will be to the criteria for regional, rural and remote centres, to better reflect their different context and ensure that applications and assessment consider this explicitly.
- The assessment criteria will be updated:
    - to differentiate more clearly between collaborations that predominantly serve metropolitan areas or regional, rural or remote areas
    - to enable collaborations to demonstrate research excellence that reflects the differences in context and challenges
    - to enable regional, rural and remote collaborations to have a specific focus on building capability and capacity of the health services partners in research and research translation
    - to include governance and organisational arrangements.
- National coverage is not a specific aim of the Initiative. Recognition of excellent collaborations in research and research translation will remain a key element of the Initiative. NHMRC anticipates that the Initiative will continue to encourage the development of high-quality collaborations across Australia.
- The requirements for accreditation and re-accreditation will be the same. An accreditation round will open in the second half of 2021 both for collaborations that are not currently accredited and for accredited centres seeking re-accreditation.
- Once accredited, centres will be required to report on their progress, outcomes and impact. NHMRC will update reporting requirements to reflect revisions to the assessment criteria.
- NHMRC will introduce a number of process changes, for example:
    - A new 'Emerging' Research Translation Centre status may be awarded to recognise those centres with a strong submission but which did not quite demonstrate all of the required characteristics at the required standard.
    - A one-year provisional extension may be provided to centres applying to maintain their accreditation status if they do not meet all of the criteria. At the

end of that year the centre would be required to demonstrate that it meets the required standard to retain its accreditation.

Attachments

- Attachment A: Research Translation Centre Initiative Review – Terms of Reference
- Attachment B: Nous Report to NHMRC
- Attachment C: NHMRC consideration of Nous's recommendations

Australian Government
National Health and Medical Research Council

NHMRC

REVIEW OF THE NHMRC TRANSLATION CENTRE INITIATIVE

Purpose of the Review

The Translation Centre initiative comprises the Advanced Health Research and Translation Centres (AHRTCs) and Centres for Innovation in Regional Health (CIRHs).

The Review will consider the design and operation of the NHMRC Translation Centre initiative and advise the CEO about whether the initiative could be modified or reformed to strengthen research-based health care and training to improve the health and well-being of patients and communities, and the integration of research into multiple health services.

Terms of Reference

The Review will:

1. Assess whether the aims and objectives of the Translation Centre initiative are being achieved.
2. Review the appropriateness of the current accreditation model, including requirements, criteria and reporting.
3. Advise on how the Translation Centre initiative could be modified to strengthen research-based health care and training to improve the health and well-being of patients and communities, and integration of research into multiple health services, including identifying whether alternative models, or elements thereof, should be considered by NHMRC.
4. Advise on whether NHMRC should undertake any future call for submissions for accreditation of new AHRTCs/CIRHs.
5. Advise on the re-accreditation process for existing AHRTCs/CIRHs, including assessment processes and criteria.

Consultation

Wide consultation will be undertaken, including but not necessarily limited to:

- NHMRC's Health Translation Advisory Committee
- International Review Panel - 2018 Call for AHRTC and CIRH submissions
- AHRTC/CIRH key personnel
- A sample of state and territory health departments
- Commonwealth Department of Health.

Attachment B

Review of the Translation Centre Initiative

National Health and Medical Research Council

19 December 2019

nous | 20 YEARS OF INFLUENCE

Disclaimer:

*Nous Group (**Nous**) has prepared this report for the benefit of the National Health and Medical Research Council (the **Client**).*

The report should not be used or relied upon for any purpose other than as an expression of the conclusions and recommendations of Nous to the Client as to the matters within the scope of the report. Nous and its officers and employees expressly disclaim any liability to any person other than the Client who relies or purports to rely on the report for any other purpose.

Nous has prepared the report with care and diligence. The conclusions and recommendations given by Nous in the report are given in good faith and in the reasonable belief that they are correct and not misleading. The report has been prepared by Nous based on information provided by the Client and by other persons. Nous has relied on that information and has not independently verified or audited that information.

Contents

1 Executive Summary

Nous Group (Nous) was engaged by the National Health and Medical Research Council (the NHMRC) to review the Translation Centre initiative (TCI). The TCI formally recognises academic health science collaborations in Australia through accreditation of Advanced Health Research and Translation Centres (AHRTCs) and Centres for Innovation in Regional Health (CIRHs).

Recommendations made in this review draw on information primarily sourced through desktop research and extensive national and international consultation. Whilst the Medical Research Future Fund (MRFF) Rapid Applied Research Translation (RART) scheme administered by the Department of Health was not specifically in the scope of this review, its existence has fundamentally influenced the operations of the AHRTCs and CIRHs and has likewise influenced the findings of this review.

The Nous review examines the design and operation of the TCI and provides advice regarding whether the TCI should be modified or reformed to better meet its core aims. The outcomes of the review are reported against the five Terms of Reference:

Term of Reference 1: Assess whether the aims and objectives of the Translation Centre Initiative are being achieved

The review has found that the objectives of the initiative are broadly being met but a clearer sense of direction would be achieved by clarification of the objectives. This assessment is made based on the TCI as an accreditation scheme only and does not consider MRFF RART project funding objectives or achievements. Centres are generally focused on developing collaboration and have an emphasis on how research can transform patient care – but it is still very early days for outcomes to be evident. In addition, Centres have been hindered in their ability to deliver change by the lack of a dedicated source of funding to support their broad objectives.

Table 1 | Term of Reference 1 recommendations

Recommendation one	The NHMRC should refine the TCI objectives to clarify the core purpose of the TCI.
Recommendation two	The NHMRC should use enablers and interim outputs as proxy measures to assess Centres.

Term of Reference 2: Review the appropriateness of the current accreditation model, including requirements, criteria and reporting

The current accreditation model is based on a competitive approach to academic excellence and collaboration to create a limited number of Centres that meet the criteria to a high level. The Nous review has found that the current model emphasises academic excellence to a higher degree than seems appropriate if translation and implementation is the key focus. It also finds the distinction between the AHRTC and CIRH streams to be unnecessary and tending towards the creation of a two-tier system not supported by the overall objectives of the initiative. Reporting could be simplified and made directly relevant to the accreditation criteria to make it a more useful tool for the NHMRC to assess Centre progress. Simplified and relevant reporting should also avoid confusion with MRFF RART reporting requirements to the Department of Health.

In summary, the current accreditation model is broadly appropriate but the NHMRC should further emphasise health translation in criteria and reporting.

Table 2 | Term of Reference 2 recommendations

Recommendation three	The NHMRC should continue to use an accreditation approach to recognise health translation collaborations.
Recommendation four	The NHMRC should discontinue the separate accreditation schemes for AHRTCs and CIRHs and accredit all Centres under a common set of criteria.
Recommendation five	The relative importance of the accreditation criteria should be clearer. They should focus on the Centre's ability to drive effective health translation by explicitly considering enabling platforms and governance.
Recommendation six	Reporting requirements should be more prescriptive, aligned to the accreditation criteria, and include interim measures.
Recommendation seven	The NHMRC should not prescribe a minimum or maximum size for Centres but should ensure that Centres have representative membership and the ability to self-govern.

Term of Reference 3: Advise on how the Translation Centre initiative could be modified to strengthen research-based health care and training to improve the health and well-being of patients and communities, and integration of research into multiple health services, including identifying whether alternative models, or elements thereof, should be considered by the NHMRC

The Nous review has considered the current TCI model in relation to evolving international experience and the experience to date of the Centres. The views of some stakeholders in Centres that have not achieved accreditation have also been considered. Overall, the review has found that the NHMRC should place more emphasis on getting the structures in place across Australia that focus on translation and implementation, and less on a highly competitive accreditation process. This would involve the Centres identifying specific initiatives to be introduced to the health services at commencement. In addition, MRFF RART funding – if ongoing – and NHMRC accreditation should be brought together into a single scheme to deliver the TCI.

Given the objective of improving health service outcomes it would make sense for the initiative to be aligned with the national health reform agenda and the specific initiatives that each Centre aims to deliver that clearly relate to that agenda.

The review has also considered the competitive nature of the initiative and whether it is more effective as an elite scheme for the top performers or as a model that aspires to national coverage, so that every health service has the opportunity to be connected with a Centre. If implementation of research that transforms health care is the aim, then it is difficult to argue for anything but 100% national coverage.

Table 3 | Term of Reference 3 recommendations

Recommendation eight	The NHMRC should drive stronger leadership from health services by requiring stronger evidence of health service commitment and implementation, and structures that encourage this.
Recommendation nine	The NHMRC and Department of Health could engage more strategically as an integrated unit to ensure they adopt a consistent approach to accreditation and funding to drive implementation of health services research.
Recommendation ten	Addressing the national health agreement should be an explicit goal for the activities of the Centres.

Recommendation eleven	The accreditation criteria should require the Centres to individually respond to the unique requirements of their community/catchment and the strengths of their partners.

Term of Reference 4: Advise on whether the NHMRC should undertake any future call for submissions for accreditation of new AHRTCs/CIRHs

The review considered the need for future calls for submissions in the context of the desirability of national coverage. This central question about whether national coverage is the appropriate goal or whether the initiative should competitively accredit an elite set of Centres goes to the fundamental issue of purpose. The Nous review has concluded that a broad purpose is appropriate to the initiative and thus supports continuation of calls to reach national coverage. State and territory governments should have input into the number – and configuration – of Centres necessary in their jurisdiction.

There is also a question of equity when considering future calls for re-accreditation – ceasing to accredit Centres would create inequitable access in the future to accreditation and the benefits it confers. The review recommends that any future calls are aligned with the re-accreditation of existing Centres.

The review believes that a national conversation prior to the next call for submissions is necessary to ensure the scheme is set up to achieve health outcomes and has the stakeholder buy-in to deliver. This conversation should draw on the expertise and experience of the creation and refinement of Applied Research Collaborations (ARC) and Academic Health Sciences Networks (AHSN) in England. State and territory governments, health services, universities and research institutions should have input into this discussion.

Table 4 | Term of Reference 4 recommendations

Recommendation twelve	The NHMRC should consider national coverage as an ultimate goal for the initiative and undertake future calls for submissions to reach national coverage, with state and territory governments providing input into the configuration of Centres necessary to serve their population. Future calls should be aligned with re-accreditation processes for existing Centres.
Recommendation thirteen	The NHMRC should host a national conversation prior to the next call for submissions, together with the states and territories and the Commonwealth government, that considers how Australia can gain the greatest benefit along the research translation spectrum.

Term of Reference 5: Advise on the re-accreditation process for existing AHRTCs/CIRHs, including assessment processes and criteria

Re-accreditation of all Centres, including those accredited in 2019, should be performed simultaneously under the updated scheme and criteria in 2022. This process should also encompass an open call that allows prospective centres to apply for accreditation. Existing Centres would be able to choose if they dissolve and reform or continue in their current configuration. Centres that have existed for longer periods of time will have a higher expectation to demonstrate success against the accreditation criteria.

Table 5 | Term of Reference 5 recommendations

Recommendation fourteen	Existing AHRTCs/CIRHs should all be re-accredited in 2022 and brought into alignment under the updated scheme and criteria.

2 About the review

Nous was been engaged by the NHMRC to review the TCI. The TCI formally recognises academic health science collaborations in Australia through accreditation of AHRTCs and CIRHs.

The Nous review examines the design and operation of the TCI and provides advice regarding whether the TCI should be modified or reformed to better meet its core aims.

Recommendations rely on findings from desktop research and extensive consultation

Recommendations made in this review draw on information primarily sourced through desktop research and extensive national consultation. A total of 84 consultations were completed in the course of the review, including:

- Centre executives, senior managers and representatives including health service executives and staff, academics and medical staff directly interacting with the Centre.
- The International Translation Centre Review Panel responsible for providing recommendations to the NHMRC about the accreditation of new Centres in 2019.
- State and Commonwealth government representatives.
- The NHMRC TCI team.
- Chief Executives of international comparators in Canada and England.

Representatives from multiple levels of all accredited AHRTCs and CIRHs were consulted. See Appendix B for the list of stakeholder groups consulted.

Findings are structured around the Terms of Reference for the review

The outcomes of the review are reported against the five Terms of Reference:

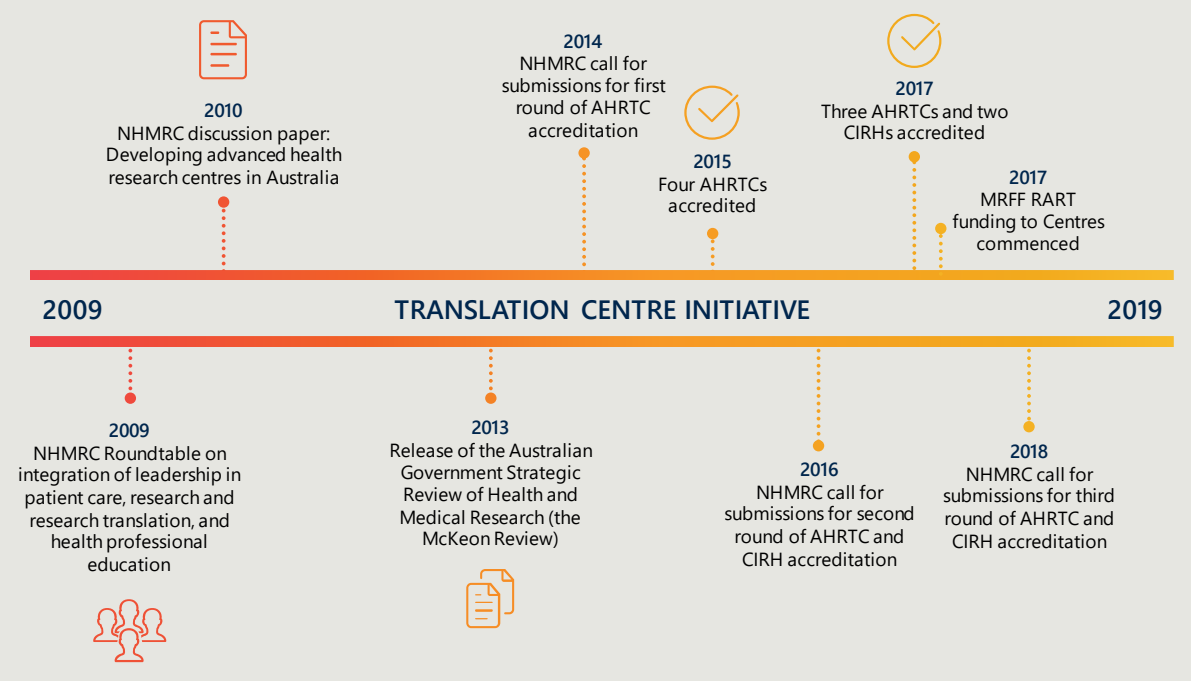
1. Assess whether the aims and objectives of the TCI are being achieved.
2. Review the appropriateness of the current accreditation model, including requirements, criteria and reporting.
3. Advise on how the TCI could be modified to strengthen research-based health care and training to improve the health and well-being of patients and communities, and integration of research into multiple health services, including identifying whether alternative models, or elements thereof, should be considered by the NHMRC.
4. Advise on whether the NHMRC should undertake any future call for submissions for accreditation of new AHRTCs/CIRHs.
5. Advise on the re-accreditation process for existing AHRTCs/CIRHs, including assessment processes and criteria.

3 Development of the Translation Centre initiative

The NHMRC TCI is an accreditation scheme that aims to "*encourage excellent health research and translation in Australia by bringing together researchers, healthcare providers, education and training to improve the health and well-being of patients and the populations they serve, including in regional/remote areas for CIRHs*".[1] The TCI gives recognition to collaborations of universities, medical research institutes and health service providers through the accreditation of Advanced Health Research and Translation Centres (AHRTCs) and CIRHs.

The TCI was established in 2014 in response to national and international influences and the first Centres were accredited in 2015 for five years. Further accreditation rounds were completed in 2017 and 2019, with the most recent round occurring concurrently with this review (the Nous review team did not have access to information about the applicants in the round or the decision-making rationale of the International Translation Centre Review Panel). Figure 1 illustrates the local drivers and landmarks influencing the TCI over the last decade.

Figure 1 | Timeline of creation of the TCI including key local drivers



National and international influences shaped the development of the TCI

International examples of collaborations between research and health services institutions have existed for many years, led perhaps by the Johns Hopkins Hospital's approach to embedding students and researchers in health care institutions which has been in place for over 100 years.[2] Growing attention on the value of collaborations that facilitate translational research led to the establishment of health translational research centres of various kinds in England, Canada and elsewhere in the 2000s. Locally, an NHMRC roundtable and discussion paper responded to international focus on Academic Health Science Centres (AHSC), and the release of the Australian Government's Strategic Review of Health and Medical Research (the McKeon Review) in 2013 drove discussions further.

[1] NHMRC, Recognised health research and translation centres, 2019: https://www.nhmrc.gov.au/research-policy/research-translation-and-impact/recognised-health-research-and-translation-centres

[2] National Task Force on the Future of Canada's AHSCs, Three missions one future, 2010: http://www.healthcarecan.ca/wp-content/themes/camyno/assets/document/Reports/2010/External/EN/ThreeMissions_EN.pdf

The McKeon Review recommended that Australia should establish and fund 'Integrated Health Research Centres' (IHRCs) to embed and integrate health research into the broader health system. It emphasised that geographic colocation is a powerful means for successful collaboration, and made the following recommendations:

1. Establish a clear set of criteria around integration, excellence, translation, strategy, leadership and governance.
2. Initially select 4-8 IHRCs and provide funding of up to $10m p.a. each for five years, and add 1-2 IHRCs every 1-2 years, building to a total of 10-20 over a 10-year period.
3. Monitor and evaluate the performance of the IHRCs to determine whether funding should be renewed at the end of the five-year funding period.[3]

Not all recommendations of the McKeon Review have been incorporated into the TCI as it currently stands. The most notable departure from the McKeon recommendations was that the TCI was created solely as an accreditation scheme with no allocation of funding.[4] The Nous review was advised by some commentators that the lack of funding was beneficial in the early years of establishment as it put the focus firmly on the development of collaborative mechanisms and good governance, while requiring the partners to "buy-in" through financial contributions. The review noted the impact on collaboration and governance but was not convinced that the lack of funding for research and implementation could be considered beneficial.

CIRHs were created to accredit Centres with a regional and remote focus

The first call for submissions for accreditation in 2014 called only for submissions for AHRTCs. During this accreditation round, a number of applications were received from Centres operating in regional and remote areas that were not successful in their AHRTC application but are still identified as valid and important collaborations for achieving translation. As a result, CIRHs were introduced and calls for submissions in 2017 and 2019 included a call for both AHRTCs and CIRHs.

The objective for AHRTCs and CIRHs is identical, except that CIRHs focus on *"practices and policies that are of direct relevance and benefit to regional and remote areas of Australia"*.[5]

The accreditation criteria are largely identical except for the breadth and focus of research excellence, with the CIRH focus on health services research relevant to regional and remote areas. Of the six accreditation criteria listed in the 2018 call for submissions, only two criteria differ in any way. This is discussed further in 5.1.5 below. Table 6 sets out the most recent accreditation criteria for AHRTCs and CIRHs.

Table 6 | Accreditation criteria for AHRTCs and CIRHs in 2018, with differences in bold

2018 AHRTC	2018 CIRH
1. Outstanding leadership in research and evidence-based clinical care, including for **the most difficult clinical conditions**	1. Outstanding leadership in research- and evidence-based clinical care that **enhances the quality of health care in regional and remote Australia**
2. Excellence in innovative biomedical, clinical, public health and health services research	2. Excellence in innovative biomedical, clinical, public health **and/or** health services research **that addresses the challenges and opportunities of health care provision in regional and remote Australia**

[3] Department of Health and Ageing, Strategic Review of Health and Medical Research, 2013: http://mckeonreview.org.au/downloads/Strategic_Review_of_Health_and_Medical_Research_Feb_2013-Final_Report.pdf
[4] Apart from an initial grant round of approximately $100,000 upon initial accreditation.
[5] NHMRC, Recognised health research and translation centres, 2019: https://www.nhmrc.gov.au/research-policy/research-translation-and-impact/recognised-health-research-and-translation-centres

2018 AHRTC	2018 CIRH
3. Programs and activities to accelerate translation of research findings into health care and ways of bringing health care problems to the researchers	3. Programs and activities to accelerate translation of research findings into health care and ways of bringing health care problems to the researchers
4. Research-infused education and training	4. Research-infused education and training
5. Health professional leaders who ensure that research knowledge is translated into policies and practices locally, nationally and internationally	5. Health professional leaders who ensure that research knowledge is translated into policies and practices locally, nationally and internationally
6. Strong collaboration amongst the research, translation, patient care and education programs	6. Strong collaboration amongst the research, translation, patient care and education programs

Applicants are assessed by their written response to the accreditation criteria and through face-to-face interviews with the International Translation Centre Review Panel. The International Translation Centre Review Panel assesses the applicants and provides recommendations for the NHMRC CEO's consideration.

MRFF funding has become closely associated with the TCI

In 2017, the Department of Health began using TCI accredited centres as a mechanism to implement translation research activities through the MRFF RART grant opportunity. To date, the nine Centres have received funding of approximately $2m per year between FY17/18 and FY20/21.

A further $153.1 million has been allocated to the RART scheme over the next 10 years. How this funding will be delivered is to be determined by the Department of Health.[6]

The introduction of RART funding has meant that the TCI is now inevitably associated with MRFF funding. Most stakeholders that the Nous review team engaged with in current and aspiring Centres were unable to distinguish the impact of the two initiatives. Accreditation brings prestige, and in the past has also brought access to funding. Moreover, the achievement of outcomes is heavily dependent on the availability of funding. It would be impossible to separately attribute any improvements in health outcomes to the mere existence of accredited Centres or to the availability of funding to deliver outcomes.

The Translation Centre initiative is evolving as Centres choose their focuses

There are currently seven accredited AHRTCs and two accredited CIRHs in Australia. Despite existing under the same initiative, each Centre has a unique focus and approach that is tailored to the Centre's catchment and partnership. Table 7 presents a brief overview of each currently accredited Centre.

Table 7 | Overview of currently accredited Centres

Accreditation year	AHRTC or CIRH	Centre	Key features as assessed by Nous
2015	AHRTC	Health Translation SA	• Complete state coverage • Emphasis on developing enabling platforms
2015	AHRTC	Melbourne Academic Centre for Health	• Emphasis on connecting researchers to health services • Translation research orientated

[6] The review heard that options could involve a continuation of the current allocation amount or the introduction of a competitive grant process.

Accreditation year	AHRTC or CIRH	Centre	Key features as assessed by Nous
2015	AHRTC	Monash Partners Academic Health Science Centre	• Emphasis on connecting researchers to health services • Translation research orientated
2015	AHRTC	Sydney Health Partners	• Emphasis on using governance arrangements to facilitate collaboration • Translation research orientated
2017	AHRTC	Brisbane Diamantina Health Partners	• Administratively based in a health service • Working to further PHN involvement
2017	CIRH	Central Australian Academic Health Science Network	• Highly distributed catchment • Strong emphasis on Indigenous health • Strongly community driven
2017	CIRH	NSW Regional Health Partners	• Emphasis on health economics and research that consumers care about • Diverse catchment spanning urban, regional and rural populations
2017	AHRTC	SPHERE Maridulu Budyari Gumal	• Governance structure draws significant financial contributions from partners • Translation research orientated
2017	AHRTC	Western Australian Health Translation Network	• Complete state coverage • Innovative methods of drawing flagship research projects from health services

The translational activities of each Centre span the full translational research spectrum, from progressing basic research to clinical trials, through to a focus on implementing good practice at scale. The first round of centre accreditation was weighted towards the basic research end of the translational spectrum, with the following two rounds tending towards implementation. Each Centre has its specialties and places its focus at different ends of the spectrum.

During the preparation of this report, an additional CIRH was accredited through the 2019 call for submissions. This centre was not included in the consultation process.

Accredited Centres collaborate on a national level under AHRA

The accredited Centres have voluntarily come together to establish the Australian Health Research Alliance (AHRA) as a body comprised of all current Centres. It acts as a platform to share knowledge and good ideas across all Centres. AHRA allocates responsibility for addressing "national system level initiatives" that are funded through the MRFF RART and align with Australian Government priorities. Different Centres take the lead or co-lead on different national system level initiatives. AHRA is also not funded by the NHMRC.

AHRA holds periodic strategy days to discuss issues relevant to all sectors and plan for the future. The strategy days provide a forum for engagement with the NHMRC and the Department of Health. They also provide an opportunity for inter-Centre collaboration. From its inception AHRA has emphasised the equal footing of all Centres. Membership is guaranteed for any Centre which is accredited, and AHRA exists through the recognition of the Centres rather than through official recognition by a government body.

4 What is intended by translational health research?

The term health translation encompasses a wide range of activities from discovery research to implementation into service delivery. Before moving to consider the Terms of Reference for this review more closely, we frame our findings by considering what was intended – and might currently be intended – by the TCI. Is the McKeon concept still relevant? What was the problem it was seeking to address? And has that problem gone away or been transformed in the current environment?

The Nous review encountered this struggle with intention and the challenge with language as a core element in considering its response to the Terms of Reference for this review. In the words of the Chief Executive of one of England's Academic Health Science Networks: "*Language gets in the way of this conversation*". Research, discovery science, innovation, translation and implementation are all used – sometimes without clarity – along the translation pathway.

The US National Institutes of Health (NIH) includes two areas of translation in its definition of translational research:

> *One is the process of applying discoveries generated during research in the laboratory, and in preclinical studies, to the development of trials and studies in humans. The second area of translation concerns research aimed at enhancing the adoption of best practices in the community. Cost-effectiveness of prevention and treatment strategies is also an important part of translational science.*[7]

Others in the NIH have identified that "*because translational research is not clearly defined, developers of translational research programs are struggling to articulate specific program objectives, delineate the knowledge and skills (competencies)…and track outcomes to assess whether program objectives and competency requirements are being met.*"[8]

In the broadest sense translation is a critical element linking health research to patient outcomes – a key intermediary step between basic research and using it as part of health service delivery to improve the lives of patients and communities. Conceptually it can perhaps best be viewed as a spectrum that spans from basic to applied research and on through to implementation. Activities relating to translational research can exist across almost the entirety of that spectrum. In this context it can be useful to distinguish the 'push' of basic research into clinical trials and beyond (which tends to be driven by universities) while at the other end health services are closely involved in the 'pull': driving identification of critical research questions and enabling implementation.

In Australia, the TCI exists as a single scheme that is intended to cover all facets of the research spectrum to drive translation. This stands in contrast to England and Canada, where multiple schemes have been established in attempts to bolster different points along the spectrum.

Recent developments in England have moved more into the implementation space

Recent experience in England provides an informative backdrop to understanding where the TCI is placed. Noticeably, the use of language in naming the various elements of the system does not facilitate understanding: definitions of Academic Health Science Centres and Networks are not consistent across countries. The terms are used frequently but are not defined consistently.

A number of collaborations exist in England which span the translational research spectrum. At the discovery end of the spectrum, biomedical research facilities are clustered together in six AHSCs, which effectively act as hubs of biomedical research. A number of other collaborative arrangements exist at this end of the spectrum, such as the Biomedical Research Centres. This end of the spectrum is relatively well funded in comparison to the implementation end of the spectrum. Along the translation pathway are the

[7] NIH Institutional Clinical and Translational Science award, 2007: https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-07-007.html
[8] D. McGartland Rubio et al, Defining translational research: implications for training, 2010: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2829707/

ARCs, previously Collaborations for Leadership in Applied Health Research and Care (CLAHRCs). Finally, AHSNs aim to implement the outcomes of research at pace and scale.

ARCs are designed to *undertake high-quality applied health and care research and work across local health and care systems to close the second translational gap by supporting implementation of research and will work collectively to ensure national impact.*[9] There are 15 ARCs, nationally distributed and "co-terminal" with the AHSNs. The ARCs are supported by funds provided to the NIHR by the Department of Health and Social Care for the purpose of funding the ARCs. The ARCs perhaps most closely resemble the model used for Australia's TCI – they are measured on high academic excellence and deliver "implementation-ready" outcomes. Consultations indicated that the predecessor to the ARCs have historically struggled to drive research in implementable fields, with research topics influenced by researcher interests. A focus of the ARCs is now to develop a pipeline of implementable and scalable products that AHSNs can then implement.

The 15 Academic Health Science Networks (AHSNs) across England were established and funded by the NHS after considerable debate in England about how to improve the implementation of research and innovation into health services. England recognised it was investing twenty-five times more on discovery research than on implementation. The National Institute for Clinical Effectiveness (NICE) found that implementation was patchy. AHSNs thus sought to fill a gap in the translation pathway by "*improving patient and population health outcomes by translating research into practice and developing and implementing integrated health care services*".[10]

Commentators from England made the point to the Nous review team that many academics do not favour the AHSN concept as it does not deliver publications and academic excellence can be pulled in from anywhere rather than being demonstrated as part of the collaboration. The alternative point of view is that "*publication does not lead to outcomes*" and that publication alone is not sufficient to ensure research translation. The criteria for success for AHSNs is the spread and pace of implementation. Good ideas are captured from all the AHSNs, prioritised centrally and then adopted as performance measures for success. AHSNs aim to reduce the pathway for widespread adoption of innovation from around 17 years to just two years.

The English approach of different schemes that span the translational research spectrum exists as a result of significant evolution over time. Multiple schemes allow each initiative to focus on one facet of translation, but consultations indicated that the schemes are at times 'culturally different' which can create challenges. A contributor to this is likely the different incentives – ARCs are incentivised by publications, while AHSNs are incentivised by demonstrated implementation into health services. The schemes are now being encouraged to work more collaboratively.

At its core, the funding sources for AHSNs direct and support their activities. Funding is distributed based on success in meeting the priorities set by each funding body: for example, NHS England and NHS Improvement funding requires AHSNs to execute their priorities and patient improvement initiatives, while Office for Life Science funding is based on Network success in supporting small businesses to scale up and sell products that improve patient outcomes. This drives AHSNs to adhere to nationally set priorities and focus strongly on implementation.

Canadian equivalents are not formally accredited

The current state of the Canadian health research translation system has been largely shaped by the Three Missions One Future review of Canadian Academic Health Sciences Centres in 2010. Canadian Academic Health Sciences Centres are comprised of a health science university and academic health care organisations. In 2010, the Three Missions One Future review recommended that Canadian Academic Health Sciences Centres evolve into Academic Health Sciences Networks, which encompass the Academic Health Sciences Centres and other health provider organisations.[11] Their stated goal is to "*improve patient*

[9] NIHR, Applied research collaborations application guide, 2018
[10] NHS, Academic Health Science Networks, 2019: https://www.england.nhs.uk/ourwork/part-rel/ahsn/
[11] National Task Force on the Future of Canada's AHSCs, Three Missions One Future, 2010: http://www.healthcarecan.ca/wp-content/themes/camyno/assets/document/Reports/2010/External/EN/ThreeMissions_EN.pdf

and population health outcomes through mechanisms and structures that develop, implement and advance integrated health services delivery, professional education, and research and innovation".[12] Canadian Academic Health Sciences Networks are approximately equivalent to Centres accredited under the TCI in Australia.

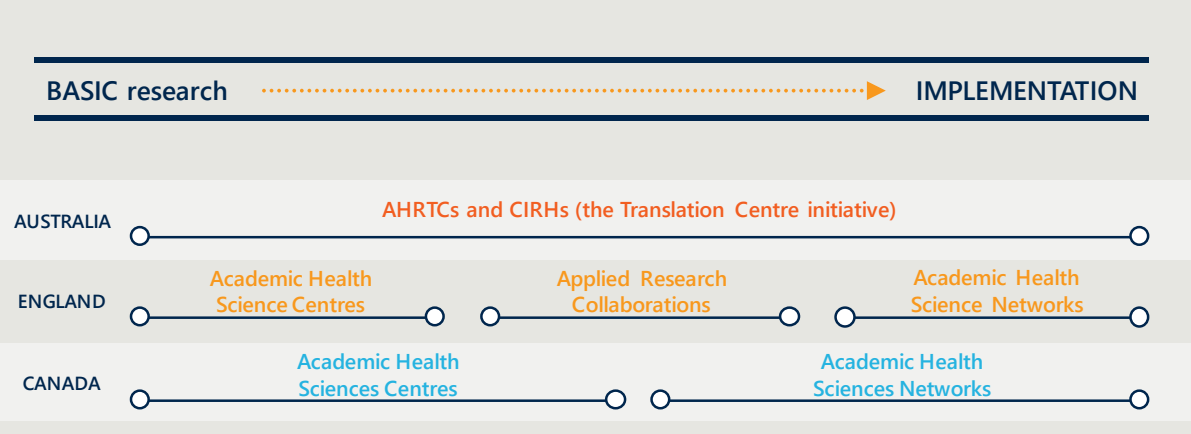
Canadian Academic Health Sciences Networks are self-identifying, are not formally accredited and do not receive dedicated funding. This has resulted in varying success across different Academic Health Sciences Networks, with regional Academic Health Sciences Networks struggling to achieve health outcomes, facilitate collaboration or develop a sustainable economic model. Consultations indicated that the lack of both formal accreditation and funding are contributors to this challenge. Without accreditation, Academic Health Sciences Networks are less likely to support each other or align their goals. Without funding, Academic Health Sciences Networks struggle to act on their objectives.

Where should the TCI sit on this spectrum?

The creation of the TCI by the NHMRC represented a significant step along the health translation pathway in Australia. Its focus on academic excellence reflects its birthplace and the influence of the McKeon review. Over time, however, some stakeholders have begun to question its focus on academic excellence and to ask how far the model is driving change in health services – i.e. the implementation end of the spectrum.

Figure 2 illustrates the simplified translational research spectrum and the space along the spectrum in which the Australian and international initiatives operate. Interaction between the English schemes has been encouraged and formalised in recent years.

Figure 2 | Australian and international translation schemes exist at varying points across the research spectrum



The fundamental question then for the TCI is where its future lies in the spectrum of health research translation. The NHMRC's current role is solely as an accreditation mechanism to provide credibility and respect to the excellence of the collaboration and is currently a requirement for funding to be received from the MRFF RART. Without its own funding, the TCI is reliant on other parts of the health system – or private industry – to provide funding for projects or purposes that will lead to the improvement of health outcomes. Such funding sources are not yet providing significant revenue.

A question has also been raised about whether the NHMRC is the appropriate body to drive the implementation end. Should its role be confined to research only and not infiltrate too far into health service delivery? (This is discussed further under Terms of Reference 2 below). This is compounded by the

[12] National Task Force on the Future of Canada's AHSCs, Three Missions One Future, 2010: http://www.healthcarecan.ca/wp-content/themes/camyno/assets/document/Reports/2010/External/EN/ThreeMissions_EN.pdf

challenge of Australia's federal health system: the NHMRC is a Commonwealth body operating in a federal health system where overarching policy and some aspects of health care (e.g. primary care, aged care and aspects of mental health care) are managed by the Commonwealth but most health services are managed by the states/territories.

As a collaborative model, the TCI is potentially well placed to move further into the implementation space, working with its health service partners to facilitate both the 'pull' and 'push' of translational research. This would remove the need in Australia to introduce additional complexity through another scheme and brings together the state-based health services with Commonwealth funded research. Given that the TCI already exists alongside complex Commonwealth/state/territory government and non-government networks/precincts/Centres/collaborations, it would seem sensible to encourage it to flourish across the whole translational spectrum.

Introduction of a stronger focus on implementation does however mean that geographic coverage becomes more important. As the Chief Executive of one AHSN in England expressed it: "*Who do you want to leave behind?*" If the Translation Centre initiative develops a stronger focus on implementation, then the model needs to be working for all Australians.

5 Response to the Terms of Reference

The design and operation of the TCI is assessed against each of the Terms of Reference in turn below.

1 Assess whether the aims and objectives of the Translation Centre initiative are being achieved

The review has found that the objectives of the initiative are broadly being met but a clearer sense of direction would be achieved by clarification of the objectives. This assessment is made based on the TCI as an accreditation scheme only and does not consider MRFF RART project funding objectives or achievements. Centres are generally focused on developing collaboration and have an emphasis on how research can transform patient care – but it is still very early days for outcomes to be evident. In addition, Centres have been hindered in their ability to deliver change by the lack of a dedicated source of funding to support their broad objectives.

5.1.1 The aims and objectives of the TCI require greater clarity

Centres and their members reported that limited detail in information relating to the TCI has led to a lack of clarity regarding the core purpose of the TCI. This has been further complicated by ambiguity in focus, the introduction of MRFF RART funding and some changes to the stated objectives over time. The Nous review suggests that the TCI objective should clearly state the ultimate desired outcomes for the scheme and the mechanisms by which accredited Centres can achieve that aim.

The TCI encompasses a wide range of translation activity

As discussed in Section 4, there is a spectrum of activity associated with the concept of translational research. The Nous review observed that each AHRTC and CIRH has unique partners, catchment needs and areas of expertise. As a result, each Centre has developed its own focus on specific components of translation. Some Centres drive the early translational stages of research, such as progression of basic research to clinical trials, while others focus more on implementing new devices/technologies or new models of care for areas of need.

Rather than rigorously defining translational research and requiring Centres to comply, this review suggests that it is appropriate to recognise that translation refers to a broad and evolving series of activities. Centres can then determine their objectives based on their region and focus on the kind of translational research or implementation that is most pertinent to their catchment needs and capabilities.

It should be made clear that the TCI appreciates that there are a range of approaches to translation, and that each Centre should achieve the TCI objectives as best suited to the circumstances and needs of their catchment. Therefore, TCI objectives should provide clarity as to the intended outcome and enabling mechanisms of Centre activities but should allow sufficient flexibility for Centres to execute 'translation' in the way most relevant to their unique catchment of patients and partners.

The stated objectives of the TCI have drifted over time

The TCI objective stated in each call for submissions has changed in slight but significant ways over time. Consultations indicated that these changes have not been clearly communicated to existing Centres. Notably, the aim provided in the Terms of Reference for this review states that the TCI aims "*to strengthen research-based health care and training…*"[13] while the website states that the TCI aims to "*encourage*

[13] TOR3, Review of the NHMRC Translation Centre Initiative Terms of Reference, 2019: https://www.nhmrc.gov.au/research-policy/research-translation-and-impact/recognised-health-esearch-and-translation-centres

excellent health research and translation by bringing together researchers, healthcare providers, education and training…"[14]. This difference, although subtle, can impact on the focus and activities of accredited Centres. A carefully thought through objective statement will help to clarify the breadth and intended focus of the initiative.

In addition, the objectives of AHRTC and CIRH schemes differ slightly to the overarching TCI objectives and have also varied over time. In reference to AHRTC initiative aims, key variations include:

- The 2014 and 2016 calls for submission focused upon the identification and recognition of leading centres. The 2014 call for submission looks to identify centres that "*excel in research, the translation of evidence into excellent patient care"*[15], while the 2016 call for submission looked to identify the "*leading centres of collaboration in health and medical research*"[16].
- The 2018 call for submissions shifted the aim from identification of leading centres, to encouraging leadership and collaboration and promoting the development of innovative and evidence-based models of health care practice.

Similar shifts are observed in the CIRH initiative aims in 2016 and 2018. See Appendix A for further detail.

Once accreditation is achieved, all Centres are operating under the same banner regardless of their year of accreditation. Consistency in objectives and communication of any changes to all Centres would provide much-needed clarity for Centres.

The introduction of MRFF funding has influenced the objectives and activities of accredited Centres

The TCI was established solely as an accreditation initiative and, despite the recommendation of the McKeon report, had no accompanying source of funding. It was anticipated that accreditation may assist Centres to acquire funding through other sources. In 2017, the Department of Health began using TCI accreditation as a requirement for distributing funding to accredited Centres through its MRFF RART initiative. The third round of RART funding closed in late 2019.

In the minds of the TCI key stakeholders, the TCI has become inextricably linked to MRFF RART funding as it has to date been the primary source of funding for AHRTCs and CIRHs. The non-competitive distribution of RART funding to accredited Centres has contributed to the collaborative nature of the TCI but has also introduced additional objectives and projects that have influenced the direction of the Centres. Centres report that the rapid timeframes for RART grant rounds and the accountability to the Department of Health for funded project outcomes has led to Centres developing grants within tight timeframes in the first and second rounds without allowing sufficient time to consolidate and align the objectives of the MRFF RART scheme and the TCI. The imperative of meeting MRFF RART objectives in order to access funding during the formative stages of the Centres has tended to focus accredited Centres on the grant round projects.

Clarification of the objectives of the TCI is needed

The objective statement for the TCI should apply to all accredited Centres, provide clarity as to the core purpose of the initiative and provide guidance as to how Centres accredited under the TCI should achieve them. The Nous review believes that the objective statement should be broad enough to allow Centres to use their individual strengths to achieve outcomes along the translation spectrum.

[14] NHMRC Recognised Health Research and Translation Centres, 2019: https://www.nhmrc.gov.au/research-policy/research-translation-and-impact/recognised-health-research-and-translation-centres
[15] 2014 and 2016 AHRTC call for submissions, available at: https://www.nhmrc.gov.au/research-policy/research-translation-and-impact/recognised-health-research-and-translation-centres
[16] 2018 AHRTC call for submissions, 2018: https://www.nhmrc.gov.au/research-policy/research-translation-and-impact/recognised-health-research-and-translation-centres

Recommendation one	The NHMRC should refine the TCI objectives to clarify the core purpose of the TCI.

We propose the following objective for the TCI:

> *The Translation Centre initiative aims to improve the health and well-being of patients and communities through facilitating the translation of research into health care by:*
>
> - *promoting health service leadership of translational research*
> - *strengthening collaboration between health services and research institutions*
> - *delivering training, education and enabling platforms.*

This objective aligns with the NHMRC's objectives and, if desired, with the national health reform agenda. See Section 5.1.11 for further information regarding the alignment of TCI objectives with the NHMRC and national health reform agenda objectives.

5.1.2 Accredited Centres are on the pathway to achieving translation outcomes, but patient outcomes are difficult to measure

Accredited Centres are still too newly established to observe patient outcomes, but interim measures indicate that they are on the pathway to achieving health translation outcomes. Proxy measures, particularly a significant increase in collaboration between partners and Centres, indicate that the Centres are well set up for success.

Centres have not been accredited for long enough to observe population health outcomes

The ultimate aim of the TCI is to provide tangible improvements to the health and wellbeing of patients and communities, best measured through population health outcomes. The Centres have not yet been accredited for long enough to demonstrate population health outcomes. Neither the TCI nor the individual Centres set out specific targets in relation to health outcomes or in relation to changed health service practices.

There are a number of proxy measures that can be used to assess the potential effectiveness of the Centres. These measures should be employed while Centres are not fully mature and, where possible, link to accreditation criteria and reporting criteria (refer to Sections 5.1.6 and 5.1.7 for further detail). Six proxy measures that can be used to assess the success of maturing Centres are:

1. Evidence of collaboration that has occurred as a direct result of the Centre
2. The Centre's progress in establishing effective governance structures
3. The Centre's progress in developing enabling platforms and processes (such as ethics processes or data sharing arrangements)
4. Evidence of buy-in from partners, including state government, LHN and primary healthcare partners
5. Evidence of profile-building and increased awareness of the Centre and its role
6. The Centre's progress in establishing projects that are on the translation pathway and are likely to demonstrate changed health practice or population health outcomes in the future.

Recommendation two	The NHMRC should use enablers and interim outputs as proxy measures to assess Centres.

All Centres are demonstrating success in proxy measures and developing enablers

Consultation across a broad range of stakeholders indicated that Centres are currently demonstrating success in the proxy measures and enablers detailed above. There is a variety of activities and approaches across the different Centres which is largely dependent on the Centre's operating environment, partners and unique catchment needs. This results in different outcomes to date, but all Centres are reporting significantly increased collaboration at all levels of partner organisations, which would not have occurred without the Centre. With slightly less consistency across Centres, accredited Centres are also achieving:

- governance structures that are collaborative and effective in focusing the direction of Centres
- buy-in from state health organisations
- development of mechanisms to identify and work towards solving health service problems
- development of translation enablers, such as consistent ethics processes or data sharing arrangements
- on-the ground capability building.

Staff at all levels within accredited Centres consistently reported that accredited Centres fill a unique niche, particularly in terms of their ability to bring diverse academics, health service providers, government representatives and others into collaborative relationships.

AHRA is a significant and well-positioned secondary outcome of the TCI

Stakeholders consistently indicated that AHRA is an effective vehicle for successful and valuable collaboration and is increasingly ensuring the spread of innovation and good ideas. AHRA allows Centres to provide support for each other as a pool of expertise that can be distributed to Centres as they require it. AHRA also provides an opportunity for a 'single voice' for engaging with the Commonwealth government or other parties. AHRA is a significant secondary outcome of Centre accreditation and will continue to be most effective in its current form – owned by accredited Centres and operated with minimal administrative burden.

Successful achievement of the aims is dependent on funding

While the Centres appear to be moving in the right direction, the real impetus to achievement of change along the pathway to outcomes has been the availability of funding, as originally recommended by the McKeon report. Centres report that the receipt of MRFF RART funding has been critical to the achievements of the Centres. However, delivery of the projects funded by the MRFF RART scheme is reported separately to the Department of Health, and it is not within the scope of this review to assess how well that funding has been used to deliver improvements.

5.1.3 Centres are at their best when health services play a central role

Centres involve their health services to varying degrees. In some Centres health services are central to the decision-making about which projects are funded, or actually hold the funds. In other Centres health service involvement is more peripheral and the governance or management is dominated by medical research/translation academics.

The review found that health service partners varied in their satisfaction with their Centre. Some health service partners were pleased with the extent of their involvement and felt that their Centre was already delivering real value to the health services themselves. In some Centres the flagship research questions and initiatives were formed as a direct response to the needs of the health partners, and the health

partners the Nous review engaged with confirmed their satisfaction with the utility of the projects undertaken by the Centres and funded through the MRFF RART.

Other partners were more circumspect and felt that the Centres had potential but had not yet capitalised well. Some partners pointed to the low profile of the Centres and suggested that very few people within the health service are aware that the Centre even exists, and that meaningful collaboration was not happening. Some front-line staff suggested collaboration was strong at a board-room level but was not flowing through the organisation. They still universally believed that the Centres were worth continuing and recognised that it was early days, but they reported feeling that there was unrealised potential.

Broadly, there is a natural tendency for the activities of Centres to gravitate towards academic research. Most of the funding for the majority of activities undertaken by the Centres has come from the MRFF RART, which follows a process similar to an academic grant/proposal-based method of funding. This is bread-and-butter for academics and incorporated into their usual responsibilities, while health service staff must find time between their full workload of other responsibilities.

Given the value of meaningful health service leadership and the natural pull towards academic activity, there is a need for explicit mechanisms to ensure that health service partners have sway in determining the research that occurs. These include adding a governance criteria, outlined under Terms of Reference 2 in Table 8, and further emphasis of the role of health services within the body of accreditation document, discussed under Terms of Reference 2 in Section 5.1.6.

2 Review the appropriateness of the current accreditation model, including requirements, criteria and reporting

The current accreditation model is based on a competitive approach to academic excellence and collaboration to create a limited number of Centres that meet the criteria to a high level. The Nous review has found that the current model emphasises academic excellence to a higher degree than seems appropriate if translation and implementation is the key focus. It also finds the distinction between the AHRTC and CIRH streams to be unnecessary and tending towards the creation of a two-tier system not supported by the overall objectives of the initiative. Reporting could be simplified and made directly relevant to the accreditation criteria to make it a more useful tool for the NHMRC to assess Centre progress. Simplified and relevant reporting should also avoid confusion with MRFF RART reporting requirements to the Department of Health.

In summary, the current accreditation model is broadly appropriate but the NHMRC should further emphasise health translation in criteria and reporting.

5.1.4 Accreditation by the NHMRC is appropriate

Centres and their members reported that accreditation has driven translation activities that would not have otherwise happened. While some of the activity is impossible to separate from the funding that accrued as a result of the MRFF RART grant opportunities, some activity and collaboration is a direct result of successful accreditation. The NHMRC has the remit, authoritative backing and capability to meaningfully accredit Centres.

Accreditation is encouraging translation

Fundamentally, accreditation is a signal: the NHMRC believes that the accredited Centres have the means and drive to translate health research into health practice. This signal is valuable to members of the Centre itself (by providing a unifying purpose) and to external funding bodies (by providing assurance on the

quality of the translation activity and the Centres' suitability for funding). By contrast, the experience in Canada where there is no accreditation process, has tended to produce vague and variable outcomes.

Accreditation signals that the NHMRC values health translation, which has not traditionally been recognised or valued in the same way as basic or discovery research in Australia. It provides an impetus for some of the major players in the medical research sector to consider the translation end of the spectrum and collaborate with other players and encourages health services to engage with research to deliver outcomes.

Some Centre stakeholders also regarded accreditation as a 'benchmark'. This was reinforced by the fact that accreditation was the threshold they must cross in order to receive MRFF RART funding.

Accreditation is valued by the Centres

All Centres reported that accreditation was important and encouraged translation, either directly or indirectly. Many stakeholders identified an obvious funding benefit: accreditation had provided access to MRFF RART funding. While the provision of MRFF RART funding is ultimately at the discretion of the Department of Health, the NHMRC accreditation provides a mechanism for the Department of Health to target its funding to Centres which are already equipped to undertake activity across the translational spectrum.

Beyond access to MRFF RART funding, stakeholders identified that the NHMRC "stamp of approval" opened doors and started conversations at the senior executive level with stakeholders external to the Centres. Internally, the requirements of accreditation and resultant unifying purpose often drove new relationships and collaborations. As discussed in Section 4, the Canadian counterpart Centres are not accredited, and consultations indicated that this was a contributor to the Canadian AHSCs' challenges in developing a sustainable economic model, bringing people together and executing outcomes.

The appropriateness of the NHMRC as the accrediting body

In light of the discussion in Section 4 above, the Nous review considered whether the NHMRC is the appropriate body to accredit the Centres. While activities in discovery research and innovation are very much the province of the NHMRC, questions arose as to whether the increasing focus on implementation into health services was really the responsibility of the NHMRC.

The review drew the conclusion that the NHMRC is the appropriate accrediting body and that no other more appropriate body exists in Australia. It would be administratively cumbersome to create another body for this purpose. The review based its view about the appropriateness of the NHMRC as the accrediting body on three factors:

- The NHMRC has the **remit** to accredit excellent health translation Centres. The TCI aligns with the object of the National Health and Medical Research Council Act 1992 which includes the aims:
  - to raise the standard of individual and public health throughout Australia[17]
  - to foster the development of consistent health standards.[18]
- The NHMRC has the **authoritative backing** to bestow accreditation that carries weight in the health research and in the service sector. Stakeholders regularly identified the value of the NHMRC accreditation in opening doors and bringing others to the table, particularly at the senior executive level.
- The NHMRC has the **capability** to undertake the administrative requirements. Recognition and assessment of institutional capacity to drive health research is the NHMRC's bread and butter.

[17] National Health and Medical Research Council Act 1992 (Cth) s 3(1)(a)
[18] National Health and Medical Research Council Act 1992 (Cth) s 3(1)(b)

Recommendation three	The NHMRC should continue to use an accreditation approach to recognise health translation collaborations.

Is the separation of accreditation from funding useful?

The current accreditation paradigm does not provide funding to the Centres itself; funding has historically come separately from the MRFF RART and from any other sources the Centre can attract, which have not yet been significant. Many stakeholders raised this as a shortcoming of the TCI: they wanted accreditation and a certainty of basic funding incorporated into the one process and wanted more funding (to the order of $10m per annum as proposed in the McKeon Review) in order to be able to achieve outcomes more effectively.

Accreditation does not provide funding and therefore cannot directly drive health translation activities. Instead it creates an environment and conditions where translation activities are more likely to occur, or where they occur more effectively. With this view, new collaborations and relationships are meaningful outcomes of accreditation. While this is useful in itself, the lack of funding limits the potential for achievement of outcomes. The alignment of the NHMRC accreditation and MRFF RART funding is considered further in Section 5.1.10

5.1.5 The delineation between AHRTCs and CIRHs is unnecessary and potentially detrimental

Centres undertake a wide range of translation activities, tailored to the unique characteristics of their catchments, expertise and health landscape. Separating Centres into AHRTCs and CIRHs based on whether they focus on regional and rural health is unnecessary, given that this is one of many ways Centres can and do differ. Furthermore, separating Centres into AHRTCs and CIRHs potentially encourages two-tiered perceptions or treatment which could disadvantage some Centres.

AHRTCs and CIRHs differ, but so does every Centre

AHRTCs were initially established to embed research into health service delivery and pull research questions directly from the coal-face. CIRHs were established for a similar purpose, but with a particular emphasis on health services research in relation to remote and regional health. This is reflected in the accreditation criteria for the AHRTCs and CIRHs.

The difference in the criteria (set out in Table 6 above) is not readily apparent and was not understood by many stakeholders. Criterion 1 for both categories uses the words: "Outstanding leadership in research and evidence-based clinical care" qualified by either:

- "including for the most difficult clinical conditions" (AHRTCs) or
- "that enhances the quality of health care in regional and remote Australia" (CIRHs).

It is difficult to see how the most difficult clinical conditions might not exist in regional and remote Australia or that the quality of health care in metropolitan Australia is not a concern for AHRTCs.

Criterion 2 for both categories shares the words "Excellence in innovative biomedical, clinical, public health and health services research" but for CIRHs it is modified to "and/or health services research" and adds "that addresses the challenges and opportunities of health care provision in regional and remote Australia". This can be interpreted as meaning that excellence in innovative, clinical, public health research is not necessary for a CIRH – and that excellence in health services research relating to regional and remote Australia is sufficient for a CIRH. This difference was not well understood by stakeholders with whom the review engaged.

The Nous review argues that these differences in the focus and breadth of the research could best be accommodated within a single scheme that responds to the character and circumstances of the geographic region the Centre serves.

Through the consultations for the review, the Nous team found that the CIRHs face different challenges and take different approaches to the AHRTCs. The CIRHs typically faced tighter workforce constraints and a more geographically dispersed catchment, often with a large proportion of Aboriginal and Torres Strait Islander residents. AHRTCs typically have a larger metropolitan population and are clustered around a well-established medical research precinct.

However, there is significant variation amongst the AHRTCs as well. Some AHRTCs are state-wide; others are strongly centred on a metropolitan area. Some have prioritised building enabling platforms while others have prioritised specific research activity (see Section 3 above). Likewise, the two CIRHs are very different: one focuses exclusively on Indigenous health and participation in research, while the other has prioritised identifying and then meeting the needs of the health services within its catchment.

Distinguishing AHRTCs and CIRHs risks creation of a two-tiered system

Universally, stakeholders did not want AHRTCs and CIRHs to be treated differently. Early in the establishment of CIRHs there were concerns about an implied hierarchy; as such, the NHMRC and AHRA took steps to ensure that every Centre is treated equally. However, the difference in name and in type of location creates the conditions necessary for differences in perceptions and eventually treatment. Stakeholders reported an example of an application being rejected and receiving feedback that led them to believe their application would have been successful under the other scheme. This underscores the inconsistent interpretation of criteria by applicants and highlights the unnecessary separation of the two schemes. Rejecting an application because the applicant applied under the wrong stream disadvantages the applicant and the population it would have served.

A single type of Centre addresses these concerns

The review suggests that the NHMRC incorporate AHRTCs and CIRHs into a single type of translation centre to avoid the potential for differentiated treatment. The criteria should encompass all existing AHRTCs and CIRHs, providing space for a spectrum of Centres but without drawing a line between them. Each Centre then becomes responsive to the defined geographic footprint in which it exists.

Recommendation four	The NHMRC should discontinue the separate accreditation schemes for AHRTCs and CIRHs and accredit all Centres under a common set of criteria.

5.1.6 There are gaps in the existing accreditation criteria and some of the criteria are not relevant to health translation

The assessment criteria were developed before the Centres began undertaking translation activity or reporting on their progress. As the Centres have found their footing, it has become clear that some of the accreditation criteria are less relevant to a Centre's ability to translate research. Likewise, effectively collaborating to focus on research translation requires some capabilities (such as governance) that are currently unaddressed by the criteria.

The criteria emphasise research excellence over translation

Research excellence is an important component of achieving the translation of research into outcomes, but it is one of many necessary factors to drive excellence in health translation. Currently:

- criteria one and two relate to **research excellence**
- criterion three relates to the specific **translation activities** undertaken by a translation centre

- criterion four relates to **workforce development**
- criterion five relates to **health service leadership**
- criterion six relates to **collaboration.**

See Table 6 for a full list of the current accreditation criteria. Research excellence has prime position, and generally Centres and their partners felt that their academic research excellence was the most important part of their application for accreditation. This was reinforced by the need to include 20 academic CVs.

Accreditation should require evidence of the development of enabling platforms

There are two broad gaps in the current accreditation criteria: a requirement to have established enabling platforms and a requirement for a well-considered and feasible governance structure.

Many Centres reported that their most valuable work relates to creating platforms that enable health translation research. This can include:

- ethics streamlining and harmonisation
- data sharing protocols and standards
- workforce capacity building
- governance mechanisms and platforms that facilitate collaboration.

These activities are alluded to in criteria three as activities that accelerate translation, but they are not explicitly called out. Workforce capacity building is encapsulated in criterion four but alongside a general alignment of research and health service education. Criterion four should emphasise the workforce capacity building aspect, and a new criterion should relate to establishing enabling platforms. This aligns the criteria with the new objective proposed in this review.

Accreditation should require a well-considered governance model

Many Centres found developing and implementing an effective governance model to be one of the most significant challenges in establishing a Centre. Some Centres are very pleased with their governance model and reported a significant change in fortune when the right governance model was established. Other Centres are still adjusting and improving their governance model. The review notes that the call document for Centre applications requires governance arrangements to be in place, however the appropriateness of these arrangements is not considered under the existing assessment criteria.

Good governance is an essential part of a well-functioning Centre, and as such it should be an accreditation criterion. While some governance lessons need to be learned through trial and error and are specific to unique circumstances of the different Centres, Centres would still benefit from being accredited with a proposed governance structure to hit the ground running.

Effective governance structures would also provide clear evidence of partner buy-in, most likely through financial contribution, and emphasise the role of the health services as discussed under TOR 1 in Section 5.1.3.

The relative importance of the accreditation criteria should be clarified

It is unclear from the guidelines which criteria are the most important. The Nous review suggests that guidance to the International Translation Centre Review Panel and applicants on which criteria are the most important would provide clearer indication of what aspects are critical. The present ambiguity creates space for Centres to infer, sometimes incorrectly, the decision-making process.

Likewise, the difference between AHRTC and CIRH criteria is subtle, but in the deliberations of the International Translation Centre Review Panel about each aspiring Centre, there must be significant enough differences for the Panel to decide that some Centres are eligible as one type of Centre but not the other. More guidance to the Panel as to how to weight the different criteria would improve consistency and transparency.

Weighting the criteria also allows a Centre that may be strong in the most critical facets, but weaker in others, to still achieve accreditation. For example, weighting might allow a Centre that has an effective process for implementing translational research but does not have world-leading research institutions within its partnership to achieve accreditation.

Recommendation five	The relative importance of the accreditation criteria should be clearer. They should focus on the Centre's ability to drive effective health translation by explicitly considering enabling platforms and governance.

We propose accreditation criteria and corresponding weightings in Table 8. These criteria seek to provide a weighting structure such that Centres can choose to specialise or focus on different areas of the translation spectrum without penalisation.

Table 8 | Proposed accreditation criteria

Criteria	Weighting
Programs and activities to accelerate translation of research findings into health care and ways of bringing health care problems to the researchers	20%
Demonstrated capability to deliver innovative biomedical, clinical, public health and/or health services research that addresses the needs of local catchments	20%
Governance structures that are effective and emphasise the role of the health services	15%
Demonstrated collaboration amongst the research, patient care and education personnel within the Centre	15%
Health professional leaders who advocate for the translation of research knowledge into policies and practices locally, nationally and/or internationally	10%
Education and training that directly improves the ability to conduct or implement translational research	10%
Enabling platforms which facilitate translation	10%

5.1.7 Current reporting arrangements do not provide a clear overview of Centre progress

Reporting can provide accountability and encourage particular activities as desired by the NHMRC. However, the current reporting arrangements are interpreted differently by different Centres and do not clearly articulate the current state of the Centres or the progress that they have made towards translating health research into practice.

Formal progress reporting is of value to both accredited Centres and the NHMRC. Reporting allows the NHMRC to ensure the Centres stay on track and allows Centres to assess their alignment with TCI objectives in an ongoing fashion.

Current reporting requirements lack specificity

Accredited Centres have reported their progress to the NHMRC once since their initial accreditation, which is planned to continue biennially. All Centres reported at the same time, regardless of how long they had been accredited. The requirements for reporting allowed Centres freedom to showcase their key

achievements and were interpreted differently by each Centre, resulting in some variation in the reports received.

The lack of specificity in the reporting requirements provided to Centres resulted in reports that do not allow for ready interpretation of Centre progress or comparison across Centres. The use of case studies to demonstrate progress is useful but must also be accompanied by demonstration of progress against the key indicators of success laid out in TCI objectives and accreditation criteria, including the governance structures that form the foundation for a successful Centre.

TCI and MRFF reporting have created administrative overlap and confusion

Given the interaction of MRFF RART funding with the NHMRC initiative, there is potential for duplicative reporting. All Centres were concerned at the amount of time they needed to dedicate to the various levels of reporting and additional requests for further information. In essence, reporting to the NHMRC should focus on the operation of the Centre, whether it is continuing to meet accreditation standards and fostering a collaborative environment in which translation can flourish. Under the current separation of funding and accreditation, reporting to the MRFF is determined by the Department of Health and to date has been project-specific. The review notes that the NHMRC and Department of Health are jointly developing a template to simplify reporting. Whilst some Centres are reporting to other funders, the MRFF RART funding is by far the most significant funding source and the MRFF RART reporting requirements were therefore the focus of Centre staff reflections.

Reporting requirements should be closely linked to the accreditation criteria

Reporting should specifically align to the objective and to the new accreditation criteria to allow for ready assessment of Centre progress and comparison between Centres. Reporting should focus on achievements in terms of implementation but may report on the interim or proxy measures that indicate a healthy research translation environment. Specifically, Centres should report on:

- how the Centre is meeting the objectives of the TCI
- the Centre's approach to translation and the structure of translational activities (e.g. clinical working groups, platforms, workforce development)
- evidence of collaboration
- the current governance structures and financial position.

Reporting in this way will allow the NHMRC to assess if the Centre continues to have the right foundational structures in place to support its translational aim. Centres should be encouraged at the outset to establish the measures on which they are to be held accountable (such as the enablers and intermediary outcomes identified under Recommendation two) and then to report such measures to demonstrate progress.

Explicit reporting requirements will also reduce the burden placed on the re-accreditation process. Reports detailing the status of Centres during their accreditation period can be used to provide supporting evidence for Centres seeking re-accreditation in future rounds (see Section 5.1.15 for discussion of re-accreditation).

Recommendation six	Reporting requirements should be more prescriptive, aligned to the accreditation criteria and include interim measures.

5.1.8 Centre size and composition should be monitored by the NHMRC

The NHMRC currently assumes a degree of risk by failing to require accredited Centres to meet set requirements regarding their composition. There is no minimum or maximum Centre size, and no controls

in place to consider the impact on accreditation if major partners (or particular categories of partners) leave a Centre, drastically changing the Centre's makeup.

Minimum and maximum Centre size should depend on representation and ability to self-govern

The NHMRC has provided guidance to accredited Centres detailing the requirement to obtain approval for any change in the partner organisations of the Centre during their accreditation period. This guidance requires the Centre to submit information to demonstrate that a new partner shares the vision of the Centre and will contribute to the Centre's performance and achievements. Removal of a partner requires Centres to demonstrate that there will be no impact upon the same. There are no guidelines on the minimum or maximum number of partner organisations.

The Nous review proposes that Centres should continue to be required to seek approval from the NHMRC of any change to membership (as is currently the case) with the additional requirement to demonstrate that an appropriate breadth of partners remains and that the change does not impact the Centre's ability to meet the accreditation criteria – including governance.

There is a risk associated with removal of partner organisations that Centres will no longer have representative membership. Minimum Centre size should not be prescribed, but Centres should be required to ensure that they have adequate representation from health service providers, government and research institutions. Consideration should also be given to the inclusion of industry representation and community and aged care organisations in Centre membership, and whether these groups should form part of the "adequate representation" definition. It is the view of the Review that the membership by these organisations will depend on the location and focus areas of each individual Centre.

Conversely, accredited Centres may also fail to be effective if they become too large. An excessively large number of partners or expansive geographic distribution may impact the Centre's ability to deliver on TCI objectives. This should be assessed at the accreditation stage through examination of the Centre's governance structures and ability to manage a large number of partners or geographic distribution and in an ongoing fashion if changes to Centre composition occurs. Rather than placing an upper limit on the geographic range or number of partners that an accredited Centre can have, the NHMRC should continue to monitor these features of Centres and use the approval requirement on membership changes to manage this risk.

As discussed in Section 3, translational research can exist at many points along the research spectrum. Universities and medical research institutes tend to drive the translation of basic research, while health services pull universities in to answer their burning questions. Representatives from both types of institution, and from government, are critical to this model.

If a Centre can no longer demonstrate this breadth of commitment, or becomes too large to be governed effectively, it would be within the NHMRC's remit to refuse to approve changes to membership.

Recommendation seven	The NHMRC should not prescribe a minimum or maximum size for Centres but should ensure that Centres have representative membership and the ability to self-govern.

3 Advise on how the Translation Centre initiative could be modified to strengthen research-based health care and training to improve the health and well-being of patients and communities, and integration of research into multiple health services, including identifying whether alternative models, or elements thereof, should be considered by the NHMRC

The Nous review has considered the current TCI model in relation to evolving international experience, as discussed in Section 4, and the experience to date of the Centres. The views of some stakeholders in Centres that have not achieved accreditation have also been considered. Overall, the review has found that the NHMRC should place more emphasis on getting the structures in place across Australia that focus on translation and implementation, and less on a highly competitive accreditation process. This would involve the Centres identifying specific initiatives to be introduced to the health services at commencement. In addition, MRFF funding and NHMRC accreditation should be brought together into a single scheme to deliver the TCI.

Given the objective of improving health service outcomes it would make sense for the initiative to be aligned with the national health reform agenda and the specific initiatives that each Centre aims to deliver that clearly relate to that agenda.

The review has also considered the competitive nature of the initiative and whether it is more effective as an elite scheme for the top performers or as a model that aspires to national coverage, so that every health service has the opportunity to be connected with a Centre. If implementation of research that transforms health care is the aim, then it is difficult to argue for anything but 100% national coverage. This is discussed under Terms of Reference 4 in Section 5.1.13.

5.1.9 Further emphasis on the importance of health service involvement would benefit the Centres

As discussed under TOR 1 in Section 5.1.3, Centres which effectively involve health services were perceived to be functioning well and were driving meaningful collaboration. Many stakeholders were pleased with the level of health service involvement, but some felt there was scope for improvement. This reflects a natural tendency for Centre activities towards the academic end of the translation spectrum. The NHMRC could adopt measures in their assessment scheme to emphasise the role and importance of health service involvement.

Meaningful health service involvement and leadership needs to be encouraged

The existence of the TCI is a response to a need: the translation or implementation of more effective health practices and technologies lags behind discovery research. In England, investment in medical research was estimated to be 25 times the investment in implementation. Creation of the TCI has highlighted the need for greater collaboration and a stronger focus on the implementation end of the spectrum. The TCI encourages Centre partners to:

- define research questions from a health service perspective
- provide an environment that fosters translational research
- collaborate to identify opportunities to apply existing research to the circumstances of the health service.

All of these require health service participation in translation activities and health service leadership to ensure that the activities benefit health services and patients.

Health service leadership should be weighted more specifically and heavily in the criteria

Health service participation and leadership can be encouraged by highlighting leadership from health services and structures that encourage this in the accreditation criteria. Structures to encourage health service leadership could include:

- Meaningful financial investment. Money speaks, and financial investment implies that health services see value in the Centre. It also means that they should expect to see something for their investment and have skin in the game.
- Reports from or consultations with the health services. The Centre experience is that reporting from Centres to the Department of Health provides a project-based account of the Centres and does not convey the role the Centre is filling more generally in the health translation ecosystem. Hearing from the health service partners directly would provide additional insight into the degree of their involvement in setting the direction and encourage Centres to engage with their health service partners.

Health service leadership should be built into the accompanying body text of the health professional leadership and governance criteria suggested in Table 8:

- The criterion *"Health professional leaders who ensure that research knowledge is translated into policies and practices locally, nationally and/or internationally"* should require that the health professional leaders are involved in a way that drives health service participation in the Centre's translation activities.
- The criterion *"Governance structures that are effective and emphasise the role of the health services"* should emphasise the role of health services through explicit Centre leadership.

Recommendation eight	The NHMRC should drive stronger leadership from health services by requiring stronger evidence of health service commitment and implementation, and structures that encourage this.

5.1.10 The NHMRC and Department of Health share accountability under current funding arrangements

The NHMRC is the accrediting body and the MRFF RART has been the major funder for Centre activity. Unsurprisingly, research and translation activity is driven by available funding. This Review is of the view that the Centres need core funding to be able to undertake more than very minor activities, While it would be ideal if a new funding source could be found for this purpose, the Review suggests that under current arrangements the MRFF RART is de facto the source of core funding for the Centres. Given this reality, the Review suggests that there needs to be a single line of accountability for major Centre activity.

Under the arrangements to date both the NHMRC and Department of Health exercise a significant amount of influence over the function of Centres. Both have a shared interest in driving health translation that improves the lives of Australians, and the Review considers that the initiative would be stronger if the two were brought together with the funding passing through the NHMRC (in the same way that the UK Department of Health and Social Care passes funding to the NIHR in England for the purpose of funding the ARCS (see Section 4 above)). This would enable a single line of accountability for major Centre activity.

The TCI and MRFF RART objectives are aligned but distinct

The objectives of the TCI and MRFF RART initiative overlap, but there is difference. The objectives of the TCI and the past RART grants are outlined in Table 9 below.

Table 9 | TCI and MRFF objectives

TCI current objective[19]	TCI proposed objective	MRFF RART grant objective[20]
To encourage leadership and collaboration in health research and translation in Australia by bringing together researchers, healthcare providers, education and training to improve the health and wellbeing of patients and the populations they serve, including in regional/remote areas for CIRHs	The Translation Centre initiative aims to improve the health and well-being of patients and communities through the translation of research into health care by: • promoting health service leadership of translational research • strengthening collaboration between health services and research institutions • delivering training, education and enabling platforms	• *Transformative Translational Research* where academic research and health service providers collaborate to harness the translation of research findings to improve health care delivery, deliver evidence and research translation consistent with the MRFF Strategy and the [MRFF AMRAB] Priorities identified for Translation Centres, and identify innovative and up-to-date approaches to healthcare and treatment • *National System Level Initiatives* where Translation Centres collaborate together to improve health services and systems sustainability, and find innovative ways for community and patient involvement in research prioritisation and system-wide learning and collaboration

The TCI and past RART grant objectives are clearly complementary, but not identical. The *Transformative Translational Research* requires that translation is consistent with the MRFF Strategy (which is updated every five years) and the Priorities (which are updated every two years). The *National Systems Level Initiatives* objective requires that Centres collaborate with one another. The TCI objectives are mechanism and activity agnostic: they are more broadly about ensuring that health research is being translated into health practice for Australian populations.

In addition to the differences between the objectives, the underlying philosophy of the TCI differs from the MRFF RART. The MRFF RART seeks to rapidly respond to areas of emerging need or quickly translate research into practice. This is reflected in the name of the relevant initiative: *Rapid* Applied Research Translation. In contrast, the TCI is establishing ongoing, long-term relationships between health services, researchers and communities to create a health system where translation becomes business as usual. The spread of change at pace is a key element of the AHSNs in England and this impacts their structure and operations.

Through accreditation the NHMRC drives the membership and strategic direction of Centres. Through funding of specific projects, the MRFF RART has to date driven project level activity.

By influencing (and on a project level, determining) the activities of the Centres, MRFF RART funding has significantly shaped the Centres themselves. The funding provided to date through the MRFF has been non-competitive and approximately equal for all Centres. Stakeholders from the existing Centres were keen to point out to the review that this lack of funding competition has encouraged a collaborative inter-Centre environment (which is particularly important given that one of the two MRFF RART grant objectives (the *National System Level Initiatives*) relies on inter-Centre collaboration). The equal funding provided to the Centres also helps to counter any perception of hierarchy among the different Centres.

[19] NHMRC, Recognised health research and translation centres, 2019: https://www.nhmrc.gov.au/research-policy/research-translation-and-impact/recognised-health-research-and-translation-centres
[20] Department of Health, Medical Research Future Fund: Rapid Applied Research Translation Grant Guidelines, October 2018

However, there is not always clear alignment between the activities funded by the MRFF RART and the NHMRC's objectives or reporting criteria. For example, activities funded under the *National System Level Initiatives* do not directly map to the current objective of the TCI. MRFF RART funding has tended to focus on projects that can rapidly deliver outcomes. This is not necessarily consistent with longer term changes to the health translation landscape that is desired from the NHMRC accreditation. The NHMRC criteria do not go to rapidity of uptake – unlike the English ASHNs (as determined by their funding-driven priorities) or the MRFF.

One option would be for the NHMRC and the Department of Health to operate as a unified body to accredit and fund Centres

Given the influence both bodies exercise over Centres, the review suggests that the two could be brought together into a single initiative that accredits and funds the Centres to deliver change. A unified approach would ensure the objectives of the accreditation and funding are consistent. This suggestion assumes an ongoing role for the MRFF RART in funding Centres, which is a decision for the Department of Health.

If a unified body is not considered feasible, then at a minimum the NHMRC and Department of Health might engage more strategically with one another when making funding or accreditation decisions. This includes the timing of reporting and calls for submissions. Small decisions made in one domain could significantly influence the behaviour of Centres in the other domain. Examples to engage more strategically include:

- Department of Health attendance at NHMRC events such as the Centre director's discussion, International Translation Centre Review Panel, or AHRA strategic planning day
- Department of Health involvement in the assessment of Centre applications
- the NHMRC's involvement in defining MRFF RART funding rounds and project funding decisions
- sharing of Centre progress reports and MRFF RART project reports.

Recommendation nine	The NHMRC and Department of Health could engage more strategically as an integrated unit to ensure they adopt a consistent approach to accreditation and funding to drive implementation of health services research.

5.1.11 There is beneficial overlap between the national health reform agenda and the TCI

In 2018 the Commonwealth, state and territory governments agreed to a Heads of Agreement which will form the basis for the 2020-2025 national health agreement, which will specify health funding arrangements and health reform responsibilities[21]. The Heads of Agreement identifies four areas of ongoing reform:

- better coordinated care, particularly for patients with complex and chronic disease
- funding and pricing for safety and quality, to avoid funding unnecessary or unsafe care
- reducing avoidable readmissions to hospital
- the Commonwealth continuing to focus on reforms in primary care that are designed to improve patient outcomes and reduce avoidable hospital admissions.

These areas complement the aims of the TCI and the legislated objectives of the NHMRC. The Centres can:

[21] Heads of Agreement between the Commonwealth and the States and Territories on public hospital funding and health reform, February 2018

- develop enabling systems to coordinate care and better understand complex and chronic diseases
- provide a stronger evidence base for health treatment quality in practice
- facilitate implementation of best-practice health service delivery
- engage with primary health networks to 'pull' research questions relevant to primary care.

These areas can be addressed by the Centres, and the profile of the TCI among State and Commonwealth governments could be raised by highlighting the alignment between the TCI and the national health reform agenda.

As the states and territories have committed to improving health outcomes through the national health reform agenda, the Centres could readily be positioned as effective mechanisms for delivering on these commitments. This would improve the buy-in from the states and territories and pull the Centres more broadly across the translational spectrum.

Recommendation ten	Addressing the national health agreement should be an explicit goal for the activities of the Centres.

5.1.12 Diversity of approach and focus for accredited Centres is appropriate

Each accredited Centre has unique membership and community needs. Centres have the ability within the initiative to design their objectives and approach to achieve the TCI's objective based on their individual community needs and the strengths of their Centre. This will result in diversity of accredited Centres and allow the TCI to span the entirety of the translational research spectrum. Accredited Centres should continue to be a health service/research partnership that balances the 'push' of research into health services with the 'pull' from health services seeking to address difficult challenges.

As detailed in Section 4, Canadian and English translation initiatives are a composite of multiple schemes that operate at different points along the translational research spectrum. Consultations indicated that this can be challenging, as multiple schemes have the potential to confuse, to vary in incentives, overlap in activity and introduce challenges associated with added complexity.

Stakeholders indicated that Centres accredited under the TCI are already operating in a complex system alongside numerous state, Commonwealth and private collaborative initiatives. The Nous review takes the view that, with some modifications, the TCI can effectively foster stronger collaboration between health and medical research and health services and extend further into the implementation end of the spectrum. To achieve this, the initiative could strengthen its requirement for each Centre to more clearly articulate the needs of its catchment and the specific initiatives it intends to foster. This would take the Centres some way towards the English AHSN model, whilst retaining the focus on translational research.

Currently accredited Centres undertake a range of activities that are largely influenced by the needs of their catchment and the strengths of their constituents. As Australia's single accreditation scheme operating in the translational research space, it is appropriate that Centres execute a range of activities dependent on where their focus sits on the research spectrum.

Rather than asking accredited Centres to be active across the full translational research spectrum, allowing Centres to choose their areas of focus will allow Centres to play to their strengths and have the highest impact possible. Explicitly allowing Centres to respond to the specific needs of their catchment will also help to drive activity at the implementation end of the translation spectrum.

Recommendation eleven	The accreditation criteria should require the Centres to individually respond to the unique requirements of their community/catchment and the strengths of their partners.

4 Advise on whether the NHMRC should undertake any future call for submissions for accreditation of new AHRTCs/CIRHs

The review considered the need for future calls for submissions in the context of the desirability of national coverage. This central question about whether national coverage is the appropriate goal or whether the initiative should competitively accredit an elite set of Centres goes to the fundamental issue of purpose. The Nous review has concluded that a broad purpose is appropriate to the initiative, and thus supports continuation of calls to reach national coverage. State and territory governments should have input into the number – and configuration – of Centres necessary in their jurisdiction.

There is also a question of equity when considering future calls for re-accreditation – ceasing to accredit Centres would create inequitable access in the future to accreditation and the benefits it confers. The review recommends that any future calls are aligned with the re-accreditation of existing Centres.

The review believes that a national conversation prior to the next call for submissions is necessary to ensure the scheme is set up to achieve health outcomes, and has the stakeholder buy-in to deliver. This conversation should draw on the expertise and experience of the creation and refinement of ARCs and AHSNs in England. State and territory governments, health services, universities and research institutions should have input into this discussion.

5.1.13 Future calls for submissions should aim for national coverage

The question of national coverage can be fundamentally linked to the core objectives of the TCI. If the TCI aims to encourage world-class translational research, then Centres should only be accredited where that standard can be maintained. However, if the TCI also aims to maximise implementation of such research across Australia, then national coverage ensures that the reach of the program is maximised and that no geographic area 'misses out'. On the basis that health outcomes are a consistent objective of the TCI, future calls should aim for national coverage to maximise the potential for the implementation of innovation broadly into health services. The objective of national coverage should not reduce the overall diversity of Centres (see Section 5.1.12), only ensure appropriately broad coverage to drive implementation.

State and territory governments should provide input into the configuration of Centres

As the major deliverers of health services, it would be appropriate for state and territory governments to provide input into the number and geographic coverage of Centres accredited in their state. This allows each state to provide case-by-case input on geographic distribution. It also allows state and territory governments to meaningfully direct Centres to better align with their priorities and to ensure Centres are appropriately supported.

Equity of access suggests ongoing calls should be made

Independent of the question of national coverage, the NHMRC should continue to undertake calls for submission for accreditation for new Centres under the TCI to ensure equity of access. If no future calls for submissions are made, then existing Centres have exclusive access to the benefits of accreditation – which to date has included preferential access to MRFF RART funding. Centres that are currently being

established or are refining their approach after a failed application should not be permanently excluded from being accredited in the future.

Future calls for submission should be aligned with re-accreditation processes

The TCI is currently employing a rolling system of accreditation, where new Centres are accredited every two years. Accrediting Centres in different rounds introduces an element of uncontrollable variation in accreditation, further amplified by slight changes to the objectives and accreditation over time which modify the standards that Centres are accredited against.

Future calls for submission should align with the re-accreditation of existing Centres, so that the accreditation of all Centres under the TCI is considered at the same time. This approach minimises variation in accreditation processes, allows Centres to report at the same time and will reduce administrative burden for the NHMRC. Refer to Section 5.1.15 for further detail.

Recommendation twelve	The NHMRC should consider national coverage as an ultimate goal for the initiative and undertake future calls for submissions to reach national coverage, with state and territory governments providing input into the configuration of Centres necessary to serve their population. Future calls should be aligned with re-accreditation processes for existing Centres.

5.1.14 A national conversation should consider how Australia can benefit from research translation

Prior to the next call for submissions the NHMRC should conduct a national conversation together with the states and territories, the Commonwealth government, health services, research institutions, and international experts to consider how Australia can gain the greatest benefit from health research translation.

This review has recommended that Centres be accredited under a single scheme with clear eligibility criteria, under a single objective, and for all Centres to be accredited on a common timeline (see Section 5.1.15 for further detail regarding the common timeline). A national conversation prior to the implementation of this new scheme will ensure the objectives, criteria and coverage are designed in a way that delivers maximum benefit to Australia and that all stakeholders have a shared understanding of the key features of the updated scheme. This review should draw on the experience of centres and networks in England over the past 10-15 years.

In England, the NIHR has chosen to explicitly aim for national coverage for the ARCs that it licences and funds. It has assured this through a licencing process similar to that of the TCI, supplemented by support for applicants who are unsuccessful in the first round to further develop and refine their application in order to be successful on resubmission. Consideration of this fundamental issue of purpose triggered a national conversation in England, centred around where on the research translation spectrum the focus should lie. The creation of the AHSNs as an additional series of research translation networks focused at the implementation end of the spectrum was the result.

There would be considerable benefit in the NHMRC hosting a conversation drawing on thoughtful contributions the key players in England who have been further down the health research translation pathway than Australia.

Recommendation thirteen	The NHMRC should host a national conversation prior to the next call for submissions, together with the states and territories and the Commonwealth government, that considers how Australia can gain the greatest benefit along the research translation spectrum.

5 Advise on the re-accreditation process for existing AHRTCs/CIRHs, including assessment processes and criteria

Re-accreditation of all Centres, including those accredited in 2019, should be performed simultaneously under the updated scheme and criteria in 2022. This process should also encompass an open call that allows prospective centres to apply for accreditation. Existing Centres would be able to choose if they dissolve and reform or continue in their current configuration. Centres that have existed for longer periods of time will have a higher expectation to demonstrate success against the accreditation criteria.

5.1.15 Re-accreditation should be used as an opportunity to 'reset' the TCI and re-accredit all Centres under the new scheme and criteria

The recommendations detailed above, if accepted, will result in significant changes to the TCI, including its structure, accreditation criteria and reporting requirements. A single, unified re-accreditation round offers an opportunity to 'reset' the scheme and allow the NHMRC to clarify the purpose of the scheme and the mechanisms by which Centres can achieve that objective. Centres can then modify their approach as required and demonstrate their alignment with new TCI criteria and requirements during the re-accreditation process.

Under the current approach, Centres are accredited for five years, after which a re-accreditation process occurs. The NHMRC has already extended the accreditation of Centres accredited in 2015 until 2022 to align with those Centres accredited in 2017. Centres accredited in 2019 should then be accredited for three years only, to align with the 2022 re-accreditation round for all other Centres.

An open call approach to the next re-accreditation process allows new Centres to be accredited in line with existing Centres

Re-accreditation processes should align with calls for submissions for the accreditation of new Centres, so that all Centres are accredited at the same time. This will allow Centres to report at the same time, reduce administrative burden for the NHMRC and encourage consistency between Centres.

Re-accreditation and accreditation processes should be merged into a single open call for submission process. This does not mean that existing Centres are dissolved and must begin from scratch: it gives existing Centres the ability to decide if they choose to apply in their existing configuration or make significant changes to their structure or approach. New Centres are then also able to apply under the same accreditation criteria and requirements.

The criteria for re-accreditation should not differ from the accreditation criteria. However, Centres that choose to continue in their existing configuration will have the advantage of prior accreditation. Therefore, re-accreditation provides an opportunity for Centres to explicitly demonstrate the role prior accreditation has played in the delivery of outcomes when preparing their submission. Previously accredited Centres can accordingly be expected to demonstrate a track record for all accreditation criteria.

Subsequent re-accreditations will build on regular and explicit reporting

The burden of re-accreditation can be reduced by applying a prescribed accreditation/re-accreditation process followed by reporting that reflects the accreditation criteria and demonstrates how Centres are meeting the TCI aims and objectives. Effective monitoring and reporting requirements during the accreditation period will allow Centres to easily demonstrate their success during re-accreditation. Therefore, it can be anticipated that re-accreditation in 2022, which aligns Centres to the updated principles and requirements of the TCI, will be intensive, but that subsequent re-accreditations should be significantly less rigorous.

Recommendation fourteen	Existing AHRTCs/CIRHs should all be re-accredited in 2022 and brought into alignment under the updated scheme and criteria.

Appendix A Aims and objectives of the TCI

Table 10 | TCI objectives identified over the course of the review

Source	Objective statement
Terms of Reference for the review	To strengthen research-based health care and training to improve the health and well-being of patients and communities, and integration of research into multiple health services.
The NHMRC TCI website	Encourage excellent health research and translation in Australia by bringing together researchers, healthcare providers, education and training to improve the health and well-being of patients and the populations they serve, including in regional/remote areas for CIRHs.

Table 11 | AHRTC objectives listed in accreditation submission documentation

Submission year	Objective statement
2018	The aim of the Advanced Health Research and Translation Centres (AHRTC) initiative is to encourage leadership and collaboration in health research and translation and promote the development and use of innovative and evidence-based models of health care practices and policies.
2016	The aim of the AHRTC initiative is to identify and recognise the leading centres of collaboration in health and medical research, research translation, research-infused education and training, and outstanding health care.
2014	To encourage this leadership, the NHMRC wishes to identify and celebrate those centres that excel in research, the translation of evidence into excellent patient care including of the most complex cases, and with a strong research and translation focus in the education of health professionals…our aim is to signal that the NHMRC values leadership and excellence in research, translation and training of health professionals in an evidence-based environment, at international levels of excellence.

Table 12 | CIRH objectives listed in accreditation submission documentation

Submission year	Objective statement
2018	The aim of the NHMRC's Centre for Innovation in Regional Health (CIRH) initiative is to encourage leadership and collaboration in health research and translation and promote the development and use of innovative and evidence-based models of health care practices and policies that are of direct relevance and benefit to regional and remote areas of Australia.
2016	The aim of the Centre for Innovation in Regional Health (CIRH) initiative is to encourage leadership in health research and translation of direct relevance and benefit to regional and remote areas of Australia.

Appendix B Stakeholder consultation summary

Table 13 | Stakeholders representing the following organisations were consulted

	Stakeholder
	NHMRC International Translation Centre Review Panel
	NHMRC TCI Branch
	Monash Partners
	Melbourne Academic Centre for Health (MACH)
	Sydney Health Partners
	Maridulu Budyari Gumal (SPHERE)
	Central Australia Academic Health Science Network (CAAHSN)
	Western Australian Health Translation Network (WAHTN)
	Brisbane Diamantina Health Partners
	Health Translation SA
	NSW Regional Health Partners
	Department of Health and Human Services Victoria (DHHS)
	NSW Health
	Commonwealth Department of Health (MRFF)
	Imperial College Health Partners, UK
	Canadian Institutes of Health Research, Canada
	South West AHSN, UK
	Eastern Academic Health Science Network, UK

nous

ABOUT NOUS

Nous Group is the largest Australian-founded management consulting firm. We partner with leaders across Australia and the UK to shape effective government, world-class businesses and empowered communities.

400	50	9	2
PEOPLE	PRINCIPALS	LOCATIONS	COUNTRIES

Financial Review Client Choice Awards 2017
Best Management Consulting Firm
Best Provider to Government & Community
Most Cost Conscious Firm

NHMRC Response to Nous Group recommendations

Nous Group recommendation	NHMRC response
1. The NHMRC should refine the Translation Centre Initiative (TCI) objectives to clarify the core purpose of the TCI.	The objective of the Translation Centre Initiative will be updated to clarify the areas NHMRC intends to promote and encourage through the initiative. This will include the ultimate objective of improving the health and wellbeing of patients and communities through the translation of research into health care.
2. The NHMRC should use enablers and interim outputs as proxy measures to assess Centres.	NHMRC will consider the use of proxy measures in updating reporting requirements under the revised initiative.
3. The NHMRC should continue to use an accreditation approach to recognise health translation collaborations.	NHMRC considers that there is value in its recognition and will continue to accredit partnerships through this initiative.
4. The NHMRC should discontinue the separate accreditation schemes for Advanced Health Research and Translation Centres (AHRTCs) and Centres for Innovation in Regional Health (CIRHs) and accredit all centres under a common set of criteria.	NHMRC will continue to accredit two types of Research Translation Centres under revised criteria to better reflect the particular challenges and context of centres focussed on regional, rural and remote areas of Australia. NHMRC sought additional feedback on this issue during targeted consultations. It heard that the context and challenges for the two types of centres are different due to urban vs non-urban localities and differences in resources and capacity and capability of health services. Some stakeholders supported one type of accreditation but only if it could preserve the diversity of centres, not lose the emphasis on regional, rural and remote areas, and not disadvantage regional, rural or remote based centres in seeking accreditation. NHMRC considers that there is more value in differentiating between the two types of centres and recognises that there are great gains to be made in regional, rural and remote health care. Accordingly, NHMRC will continue to specifically recognise centres that work directly with health services and communities in these locations.

Nous Group recommendation	NHMRC response
5. The relative importance of the accreditation criteria should be clearer. They should focus on the Centre's ability to drive effective health translation by explicitly considering enabling platforms and governance.	The assessment criteria will be updated to ensure they reflect the importance of research translation and, in particular, the challenges and context of centres focussed on regional, rural and remote areas of Australia. The criteria will also be strengthened in relation to governance and organisational arrangements. NHMRC and stakeholders consulted throughout the Review agreed that governance is a key component of collaborative partnerships. Previously, a governance structure was expected of applicants, but it was not included in the assessment criteria. An explicit criterion for collaborations to demonstrate established governance and organisational arrangements will be added to the assessment criteria.
6. Reporting requirements should be more prescriptive, aligned to the accreditation criteria, and include interim measures.	NHMRC introduced progress reporting for accredited centres in 2019. This followed advice from a sub-group of representatives from the centres. The reporting framework enabled centres to decide the appropriate measures for their particular centre (interim, proxy or other) to demonstrate progress toward impact. Progress reports were comprised of a combination of both narrative (case studies) and quantitative data. The first reports are on the NHMRC website. NHMRC will re-consider the reporting requirements of accredited centres under the revised model to determine how best to capture, understand and communicate the progress or outcomes of their efforts toward their intended impacts.
7. The NHMRC should not prescribe a minimum or maximum size for Centres but should ensure that Centres have representative membership and the ability to self-govern.	NHMRC has not prescribed a minimum or maximum size for Research Translation Centres. Collaborations must be of an appropriate size and scale to demonstrate the excellent, high-quality research, research translation and education and training required to meet the assessment criteria. NHMRC will introduce a criterion to strengthen its expectations for governance. Refer to NHMRC's response to recommendation 8.

Nous Group recommendation	NHMRC response
8. The NHMRC should drive stronger leadership from health services by requiring stronger evidence of health service commitment and implementation, and structures that encourage this.	NHMRC will strengthen its expectations for the active involvement of health services. The assessment criteria will be revised to require applying collaborations to provide evidence of established governance structures and organisational arrangements that ensure health services are central to determining priorities for centre activities.
9. The NHMRC and Department of Health could engage more strategically as an integrated unit to ensure they adopt a consistent approach to accreditation and funding to drive implementation of health services research.	NHMRC will continue to engage with the Australian Government Department of Health in the delivery of NHMRC's accreditation initiative for Research Translation Centres. The Department of Health develops funding opportunities in accordance with its purposes and requirements. Medical Research Future Fund (MRFF) funding will continue to be determined under the framework set by the *Medical Research Future Fund Act 2015*.
10. Addressing the national health agreement should be an explicit goal for the activities of the Centres.	The *2020–2025 National Health Reform Agreement*[1] is an agreement between the Australian Government and all state and territory governments. Addressing this agreement will not be set by NHMRC as an explicit goal for the activities of the Centres. Rather, NHMRC expects that Centres, as collaborations including health service organisations, will meet all governmental requirements and align with the health priorities of government relevant to the period of their accreditation. All applicants for accreditation will need a letter(s) of support from their state/territory government(s).
11. The accreditation criteria should require the Centres to individually respond to the unique requirements of their community/catchment and the strengths of their partners.	NHMRC will strengthen its requirement for collaborations to address the priorities of the population they serve.
12. The NHMRC should consider national coverage as an ultimate goal for the initiative and undertake future calls for submissions to reach national coverage, with state	During NHMRC's targeted consultations, some stakeholders supported an explicit goal of national coverage, as they considered it was critical to equity. However, others considered that a balance would be

[1] 2020–2025 National Health Reform Agreement: https://www.health.gov.au/initiatives-and-programs/2020-25-national-health-reform-agreement-nhra

Nous Group recommendation	NHMRC response
and territory governments providing input into the configuration of Centres necessary to serve their population. Future calls should be aligned with re-accreditation processes for existing Centres.	needed to ensure an acceptable standard of academic rigour against a goal of national coverage. Recognising excellent collaborations in research and research translation will remain a key element of the Initiative. We anticipate that this public recognition will continue to encourage the development of high-quality collaborations across the country. NHMRC will require that applications for accreditation include letters of support from their state/territory health department. Refer to NHMRC response to recommendation 14 on the alignment of re-accreditation processes for accredited centres.
13. The NHMRC should host a national conversation prior to the next call for submissions, together with the states and territories and the Commonwealth government, that considers how Australia can gain the greatest benefit along the research translation spectrum.	Targeted consultations were undertaken in 2020-21, with all state and territory health departments and others, to discuss NHMRC's Research Translation Centre Initiative. NHMRC is developing a Research Translation Strategy that will consider NHMRC's role and activities across its programs and initiatives more broadly. Opportunities to engage stakeholders further will be considered as part of this process.
14. Existing AHRTCs/CIRHs should all be re-accredited in 2022 and brought into alignment under the updated scheme and criteria.	The process for accreditation and re-accreditation will be aligned and the criteria for both will be the same. The next call for accreditation will be open both to collaborations seeking accreditation and to those seeking re-accreditation.