

aamri

Association of Australian
Medical Research Institutes

SUBMISSION TO THE
**STRUCTURAL REVIEW OF
NHMRC'S GRANT PROGRAM**

25 AUGUST 2016

Contact:

Professor Doug Hilton
President
Association of Australian
Medical Research Institutes
ABN 12 144 783 728

PO Box 2097
Royal Melbourne Hospital VIC 3050
president@aamri.org.au
www.aamri.org.au

ABOUT AAMRI

AAMRI is the peak body representing medical research institutes (MRIs) across Australia. Our 46 member institutes are leaders in health and medical research, and collectively represent over 15,000 staff and students and have a turnover of over \$1.2 billion. AAMRI members undertake approximately 36% of all NHMRC funded health and medical research. Their research ranges from fundamental biomedical discovery through to clinical research and the translation of research findings from bench to bedside.

AAMRI members cover an extensive range of human health issues, from preventative health and chronic disease, to mental health, Indigenous health and improved health services. Together, they aim to drive innovation in healthcare to improve the lives and livelihoods of people in Australia and world-wide.

THE CASE FOR CHANGE

Rising grant application numbers within a static funding environment is leading to reduced funding rates within the NHMRC program. This is leading to:

- researchers spending more time writing grant applications that are unlikely to be funded
- increased peer review burden
- potential negative impacts on EMCRs, especially women
- applicants developing and reviewers favouring more conservative research proposals
- an increase in applications, as researchers seek to improve the odds of success

These difficulties are well known by research organisations, researchers and the NHMRC, and are well outlined in both the consultation paper and the supplementary information paper. As such AAMRI will not reiterate the need for substantial change here, but AAMRI does express its support for the bold approach being taken.

EXECUTIVE SUMMARY

AAMRI welcomes the opportunity to comment on the *Structural Review of NHMRC's Grant Program Consultation Paper*. The current system of awarding NHMRC funding for health and medical research is both inefficient and unsustainable. The NHMRC is to be commended for attempting to tackle the systemic issues with the current grant program by putting forward bold proposals for change.

Having carefully considered the three models put forward by the review, AAMRI is of the view that a model that combines different elements of model 1 and 2 has the greatest chance to improve health and medical research outcomes, reduce the administrative burden of grant application and review, and provide greater career stability for researchers.

In this response AAMRI sets out three broader points that should be considered in terms of a sustainable grant funding system, and then **outlines a hybrid version of model 1 and 2 for consideration by the NHMRC. This model is referred to in this response as model 4.**

AAMRI is aware that modelling will need to be undertaken to examine the potential impacts of all four of the proposed models. The consultation paper provided the high level details of each of the proposed models, and AAMRI looks forward to ongoing consultation with the sector to work through the specific details of implementing a new grant program model.

ADDITIONAL AREAS FOR CONSIDERATION IN DESIGNING A NEW GRANT PROGRAM

Independent Research Institutes Infrastructure Support Scheme

The overhead infrastructure and support costs incurred in undertaking NHMRC funded medical research are substantial. The Government provides a separate mechanism to cover some of the costs incurred. For universities this funding is provided through the university research block grants. For most MRIs funding is provided through the Independent Medical Research Institutes Infrastructure Support Scheme (IRIISS). Unfortunately the level of funding provided through IRIISS is inadequate and provided at a rate lower than that provided through the research block grants for universities. This issue is threatening the financial sustainability of the medical research sector, and is potentially putting at risk Australia's future ability to undertake high quality health and medical research.

AAMRI recommends the NHMRC provides support through IRIISS to MRIs at the same rate provided to universities through the research block grants.

Impact on research organisations

Any future grant funding model should continue to support research across the diversity of Australia's health and medical research sector. This includes supporting research across a range of disciplines, stages, and within different types and sizes of research organisations.

Medical Research Future Fund

The discussion paper makes it clear the review will not consider the relationship between the NHMRC Medical Research Endowment Account and the Medical Research Future Fund (MRFF). Given the MRFF strategy and priorities are still under development and the pressing need for change in the NHMRC Grant Program, it is tempting to move forward with this review without regard to the MRFF. However, given that so many of the priority issues being addressed in this review could potentially be impacted on by the future direction of the MRFF, **a mechanism for iterative change in any future Grant Program is needed to ensure Australia's two primary health and medical research funding streams are working with synergy with one another.**

PROPOSED ALTERNATIVE MODEL 4

Having considered the relative benefits and draw backs of each of the three models, AAMRI proposes combining aspects of model 1 and 2 into a new model. Both model 1 and 2 offer advantages over the current program in that they will:

- Provide simplicity and flexibility to researchers.
- Encourage greater innovation and less conservatism in research.
- Allow researchers greater freedom to take their research in new and novel directions.
- Help provide greater career certainty.
- Provide an enhanced career development pathway for researchers at different stages of their career.
- Provide clearer support for clinical trials
- Reduced administrative burden

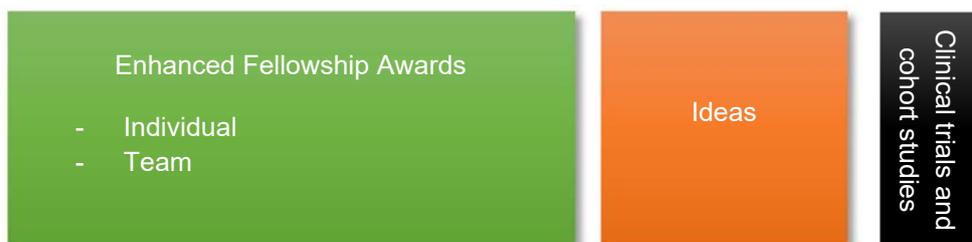
Model 3 does not appear to offer the benefits of flexibility and simplicity that can be achieved in models 1 and 2, and with proposed assessment practices similar to those in place now, it would not deliver the benefits of funding more innovative research proposals.

AAMRI is of the view that there are clear benefits in modifying and combining aspects of both of models 1 and 2 into a hybrid model, referred to in this response as model 4.

The details provided on the three models in the consultation paper were deliberately provided at a high level. Model 4 is also presented here at a high level. AAMRI recognises that model 4, just like the other models, will require additional work to ensure any negative unintended consequences can be mitigated, and to ensure the transition to a new grant program is as smoother as possible.

Overall structure of model 4

Figure 1: Alternate model 4 structure



S

SUMMARY OF MODEL 4

The model would support the full research program of high performing researchers across the spectrum of research areas, disciplines, career stages (ranging from early career through to distinguished researcher) and would provide researchers with flexibility to engage in partnerships, commercialisation, translation, and implementation activities. The drivers of this structure are support for the best researchers, a more structured pathway to becoming an established researcher, capacity building, simplicity and flexibility.

1-Enhanced Fellowship awards

This grant would provide long-term support via a single Enhanced Fellowship Award for top performing individual CIs and their core group, or for top performing teams of CIs and their core group. The features of this grant would include:

Funding packages

- Applications could be from individual investigator CIs (as per model 2) or from teams of CIs (as per model 1), and would support the CI and their core group, or the team of CIs and their core group(s)
- Seven year duration
- A range of funding packages would be available, depending on the streams (listed below) which will take into account the researcher's experience and area of research.
- The funding could be used flexibly as determined by the CI, including salary support for the CI.

Salary support

- Each CI on the grant would be recognised as a Fellowship award holder.
- Salary support for the CIs and the core group would be included as a line item within the Enhanced Fellowship Award.
- At an institution's discretion, after an award has been made salary support for the CI or other members of the group can instead be provided by the institution to free up additional funds for research activities.

CI level designation

- All CIs would be considered equal on the application, i.e. the existing CIA to CIJ classification would not be used.

Assessment

- Assessment would be based on track record of the CIs (relative to opportunity) and the broad research outline.
- For teams of CIs an assessment of the collaborative gain would also form part of the assessment.

Grant application/holding restrictions

- CIs that hold an Enhanced Fellowship Award would not be able to apply for a new award until the final 2 years of their existing award.

- CIs may apply for and hold only one Enhanced Fellowship Award.
- Holders of an Enhanced Fellowship Award would be restricted to holding one Ideas or one Clinical trial and cohort study grant.

Streams

There would be a number of streams within the Enhanced Fellowship Award as outlined in model 2, including:

- Established
- Transition
- Career interruption
- Practitioner / Clinician

2-Ideas

This grant would provide funding for individuals or teams of researchers with good ideas where assessment would be weighted towards the significance / innovation of the research proposal. The features of this grant include:

Funding packages

- Duration of up to five years.
- A range of funding packages would be available. The funding could be used flexibly, as determined by the CI, including for the CIs salaries (see below)
- Two funding packages would be available:
 - Standard – funding would be capped at \$2.5 million per grant.
 - Large or 'big science' – for applications seeking a grant of \$2.5 million or more. This stream would have additional requirements, including a systemic review of the evidence to support the need for the proposed research and a framework of milestones to support achievement of research goals.

Salary support

- Salary support for the CIs and the core group would be included as a line item within the Ideas grant.
- At an institution's discretion, after an award has been made salary support for the CI or other members of the group can instead be provided by the institution to free up additional funds for research activities.

CI level designation

- All CIs would be considered equal on the grant, i.e. the existing CIA to CIJ classification would not be used.

Assessment

- Track record and capacity to deliver would still form part of the assessment process, but assessment would be weighted towards significance / innovation of the research proposal.

Grant application/holding restrictions

- A maximum of 10 CIs per grant.
- CIs may apply for only one Ideas Grant or one Clinical Trials Grant per round.
- CIs may hold a maximum of two Ideas Grants or Clinical Trials Grant in any combination.

- CIs holding an enhanced an Enhanced Fellowship Award could only apply for or hold one Ideas Grant or one Clinical Trials Grant.

3-Clinical trials and cohort studies

This grant would provide funding for individual or teams of researchers wishing to undertake clinical trials. The features of this grant include:

Funding packages

- Duration up to seven years
- Two funding packages would be available:
 - Standard – funding would be capped at \$2.5 million per grant.
 - Large or 'big science' – for applications seeking a grant of \$2.5 million or more. This stream would have additional requirements, including a systemic review of the evidence to support the need for the proposed research and a framework of milestones to support achievement of research goals.
- The funding could be used flexibly, as determined by the CIs.

Salary support

- Salary support for the CIs and their core group would be included as a line item within the grant.
- At an institution's discretion, after an award has been made salary support for the CI or other members of the group can instead be provided by the institution to free up additional funds for research activities.

CI level designation

- All CIs would be considered equal on the grant, i.e. the existing CIA to CIJ classification would not be used.
- Satisfactory progress would need to be shown at key milestone points within the grant.

Assessment

- Assessment would be weighted on both the significance/innovation of the project along with a demonstrated capacity to deliver.

Grant application/holding restrictions

- CIs may apply for only one Ideas Grant or one Clinical Grant per round.
- CIs may hold a maximum of two Ideas Grants or Clinical Grants in any combination.
- CIs holding an Enhanced Fellowship Awards could only apply for or hold one Ideas Grant or One Clinical Trials Grant.

RATIONALE FOR PROPOSED MODEL 4

Overall structure

The overall structure of model 4 builds on model 1 and 2 and retains the following key features:

- Provides long-term support to top-performing researchers or teams of top-performing researchers, and their group(s), with application assessment based primarily on track record.
- Provides long-term support to individuals or groups of researchers for innovative research projects with a strong weighting on the research proposal.
- Removes separate fellowship and research program funding schemes to ensure researchers in receipt of a fellowship always have access to research funding.
- Remove the designation of CIA to CIJ (as suggested in model 1)

In contrast to model 1 and 2, model 4:

- Replaces the Teams/Investigator grants with 7 year Enhanced Fellowship Awards.
- Removes the people support grants (as suggested in model 1) and replaces it with a structure that provides better career development and certainty.
- Removes the collaboration bonus (as suggested in model 2) and provides a different mechanism to assess collaboration.
- Introducing a clinical trials stream.

Individual and teams supported by a Fellowship

One of the most significant difference between models 1 and 2 with model 4 is within the proposed *Enhanced Fellowship Awards*. Within model 1 the equivalent program is open to teams of CIs, whereas within model 2 this is targeted at individual top-performing CIs. Both of these different approaches have merit, but each would favour particular disciplines, types of research and potentially types of research organisations.

It makes sense to leave the option open for both individual and team applications, and then to assess the application on its merits. In model 4 the Team/Investigator Grants are renamed *Enhanced Fellowship Awards* and would be targeted at top-performing individual CIs as well as teams of top-performing CIs. As is the case with models 1 and 2, these awards would cover the CIs and their core team for a full research program.

The benefits of providing greater career certainty and investing in people for longer periods are already being realised by the UK Francis Crick Institute and the European Molecular Biology Laboratory. Model 4 suggests providing 7 year Fellowships which is distinct from both model 1 and 2. Providing longer awards like this will free up researchers from NHMRC grant writing and allow researchers to pursue other sources of funding and industry collaboration opportunities. Such opportunities are currently constrained because of the need to show results within a tight 3 year grant application time frame. AAMRI recognises that it will be important to carefully manage the transition towards such 7 year Fellowships but is of the view that in the long term achieving such an aspiration would be worthwhile.

Public health research and health services research

As there have been some concerns raised that public health research and health services research might not fare as well under this model (or the other models put forward) the NHMRC could put a

mechanism in place to ensure the current quantum of support for research in this area is at least maintained.

Removing the need for a separate fellowship program

Model 4 proposes removing the fellowship program as a separate grant application. Within each award a line item for salary support for the CI (and their core group) would be provided. Following an award being made, institutions would, at their own discretion, be permitted to cover CI salary costs from their own resources, allowing the Fellowship salary component to be redirected to additional research activities. AAMRI is not concerned that this would encourage cost-shifting, and believes it provides an opportunity to leverage additional funding into the health and medical research system from other sources.

While removing Fellowships as a separate program would represent a significant change there are advantages. The Enhanced Fellowship Awards reduce the need for additional fellowship applications, and they ensure that all recipients of an award have a mechanism for both salary support and research costs. This is something which is not guaranteed within the existing program.

CI designation

The proposal in model 1 to have equal CI designation (i.e. the removal of CIA to CIJ) in the Teams Grants is advantageous in that it provides greater recognition for the role of EMCRs within the research system, and this has been incorporated into model 4, and extended to all the grant funding streams.

The proposal in both model 1 and 2 to assess the Teams/Investigator Grants primarily on track record of the CIs (relative to opportunity) and broad research outline offers significant benefits and is incorporated into model 4. This should:

- Reduce the amount of time spent developing and reviewing research applications.
- Provide much greater freedom and flexibility to researchers to be bold with their research and explore new innovative areas of research.
- Allow researchers to change research direction as appropriate, and explore research, industry and commercialisation partnerships.

Grant application/holding restrictions

Limiting the number of grants that can be applied for or held is key to reducing grant application and review burden. Both models 1 and 2 outline different maximum combinations that would be effective in this regard. In model 4 it is proposed that CIs with an Enhanced Fellowship Award would not be able to apply for a new award until the final two years of a 7 year award. This award should provide the CI with two opportunities to be refunded. As the awards are expected to be of significant size and scope, and will cover the CIs whole research program, only one Enhanced Fellowship Award could be held at a time.

Similar to model 1 and 2, limits on the number of Ideas grant applications have been put in place to reduce the burden of grant application and review burden. The size and scope of the Ideas grants should be sufficient to support CIs and their core group, as well as the research program, and as such multiple applications should not be necessary. The length of grants can be between 1 and 5 years, giving CIs the flexibility to determine the scope of their research application. To ensure a wide range of applicants can be funded through the Ideas Grants pool it is proposed that those with an Enhanced Fellowship Award are only permitted to apply for or hold one Ideas Grant.

Grants could be held in any of the following combinations but only one application could be made each year.

- 1 Enhanced Fellowship award + 1 Ideas Grants or 1 Clinical Trials/Cohort Study Grant
- 2 Ideas Grants
- 1 Ideas Grant + 1 Clinical Trials/Cohort Study Grant
- 2 Clinical Trials/Cohort Study Grants

Supporting researchers at different stages of their career

Model 4 has a number of important features that are designed to provide both greater career security for researchers at different stages of their career, as well providing an enhanced career pathway.

In providing longer term 7 year Enhanced Fellowship Awards with a line item for salary support institutions will be in a better position to provide career certainty for all researchers, including early- and mid-career researchers. There will be a specific requirement within the Award that senior investigators provide enhanced opportunities for early-career researchers.

While the Enhanced Fellowship Awards would usually be awarded to senior investigators (established stream) and mid-career researchers (transition stream), these awards provide an improved opportunity to provide greater support to early-career researchers. In providing longer term 7 year awards, institutions will be able to provide greater career certainty for early career researchers. Such researchers would largely be free from repetitive grant writing activities and would instead have greater time to develop their careers before they are ready to apply for their own award through the transition stream or for an Ideas Grant.

The transition stream of the Enhanced Fellowship Award is targeted at mid-career researchers and provides them with the opportunity to develop research leadership and independence. In addition to this a career interruption stream is also provided to assist those returning to the workforce after a career break, and this is most likely to benefit EMCR researchers.

The Ideas Grants provide a new opportunity for all researchers, including early career researchers, to apply for research funding where application assessment will be weighted towards significance / innovation. This stream is set to benefit EMCR researchers as it would allow them to compete on a more equal footing with senior investigators.

Researchers working across disciplines

There have been concerns expressed that the proposed models, particularly models 1 and 2 (on which model 4 is based), are not well suited to researchers working across disciplines. In particular, researchers working in biostatistics or bioinformatics often work across disciplines, frequently only working on part of a research project, rather than one entire research project for 5-7 years.

It is envisioned the Enhanced Fellowship Awards would suit such investigators, and that these awards would provide researchers with greater freedom to move between projects. These investigators would have their own budget including a salary component, and could choose to collaborate on a range of projects at their discretion.

The Ideas grants, with their varying length, also provide an opportunity for these researchers to either develop joint proposals with other CIs for projects, or alternatively to work as non-CIs on the project and have their time on the grant 'bought in' through the salary component of the project. It would be worth considering whether an additional status for such research, such as Associate Investigator, might be warranted to better recognise their contribution.

Clinical grants

The proposed separate program for Clinical trials grants has been added to model 4 to ensure:

- Continued support for Clinical trials grants is maintained at a sustainable level within the NHMRC grant program.

A different set of assessment criteria can be used that recognises both the quality of the research proposal as well as the capacity to deliver on it.

AAMRI MEMBERS

