Australian Academy of Health and Medical Sciences



ABN 55 167 124 067

C/- RACP Offices Level 2, 417 St Kilda Road, Melbourne, VIC, 3004 PO Box 7210, St Kilda Road, VIC AUSTRALIA 3004

tel.: +61 400 428 224 · email: info@aahms.org

www.aahms.org

Australian Academy of Health and **Medical Sciences**

AAHMS HEALTH AND MEDICAL RESEARCH PRIORITIES

1. **Executive Summary**

The Australian Academy of Health and Medical Sciences (AAHMS) is a learned academy that aims to promote high standards of health and medical research as a means to ensuring evidence-based, quality health care. The three main purposes of the Academy are: mentoring the next generation of clinician researchers; providing independent advice to government and others on issues relating to evidencebased medical practice and medical research; and providing a forum for discussion on progress on medical research with an emphasis on translation of research into practice. Contributing to the setting of priorities in medical research is an important part of the Academy's agenda, and of particular relevance given the recent creation of the Medical Research Future Fund.

This document is a submission prepared by AAHMS for consideration by the Australian Medical Research Advisory Board. It is intended to provide the Board with a range of perspectives regarding the Medical Research Future Fund (MRFF), sourced from the broader Academy Fellowship as well as a number of selected external stakeholders through an extensive consultation process.

The Academy has formulated 10 key principles that reflect the Fellowship's perspectives on a framework for the selection of priority areas for MRFF funding, the selection of specific projects within each priority area, and the execution and monitoring of funded projects. Briefly, these principles are:

Principle 1: MRFF as a Transformational Catalyst

Principle 2: Health Outcome Focussed Approach

Principle 3: Economic/Commercial Outcome Focussed Approach Principle 4: Capacity Building and Training Focussed Approach

Principle 5: Implementation Oriented Approach

Principle 6: Consumer Involvement

Principle 7: Collaborative Strategic Approach

Principle 8: Comprehensive Investment and Operational Strategy

Principle 9: Measuring Success

Principle 10: Support Innovation in Research and Funding

Building upon these Principles, the Academy Fellowship identified a number of discussion areas to consider in greater depth. These discussions expanded upon the Principles, and outlined a number of additional opportunities and challenges. These were as follows:

- Capacity Building
- Consumer Participation
- Link between MRFF and NHMRC
- Development of Platforms
- Advanced Health Research Translation Centres
- Cultural Change
- Reflections from Best Practice Models
- Embedding Research into Healthcare and Jurisdictional Barriers
- Implementation Projects and Research
- Funding Considerations

2. Outline of Consultation Process

An extensive process of consultation with the broad Fellowship, as well as a number of key external stakeholders, was undertaken to produce the contents of this submission. The process was as follows:

1. Planning Event

O A group of key Academy Fellows, facilitated by Dr Norman Swan, met on the 9th March 2016 in Canberra to prepare a list of recommended Proposed Principles to promote broad discussion regarding setting priorities for health and medical research in Australia. An initial draft of the Proposed Principles was formulated and circulated for feedback from the Fellowship.

2. Fellowship Survey and Feedback

- The Fellowship was surveyed to ascertain their thoughts on the Proposed Principles, as well as their broader opinions on the framework that should be utilised for priority driven medical research funding.
- Over 30 written submissions were received, and a summary of the written feedback received is included as Appendix A.

3. Priority Setting Symposium

- o A Symposium facilitated by Dr Norman Swan met on the 29th April 2016 in Sydney.
- O The Symposium was addressed by Federal Health Minister Sussan Ley, Chairman of the Australian Medical Research Advisory Board and AAHMS President Prof Ian Frazer AC, CEO of NHMRC Prof Anne Kelso AO and Chairman of Innovation Australia Bill Ferris AC to outline the current medical research landscape in Australia.
- Prof Ingrid Scheffer AO, AAHMS Vice-President, presented the Proposed Principles for discussion at the meeting.
- Over 100 attendees including 56 Academy Fellows, 3 Academy Mentees and key selected external stakeholders from government, industry, research organisations and

key community organisations provided input to the Proposed Principles, as well as on key opportunities and challenges for the MRFF.

4. Finalisation of Priority setting document

• The document was finalised and circulated to all Fellows for further comment, in preparation for submission to the MRFF Advisory Board.

3. AAHMS Proposed Principles to Guide Priority Setting Process

These broad principles are proposed by the Australian Academy of Health and Medical Sciences to:

- Provide a framework to guide selection of target areas for priority based funding.
- Outline broad principles to guide execution of priority funding by the Medical Research Future Fund and other funding bodies.

Overall:

Principle 1 outlines an overall driving philosophy that underpins the rest of the principles.

Principle 2, 3 and 4 focus on selection of priority areas for funding.

Principles 4, 5 and 6 guide selection of specific projects within each priority area and define how these projects work together towards achievement of implementation outcomes.

Principles 6, 7, 8, 9 and 10 relate to execution and monitoring of funding and project activities.

Principle 1: MRFF as a Transformational Catalyst

The introduction of the MRFF should be viewed as a transformational opportunity in translation of health and medical research into outcomes for patients and the community as a whole, holding significant potential to catalyse progress and change in a number of domains. A key component of maximising this unique opportunity is constant evaluation of the value-add that the MRFF can provide over and above the status quo, and this approach should underpin the full spectrum of activities carried out by the MRFF.

Principle 2: Health Outcome Focussed Approach

Priority based research funding should be based on a health outcomes and engagement approach, encompassing a spectrum of health issues, benefits and users. These will be based on community needs, burden of disease, health disparities and impact of preventive/public health activities. Translation to clinical care requires a health systems research approach linking innovative therapy with interventions to ensure education and training, which can be measured to inform ongoing improvement in delivery.

Principle 3: Economic/Commercial Outcome Focussed Approach

In addition to a health outcomes focus, specific consideration should be given to the potential economic impacts of priority areas. This approach is necessary to reflect the realities of constrained research and healthcare budgets. The economic benefits examined will range from cost savings through efficiencies in healthcare delivery, through to creation of new revenue streams via self-sustaining commercial entities. Examples of key performance indicators that may be used include cost assessment of new vs existing

approaches, number of successful commercial ventures in the health sector, return on investment metrics and public health based financial metrics together with cost-benefit evaluation of projects supported by the MRFF to be used to refine further investments to generate high value outcomes.

Principle 4: Capacity Building & Training Focussed Approach

Priority should be given to opportunities to build capacity at all levels within the Australian health and medical sciences research domain. Human resource capacity building will aim to develop cohorts of multi-skilled researchers at all levels drawn from a range of high impact domains, provide ongoing skills support and development, and complement existing fellowships and other frameworks. Specific consideration will be given to capacity building opportunities related to infrastructure, platforms and tools that may extend beyond the initially funded project.

Principle 5: Implementation Oriented Approach

The key outcome on which project selection and monitoring will be assessed is implementation of healthcare delivery innovations in the selected priority areas. Higher priority will be given to projects with greater potential for widespread implementation, significant potential impact or a high chance of achieving success. Assessment of implementation feasibility will utilise best practice industry style evaluation models, and involve the partners who will be involved in the implementation right from the start. Also important will be de-implementation of ineffective or unproven healthcare practices that form part of current practice.

Principle 6: Consumer Involvement

Meaningful consumer input into research should be designed at all stages of MRFF activities. The underlying principles of this consultation are to drive a mature approach to needs analysis and market research, drive invention and prioritisation from an end user/beneficiary perspective, shortcut implementation cycles and maximise outcomes and returns, and capitalise on the existing knowledge, funding and structural systems. Consumer involvement strategy should be carried out in a sophisticated manner that maximizes input while maintaining an evidence-based and balanced focus.

Principle 7: Collaborative Strategic Approach

Projects selected for support will demonstrate a specific collaborative focus to ensure that the **right people** with the **right skills** and **networks** are in place to give the greatest chance of success. These skills will be multidisciplinary in a meaningfully complementary way, and must include all domains necessary to maximise outcomes e.g. business and project management, engineering, physics, information technology etc. Funding decisions will therefore be agnostic of public/commercial status of applying institutions, and where required skills are not already available within applying bodies, acquisition will be facilitated by the MRFF.

Principle 8: Comprehensive Investment and Operational Strategy

Priority based research funding will be executed using a cohesive investment and operational strategy which includes the following key components:

Focus on areas of national importance and global significance.

- A global approach will be taken, looking at international context and evidence base, local scope and cooperation/co-investment opportunities, and global industry status and competition considerations.
- Utilise a goal and milestone based approach incorporating best practice from public and private research and project management fields. Wherever possible a staged approach that builds in accountability to achieve intended outcomes will be used.
- Funding for success, including reflecting the true total costs of research activities, incentivising
 excellence and maintaining flexibility in funding to allow 'pivoting' as new opportunities or
 barriers arise.
- Maintain a diversified risk/benefit portfolio, including an appetite for potentially disruptive/innovative or high risk/high potential benefit activities. Additionally, support derisking early stage ventures with a view to commercialisation.
- Use of expert review to guide selection, approval and ongoing monitoring of activities. This should be implemented in an industry based manner using a targeted, iterative, staged/gated approach.

Principle 9: Measuring Success

Measurement of success of activities will be based on a key performance indicator (KPI) model in two areas:

- 1. Process KPIs these reflect the work of the funding body and will be designed to meet the expectations of the stakeholders. Key examples for consideration may be the number of projects funded, impact of research funded on overall health burden reduction, number of projects achieving predefined milestones, number of projects progressing along commercialisation path, number of new start ups, increased employment and export earnings as a result of funding made.
- 2. Outcomes KPIs these reflect the performance of the funded research bodies and should be set as part of the funding, milestone setting and oversight process. Examples may include reduction in disease burden in priority areas, assessment of specific healthcare improvements achieved, and overall economic return on investment of funded projects. Achievement of relevant milestone KPIs should a critical part of ongoing funding decision making through the project cycle.

Principle 10: Support Innovation in Research and Funding

Support the use of new and novel techniques to maximise innovation potential in research funding. Project submission and assessment should utilise an iterative, consultative approach to development of proposals, business cases and funding models, allowing resubmission with peer review when necessary. Research techniques for consideration may include brainstorming sessions, pitching sessions, 'hackathons', 'blue-sky' days, venture capital sessions. Maximise opportunities to leverage new and novel funding approaches, including philanthropic funding, joint/matched commercial funding should be supported where possible.

4. AAHMS Symposium Key Discussion Areas

This provides a brief synthesis of key discussions from the following sources:

- the written submissions from Fellows
- discussions by attendees at the AAHMS Priority Setting Symposium.

It must be emphasised that this is not intended as an exhaustive summary of all discussions and is intended to provide an overview of key discussions, areas of consensus and areas of contention.

The key discussion areas covered are:

- Capacity building
- Consumer participation
- Link between MRFF and NHMRC
- Development of platforms
- Advanced Health Science Centres
- Cultural change
- Reflections from best practice models
- Embedding research into healthcare and jurisdictional barriers
- Implementation projects and science
- Funding considerations.

Capacity Building:

- Australia faces particular challenges in the area of research skills and capacity that are necessary to address for long term success, including but not limited to a hollowing out of the research skills base, a constrained employment landscape for researchers, and a decrease in the number of future researchers and leaders in the development pipeline.
- The Fellowship expressed strongly that capacity building in the human resource area needs to be a particular and specific focus of the MRFF for this reason, as it was seen to be a critical enabler to the success of the type of work the MRFF is aiming to carry out.
- One view was that the MRFF should not be seen as a de facto Fellowship program. It was also countered that Fellowships may form an important and specific method of capacity building in priority driven areas.
- Organisations that are applying for MRFF funding should explicitly show that they meet MRFF defined criteria related to training and capacity building through routine project activities.
- Training should focus on specific individual skills as well as interpersonal and team skills that are necessary for successful project completion and implementation.
- It will be important to access training gaps and unemployed or underemployed skills in the current medical research community prior to determining training needs so that skills development leverages off the current skill base.
- MRFF directed support of skills training would:

- Aim to build capacity and skills over a longer time frame, with a more extensive skillset, feeding into areas with broad impact or areas of national need. Examples of these areas could be biostatistics, bioinformatics, clinical pharmacology etc.
- Aim to produce multi-skilled researchers in transdisciplinary research, enabling traditional health researchers and personnel to work across areas such as technology/engineering, and conversely attract personnel from these fields into medical research and implementation.
- Training would be linked across various funding bodies (e.g. ARC/NHMRC/MRFF).
- Training needs to be across many levels, in particular:
 - A particular focus on future research leaders, potentially in the form of longitudinal cadetships.
 - Cross disciplinary leaders, potentially in the form of Fellowships.
 - Enablers, scientists, technicians in various forms.
- Consider a mix of training providers, including government/academia/industry to provide experiential training combined with formal training.
- Multidisciplinary training environment e.g. similar to that created by the old CRC scheme, added benefit of high employability.
- Implemented as a longitudinal program that creates a set of "research staff scientists" with highly transferable skills. Examples of programs that could be assessed for best practice in this approach were the SPRAC program at Stanford University and Northwestern University's Collaboration and Team Science program. Another skills based part-time fellowship program model is the Office of Technology Development at Harvard.

Consumer Participation:

- A recurring theme of discussion was the opportunity for cultural change in the inclusion of consumer input and focus into research activities, which it was felt has historically been an area of poor performance.
- Representatives from consumer organisations present outlined that consumers seek to be respected and involved in bringing their significant expertise to use, and that it is necessary to train researchers to work with consumers.
- Consumer input has significant value to add in a number of specific areas, including but not limited to:
 - Prioritisation activities including front end market research
 - Patient centred outcomes assessment
 - Trial participation considerations
 - Significant input into implementation and uptake.
 - Ethics Committees (often enshrined in legislation)
 - Organisational governance
 - Refinement of research question
 - Access and equity issues

- Specific mention was made of the unique needs of children and young people in consumer input, as there is historically particularly poor performance here
- Several examples of approaches to consumer involvement were nominated as valuable to review, including the HIHR, Australian Commission on Safety and Quality in Healthcare.
- It was felt that consumer participation should be an explicitly stated and assessed criterion for projects looking for MRFF funding.
- Although these views had a broad majority support, there were potential risks recognised in balancing consumer representation. Particular concerns were raised that the influence of lobbying and advocacy groups may result in an element of "whoever shouts the loudest gets the most", and that at times there are significant differences between consumer behaviours and desires and evidence-based practice. It is therefore important that consumer input is structured in such a way that it represents the breadth and depth of opinions that exist in the community.

Link between MRFF and NHMRC and other Funding Bodies:

- The link between the MRFF and the NHMRC will need to be clearly defined and will also evolve over time.
- The introduction of the MRFF provides the opportunity to do things differently, and strengthen and define the role of NHMRC.
- A major differential between the funds is that NHMRC research is "bottom up" investigator initiated research, while MRFF will be "top down" research that focuses on addressing an unmet health need.
- It was noted that the mandate and funding on the MRFF and NHMRC are intentionally separate but should be viewed as complementary. In particular, the MRFF will not actually spend money directly, rather the board will make suggestions to the Minister which will then go through the Cabinet funding process.
- It was recognised that there is a risk of duplicating bureaucracy and requirements. Special attention should be paid to ensuring that duplication of efforts and redundancy is avoided.
- There may be the opportunity to use existing structures e.g. for types of peer review, ethical frameworks, funding agreements with existing research organisation, to avoid duplication.
- It was noted that the distinction between MRFF and NHMRC funded projects may require some time to become clear. Therefore, there will be a need to support researchers as follows:
 - A clear set of guidelines should be developed.
 - A common triage approach may better direct researchers to the appropriate funding body.
 - Initially, researchers may apply to both funding bodies but could not hold both. This process may help to reduce recycling in the initial bedding down stage.
- A working group considered areas for interface between the Medical Research Endowment Account (MREA) and the MRFF in particular, and the following were noted:
 - Overall aim to role share between the MREA and MRFF, and avoid duplication
 - Development grants may be better suited to the MRFF.
 - Targeted research calls may be better suited to the MRFF

- Clinical trials may be an area for inclusion in the MRFF, with the following notes
 - Clinical trials with economic benefits, including service delivery efficiency and cost savings, may be well suited to the MRFF.
 - Shifting to MRFF may allow for more use of KPI milestones and staged funding based on attainment of KPIs (e.g. enrolment targets), which is currently not the approach utilised in MREA funding.
 - However, it was not clear if shifting activities such as RCTs into MRFF would lead to the MREA no longer being translational in nature.
- Fellowships that could be moved from NHMRC to the MRFF could include TRIP Fellowships and Practitioner Fellowships.

Development of Platforms:

- Platforms as referred to in this document are capabilities, the benefits of which may be realised distal to the initial work that develops them.
- MRFF support of projects that develop platforms is a key component to capacity building and development.
- There are a number of domains in which particular gains may be realised through MRFF activities:
 - Collected health data
 - Large scale, "big data" provides a powerful research platform that can have utility for numerous projects.
 - MRFF could consider activity in this area to replace or link together registries etc.
 - Emerging sources of "big data" such as electronic health records, and personal health records could be developed into usable platforms.
 - There is a constant need to balance privacy considerations with information availability for research. Moves such as E-Health Records moving to an opt out model, incentivising to sign people up such that they may then be recruited to trials etc, open sourcing MBS and PBS data e.g. give to third party apps or researchers, or MBS & PBS data de-identified in large amounts, represent concrete examples of activities that can be built upon.
 - Healthcare Quality
 - Overall aim is to improve outcomes by reducing variation.
 - Significant research component that is distinct from implementation activities that could benefit from increased rigour and support.
 - Patient Directed Health Care
 - This represents a broad suite of areas from health maintenance and preventative health, communication, literacy, education, technology, health records, third party tools such as apps.
 - Telehealth

- Development of alternative mechanisms, equity considerations and consumer focussed approach could be areas for work.

Health Promotion

 Prevention and promotion tools that utilise a multidisciplinary approach, are consumer focussed. In particular behaviour change platforms could be of significant value.

Clinical Trial Networks

- Currently a network of over 60 existing clinical trial networks.
- Support for clinical trial networks as a capability or platform could provide significant utility.
- Medicinal Chemistry Manufacturing
 - Centralized scale up and pilot pharmaceutical manufacturing facilities are required to enable production of drugs for early stage clinical trials. Without these facilities, it is not possible to transfer new pharmaceutical therapies to pharma companies.
- Genomics/Bioinformatics
 - Coordination to reduce variation and duplication.

Advanced Health Research and Translation Centres:

- AHRTC are collaborative networks assembled around themes that address healthcare and translational projects.
- Currently, these organisations are not funded and therefore face infrastructure and capacity constraints.
- These represent a resource that could fit well with the MRFF priority driven approach and be leveraged with relatively good fit into the priority driven funding model.
- Support could be tailored around key targets and measurable goals that would fit well into the AAHMS proposed staged/milestone driven approach.
- Criteria for support could include:
 - AHRTC accreditation; or
 - Disease/problem based consortia e.g. reducing colon cancer deaths, eliminating Hepatitis C etc.

Cultural Change:

- MRFF represents an opportunity to transform a number of aspects of culture. In particular, the following areas:
 - Collaboration and sharing.
 - Explicitly stated consumer focus.
 - Engage the health system at all levels of activity or implementation consideration.
 - Use of innovative metrics and KPIs, and not just classical metrics that may no longer be fit for purpose.

- Consideration of alternatives to journal publication.
- Future leaders and career development.
- Connecting silos (laboratory scientists, clinical, infrastructure, commercial representatives) by incentivising team focus.
- Use of commercial skills and acumen in project management and coordination.

Reflections from Best Practice Models:

- During discussions, a number of models were brought up as potential sources of best practice for the activities of an organisation such as the MRFF. It was felt that all efforts should be made to incorporate lessons learned into the MRFF from the start.
- Some examples and key features raised include:
 - National Institute for Health Research: a split model between basic science and a separate group for implementation work. Clinical and translational research in Australia is considered under-funded. With the NHMRC having a limited role in filling the gaps, a model such as the NIHR may be of benefit.
 - Welcome Trust: This is the second largest non-governmental funder of medical research globally. It was highlighted as a model of an organisation occupying a similar position to that which the MRFF could be envisaged to hold, and which has a high rate of successful commercialisation. Key features that were discussed were the competitive bidding process, the use of project managers who assist researchers even prior to the proposal development, project management from the Trust is based on "a light touch" with the principal responsibility for management residing with the applicant.
 - **Gates Foundation:** Globally this is the largest non-government funder of medical research. It utilises a phased project approach with project officer support throughout including during concept development and pre-proposal.

Embedding Research into Healthcare and Jurisdictional Barriers:

- Significant continuing gap in implementation of research into everyday healthcare, where priority on service delivery may significantly reduce research activities.
- It was felt that health services do not have research KPIs and incentives, and without accountability at every level of management this culture will continue.
- Additionally, there are numerous jurisdictional barriers to research including movement of people, data, specimens.

Implementation Projects and Research:

- A point of discussion was the role for the MRFF to fund implementation related projects, which involve implementation of known knowledge rather that new research.

- Some attendees felt that implementation projects would not be the best use of resources as they do not usually drive innovation and would represent a lost opportunity, and were concerned that the MRFF should not become a de facto implementation fund.
- However, it was countered that implementation of known evidence, particularly where large gaps exist between clinical practice and best evidence, could represent a significant opportunity for cost savings and efficiency gains with a high potential for success.
- It was also noted that research into implementation science itself is rigorous and a vital field of research in and of itself.
- A portfolio approach, as outlined in the principles, was supported to ensure that an appropriate balance could be achieved between the "low hanging fruit", implementation projects and "blue sky" innovative research.

Funding Considerations:

- Noteworthy considerations regarding funding
 - A clear approach and philosophy regarding reinvestment of economic benefits into MRFF activities would be desirable.
 - The MRFF taking equity stakes in technology development that has commercial value.
 - Alternative models of funding should be considered, for example matching public/private funding and prioritisation of projects with external funding to incentivise applicants to seek additional funding.
 - Encouraging hospitals and health districts to provide funding and infrastructure for research activities.
 - Consideration of novel sources of funding, e.g. the Australian superannuation industry.

Appendix A: Summary of written feedback from the AAHMS Fellows

Executive summary of the feedback from the AAHMS Fellows

- All activities must be world best practice and driven by excellence
- Preventative health care must be given greater emphasis
- Implementation focused research should be a priority including research into health care delivery, including both improvements and removal of inefficient treatments
- Integration of MRFF projects into existing research programs (NHMRC & ARC)
- Important to gain support from all stakeholders for principles and MRFF projects
- Use an evidence-based medical research funding policy

The following is a summary of the feedback from the Fellows of the AAHMS on the guiding principles for selection of MRFF priorities funding areas (<u>underlined points indicate principles that did not receive unanimous support</u>)

- It is important to outline the boundaries between MRFF goals and the goals of NHMRC and ARC and ensure that the functions of the respective groups are complementary
- Projects need to have the support of the public rather than solely the medical research community
- MRFF projects should leverage funding from State + commercial + philanthropic entities
- Research must be internationally competitive
- Principles need to be more explicit about the cost benefit analysis to be used to select priority
 areas including long run translational impact; to improve clarity, principles should separate
 financial benefits of cost-saving from revenue-raising commercial activities
- There is a need for greater emphasis on public health, health economics and preventive medicine as a means of reducing the health burden (consistent message from many Fellows)
- There is a need to fund infrastructure projects such as Personally Controlled Electronic Health Record (PCEHR)
- Health burden must be based on national mortality and morbidity statistics + there is a need for better tools to measure health burden and health improvements post clinical interventions
- The principles need to address equity of access + disability + indigenous health needs more explicitly
- MRFF projects should be able to be initiated on a short time frame to address emerging health threats
- Reduction in health burden should take precedence over economic benefits; although the contrary view was also expressed that where there is a clear financial benefit in an area that does not address an area of major health burden these projects should be funded; the question here is is there an "and" or an "or" relationship between principle 1 and principle 2?
- There is a danger that emphasis on translational research may compromise the pipeline of new technology for translation; need to prevent low risk projects being selected at the expense of high risk/high gain research; need to avoid reductions to funding of meritorious biomedical research through NHMRC
- Research that has the greatest translation potential + research into clinical practices that lack a true cost benefit should be prioritized; although the alternative view that research into cost

benefits of new technology should not be covered by the MRFF as this is "not research" was also expressed

- Capacity building should be a guiding principle of the MRFF; this includes capacity for each stage of the implementation process including clinical research and project management
- Long term viability of applicant and track record of success need to be considered in the project selection process
- Collaboration should extend to transfer of projects between teams who have expertise in the respective stages of commercialization
- Collaboration with regional institutions and a focus on addressing regional health burdens should be included in the guiding principles; collaboration should be an as needed rather than absolute requirement for project funding
- The importance of avoiding political interference in funding decisions + the need for independence between the applicants and fund administration
- Project reporting needs to be customized to the level of funding
- Project funding needs to extend through to clinical implementation or commercial viability
- Application process should be iterative
- Project approval process must be peer reviewed
- NHMRC should be utilized to approve and monitor project funding on behalf of the MRFF and conversely, a non-NHMRC administrator should be appointed to manage the MRFF
- Research should be completed into the most effective way to spend research funds

The feedback on the priority areas of research were:

- Use of the National Health Priorities (cancer control + cardiovascular health + injury prevention and control + mental health + diabetes + asthma + arthritis and MSK conditions + obesity + dementia)
- Health burden must be based on national mortality and morbidity statistics
- Use Delphi process to gain consensus on priority areas rather than a majority opinion
- Addition of stroke, premature birth, non-communicable disease, chronic pain, autoimmunity, infectious disease and obesity to the list of priority areas
- Addition of tropical diseases relevant to the Asia Pacific region and diseases relevant to indigenous populations (rheumatic heart disease + nephritis + scabies)
- A matrix of disease burden + enabling technologies + implementation strategies should be developed to guide selection of priority areas for research and implementation
- Enabling technologies including genomics + immunotherapy + innovative diagnostics + imaging + regenerative cell therapy + personalized medicine should be funded
- Research into health policy models such as One Health, self management of disease, collection
 of health data and evidence for alternative therapies should be addressed within the MRFF
- Fund infrastructure and research excellence as an alternative to setting priority areas based on health burden or economic benefit