



Health and Medical Early to Mid-Career Researcher Stakeholder Roundtable - Background Paper

INTRODUCTION

The Minister for Health and Aged Care, the Hon Greg Hunt MP, asked the Department of Health (the Department) to convene a Roundtable with stakeholders (Stakeholder Roundtable) who nominated early to mid-career researchers (EMCRs)¹ for the Health and Medical Research EMCR Roundtable (EMCR Roundtable) held on 6 May 2021. The purpose of the May EMCR Roundtable was to better understand the factors impacting EMCRs' ability to remain within the health and medical research sector.

The Stakeholder Roundtable will be facilitated by the Health and Medical Research Office (HMRO), the area of the Department responsible for Medical Research Future Fund (MRFF) administration.

PURPOSE OF THE ROUNDTABLE

The Stakeholder Roundtable is an opportunity for peak research bodies, universities, medical research institutes, and forums such as Academies to collectively engage with feedback provided by EMCRs at the 6 May 2021 EMCR Roundtable. Not all challenges faced by EMCRs can be solved by Government funding and/or policies, especially in the short-medium term, therefore health and medical sector engagement and collective effort is required to address this adaptive challenge.

This purpose of this follow-up Stakeholder Roundtable with organisations is to:

- provide feedback to key stakeholder groups on the discussions and ideas raised at the May 2021 EMCR Roundtable,
- discuss and share information on strategies that stakeholders currently have in place to support EMCRs, and
- discuss additional opportunities/strategies that could support EMCRs within the health and medical research sector.

A small cohort of EMCRs involved in the May 2021 EMCR Roundtable will participate in this discussion to present findings from the EMCR Roundtable and to respond to questions and comments from the stakeholders attending. The pre-Stakeholder Roundtable submissions received in September 2021 from invited stakeholders will also be discussed. The CEOs and staff of both the

¹ The Department defines EMCRs as emerging researchers within their first ten years of academic or other research-related employment, following completion of postgraduate research training (with consideration for career disruptions). There is no age limit on who can be an EMCR.

National Health and Medical Research Council (NHMRC) and HMRO, as well as Australian Research Council (ARC) representatives will be present to support and listen to the discussion.

Outcomes of the Stakeholder Roundtable and any strategies identified for action will be provided to the Minister, the EMCR's who attended the 6 May 2021 Roundtable and invited stakeholders. A follow up with stakeholders may be scheduled in due course to discuss stakeholder experiences with implementation of identified actions and any additional ideas.

BACKGROUND – THE EMCR ROUNDTABLE

The Minister asked the Department to convene a roundtable with EMCRs to better understand the factors impacting their ability to remain within the health and medical research sector. The virtual EMCR Roundtable took place on 6 May 2021. Prior to the EMCR Roundtable, written feedback was received from over twenty sources (individual EMCR perspectives, or summaries of the views of EMCR groups). This feedback was used as the basis for both the EMCR Background Paper, which also included information on the MRFF and funding landscape, and the EMCR Roundtable discussion.

At the EMCR Roundtable, 28 EMCRs contributed their time to bring a valuable mix of diverse perspectives, views, and experiences to the discussion on the drivers impacting their ability to remain within the sector and potential solutions to these challenges. The CEOs and staff of both the NHMRC and HMRO were present to support and listen to the discussion. The outcomes from the EMCR Roundtable were provided to the EMCRs. The recommendations that emerged have also been considered by the Minister. The Department is currently considering options to address feedback provided within the scope of the MRFF. As several recommendations fall within the remit of the sector more broadly, the Minister asked the Department to convene this second roundtable with stakeholders.

SUMMARY OF FINDINGS

The Department appreciates the written responses received from stakeholders prior to this Stakeholder Roundtable. The most common challenges facing EMCRs as well as EMCRs' summarised ideas for improvement, and a summary of your stakeholder, pre-Roundtable written responses are collated in the Tables 1-5 below.

This document focuses on strategies identified as within the scope of stakeholders and employing organisations of EMCRs. During the Stakeholder Roundtable, the Department is keen to hear discussion between stakeholders about successes supporting EMCRs in their organisations as well as possible additional solutions and ideas that stakeholders could implement to better support EMCRs in health and medical research.

Table 6 identifies strategies the Department is considering that are within the scope of the MRFF.

Table 1. Security of Employment

The key finding from engagement with EMCRs was that secure employment allows EMCRs to plan their research projects, professional careers, and personal lives, and reduces uncertainty and stress. However, EMCRs reported facing multiple challenges in security of employment including short employment contracts (often only 1 year, sometimes 6 months), extreme competition for positions, low salaries, higher pay as a clinician than a researcher (resulting in lack of incentives for clinician scientists), and limited career progression opportunities.

Key strategies to address this issue raised at the EMCR Roundtable included restructuring grant opportunities and incentivising institutions to provide better support to EMCRs.

Ideas suggested by EMCRs deemed relevant to stakeholders	Strategies suggested by stakeholders to address this challenge	Reported barriers to implementing these strategies
<ul style="list-style-type: none"> • Review the current structure of PhD programs within universities. PhD programs are usually targeted towards an academic career track. Consideration should be given to restructuring to facilitate acquisition of a diversified skill set during PhD studies that can be applied to careers outside of academia • Diversify the available career paths and job opportunities in Australia • Encourage alternative income streams from the research generated • Provide non-MRFF incentives for institutions to support EMCRs and provide longer employment contracts • Encourage institutions to provide dedicated funding for EMCRs • Encourage institutions to provide incentives for senior researchers to train EMCRs • Encourage universities to recognise and/or compensate EMCRs for ‘free’ services such as student supervision 	<ul style="list-style-type: none"> • Fellowship schemes, awards for high performing EMCRs • Transparent positions, salaries, in line with Enterprise Bargaining Agreements • Maximising contract length for EMCRs • Supporting clinician researchers, engaging with local health services for co-funding and to build research capacity in clinicians. For example, universities embedding statistical support and research project development expertise in the health services. • Mentoring programs • Equal opportunities for EMCRs to access support regardless of employment status, e.g. part-time, contracts etc • Creation of hybrid clinician/researcher or teacher/researcher roles which have flexibility to increase/decrease proportion of time devoted to research 	<ul style="list-style-type: none"> • Gap between funding awarded by research agencies and actual salary costs (university pay scales), budget constraints • Insufficient external funding opportunities target at EMCRs to support the number of researchers • Challenges with superannuation and reporting lines when EMCRs are employed by both healthcare organisation and the University/Research institute • Coordinated approach to recruit and retain high-performing EMCRs • COVID-19 related impacts: limited opportunities for EMCRs visibility, limited contacts and network building due to inability to meet face-to-face • Overseas opportunities are more attractive than what is offered in Australia • The difficulty in attracting clinicians to rural/regional posts results in very limited time allocated to research even when there is institutional support and funding

Table 2. Access to grant funding

The key finding from engagement with EMCRs was that access to grant funding allows EMCRs to pursue novel research ideas and provides employment security. However, EMCRs reported facing multiple challenges in accessing grant funding including limited relevant grant opportunities, low success rates, short grant duration promoting short employment contracts, large salary gaps meaning multiple grants are required to cover a single position, limited available bridging support/overlapping funding/implementation funding, and pressure to focus on urgent research needs with high publication potential rather than explore novel, longer term questions.

Key strategies to address this issue raised at the EMCR Roundtable included providing more dedicated funding for EMCRs, revising assessment models and increasing awareness amongst EMCRs of available grant opportunities and avenues to learn about funding process.

Ideas suggested by EMCRs deemed relevant to stakeholders	Strategies suggested by stakeholders to address this challenge	Reported barriers to implementing these strategies
<ul style="list-style-type: none"> • Institutions should ensure that all relevant information is provided to all researchers. There is a perception that some institutions are filtering information with the impact that some (and not all) EMCRs are able to submit applications and/or be involved in peer review • Institutions should provide support to all EMCRs preparing grant applications, independent of whether those applications are for category 1 funding or other funding • EMCRs, institutions and industry should consider how to establish networks for collaboration and information flow in order that EMCRs can build connections to put EMCRs in the best position to apply for relevant grant opportunities and have the most competitive team on that application 	<ul style="list-style-type: none"> • Internal investments to make EMCRs more competitive for research grants, such as: seed funding, career support, “near miss” and “bridging” schemes, pilot projects and proof of concept proposals • Provide training, development, research support infrastructure to improve grant success for EMCRs • Partner with donors and industry to provide financial support, pursuing unconventional new avenues to support research. For example, partnering with a pharmaceutical company to administer a grant opportunity to members. • Dissemination of grant opportunity information • Appointment of Research Translation Coordinators embedded in rural health services to support research capacity development with the aim of securing external grant funding and translating findings into policy/practice • Encourage team-based research (for rural researchers this is often via a virtual membership) that is better positioned to secure larger, longer-term funding 	<ul style="list-style-type: none"> • Insufficient external funding opportunities targeted at EMCRs to support the number of researchers • Time and workload – team teaching would help to free up some time for research or grant writing • Limited funds available for internal investment schemes, financial constraints due to COVID-19 • The state-based public health systems in Australia have large budgets but fragmented R&D, or little R&D function

Table 3. Workplace culture

The key finding from engagement with EMCRs was that it is important that workplaces set realistic expectations of what ‘success’ looks like and promote a healthy work life balance. However, EMCRs reported facing multiple challenges due to workplace culture including maintaining a healthy work life balance with large workloads (including research, teaching, administration, student supervision, service contributions, repeatedly applying for job contracts/grants), lack of technical assistants, unpaid hours to “keep up” in competitive environments, hyper competition that impacts on collaboration, high expectations on what EMCRs should be achieving, and workplaces that do not have a nurturing culture.

Key strategies to address this issue included better forward planning of grant opportunities and public accountability for cultural issues.

<p>Ideas suggested by EMCRs deemed relevant to stakeholders</p>	<p>Strategies suggested by stakeholders to address this challenge</p>	<p>Reported barriers to implementing these strategies</p>
<ul style="list-style-type: none"> • Increase clarity and establish guidelines within institutions on the role of an EMCR. Current EMCR KPIs are based on narrow metrics that don’t recognise the actual scope of the role in practice • Promote mentoring culture within institutions • Change the research funding model to emphasise collaboration rather than excessive competition with peers • Promote/increase visibility of ‘healthy’ role models within organisations • Encourage institutions to provide increased resources to assist EMCRs in their day-to-day work • Mandate increased transparency of workplace cultures. • Make organisations accountable for poor workplace culture and incentivise/reward those with positive and healthy cultures (e.g. mentoring programs, child-care support) • Consider ways to measure researcher output relative to time 	<ul style="list-style-type: none"> • Paternal leave, childcare, flexible hours and work arrangements, support those with carer responsibilities • 360-degree anonymous feedback, open communication • Leader-shadowing programs • Career guides for women • Codes of conduct, policies • Strategies to account for performance relative to opportunity • Workload relief to allow time for grant writing • Supporting attendance at meetings and conferences. For example, covering or providing childcare for events, scheduling events occur during the work week (rather than weekends or during school holidays) • Establish research within rural health service strategic plans, budget for research and allocate time appropriately • Educate rural health service clinical managers as to the value of research and the need to focus research on solving their problem • Awards that recognise the full ecosystem of research, for example member engagement in public communication and outreach, teaching, and community impact 	<ul style="list-style-type: none"> • The hypercompetitive nature of health and medical research promotes individualism over team and joint endeavours • Funders should provide feedback to unsuccessful grant applicants to reduce wasted time and effort • Limited personnel for workload relief • Expectations that sacrifice is required to be successful, poor work-life balance • R&D is not included in health service budgets • High work/case loads of clinician researchers (and absence of sufficient back-fill options in rural settings) makes it difficult to release clinician/researchers to undertake research – even when related to clinical ‘problems’

Table 4. Provision of training and support

The key finding from engagement with EMCRs was that EMCRs need appropriate support to progress from pure researchers to leadership roles in academia and/or to careers in other sectors (e.g. industry, research policy). However, EMCRs reported facing multiple challenges including limited mentoring and sponsorship (advocacy) by senior researchers, limited networking opportunities for (new) collaborations, lack of formalised management training and limited training/information on pursuing career paths outside of academia.

Key strategies to address this issue included formal training and mentoring programs for EMCRs.

Ideas suggested by EMCRs deemed relevant to stakeholders	Strategies suggested by stakeholders to address this challenge	Reported barriers to implementing these strategies
<ul style="list-style-type: none"> • Provide formal training to EMCRs around general grant/research management and leadership • Provide formal mentoring programs for EMCRs, including mentors within and external to the EMCR’s specialty area • Train senior researchers on how to mentor EMCRs • Create incentives to senior researchers to train and mentor EMCRs appropriately- Promote structured succession planning within research groups. This may also include consideration of senior authorship guidance and positioning on grant applications • Review the current structure of PhD programs within universities (also noted in section 1 – security of employment) • Promote seminars/career fairs for PhDs for exposure to non-academic industries looking to recruit PhDs and to hear from individuals who have successfully transitioned • Promote work placements in industry/policy/etc • Promote industry/research policy as a viable career option, not a “failed” academic career • Create industry incentives to employ highly skilled EMCRs who do not have prior industry training • Create financial incentives for NGOs, private practices, etc. to undertake meaningful research using qualified researchers • Decentralise policy jobs – currently Canberra-centric 	<ul style="list-style-type: none"> • Mentoring, for example pairing EMCR mentees with an established researcher mentor, working to improve the mentee's research profile, grant income, and/or publications • EMCR development workshops/programs • Incentives for senior academics to engage in mentoring and development activities with EMCRs, for example including <i>Supervision and Researcher Development</i> as an assessment category for academic promotion • Networking opportunities, symposia, conferences, webinars • EMCR representation on university committees • Professional development focusing not only on research skills but also other transferrable skills, e.g. commercialisation, communication • MCR involvement in editing scientific journals • Training for rural health service clinicians in research 	<ul style="list-style-type: none"> • Capacity and resourcing to deliver and manage programs • Promotion of programs, particularly to those who are less easily accessible • Lack of support from senior researchers, broader career development seen a distraction • HR systems – different professional development available depending on whether one is employed in a professional or academic position • Funders should encourage senior researchers to mentor EMCRs as part of the assessment criteria, rather than focusing on driving early EMCR independence • Lack of local critical mass in rural settings • Lack of research plan within rural health service strategic plan

Table 5. Support for diversity

The key finding from engagement with EMCRs was that diversity needs to be championed to ensure a wide range of perspectives are embedded in research and that individuals from all backgrounds are valued. However, EMCRs reported facing multiple challenges with respect to diversity including there being too strong a focus on academic metrics (e.g. number of publications), that being associated with an established lab and under an existing research program is more likely to result in success than exploring new questions/innovative ideas, there being a lack of diversity in peer reviewers (e.g. with families, women, culturally and linguistically diverse, rural backgrounds), a failure to recognise future feasibility/impact of commercially geared research, that research involving protected IP cannot be published, and overly restrictive career disruption guidelines.

Key strategies to address this issue included embedding of diversity within research. Note that a clear message was that strategies must ensure diversity does not become an additional burden for those of a minority population.

Ideas suggested by EMCRs deemed relevant to stakeholders	Strategies suggested by stakeholders to address this challenge	Reported barriers to implementing these strategies
<ul style="list-style-type: none"> • Encourage institutions to address conscious and unconscious bias within their organisation to ensure diversity of EMCRs is supported, valued and cultivated • Create structures and guidelines to support diversity and create meaningful change within organisations • Increase paternity leave to normalise equitable division of parenting responsibilities • Incentivise moves to rural, regional and remote areas to conduct research issues there and build research capacity. 	<ul style="list-style-type: none"> • Programs that are specifically designed for key EMCR groups. For example, a co-design workshop with Indigenous researchers indicated that traditional mentoring may not be suitable, so instead an Indigenous-led collective program is being developed. • Diversity metrics, such as gender and diversity leadership KPIs • Diverse representation in senior committees, peer review panels, and mentors • Strategies to increase diversity of senior researchers and their visibility to EMCRs • Institution membership in diversity programs • Frameworks, policies and procedures to ensure equity • Support schemes for carers, parents, for example financial assistance for researchers to re-establish their research careers following a period of carer leave • Training of award assessors to be aware of unconscious biases, selection of assessors for diversity • Strategies to account for performance relative to opportunity 	<ul style="list-style-type: none"> • Capacity and resourcing to deliver and manage programs • Lack of diversity in senior researchers despite efforts to improve this • The challenge of providing a robust evidence base for policies and processes • Ingrained expectations of what a successful academic looks like, i.e. Cat 1 grant and many peer reviewed publications • Difficulty in recruiting peer reviewers

Table 6. Ideas suggested by EMCRs potentially in scope for MRFF currently being considered by the Department

- Consider how grant application criteria could support EMCR development
- Consider how grant opportunities could best be scheduled to support EMCR
- Explore different grant funding models
- Increase communication with the sector
- Consider options for enhanced funding of EMCRs
- Review salary amounts that can be applied for
- Provide feedback to unsuccessful applicants to improve future applications
- Broaden assessment metrics to recognise experience outside academia, research area mobility, and relative opportunity
- Promote diversity throughout the grant application/assessment process

(Complete list of EMCR suggestions within the Key Findings and Outcomes of the Health and Medical Research Early to Mid-Career Researchers Roundtable document, also available at the Department's website)