



Australian
Academy of Health and
Medical Sciences

Feedback on the draft changes to the NHMRC Open Access Policy

SUBMISSION FROM THE AUSTRALIAN ACADEMY OF HEALTH
AND MEDICAL SCIENCES

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Summary

The Academy would like to thank the NHMRC for the opportunity to provide comment on the proposed changes to their open access policy in this targeted consultation. While we are broadly supportive of this move, we urge the NHMRC to carefully consider what financial and other support mechanisms will be provided to accompany the mandate for immediate open access publication for NHMRC-funded research. If this new policy is introduced without any support for researchers and research organisations, there is a risk of large-scale negative impacts to the health and medical research sector, predominantly financial impact, which could negatively affect longer term research outcomes. This change needs to be introduced in concert with financial support to ensure that the Australian health and medical research sector maintains its world-class output and engagement in the international research community.

In this submission, we have summarised the likely broader unintended consequences of the proposed changes to the open access policy for your consideration. We have also provided suggested approaches that the NHMRC could take to mitigate these negative impacts and assist in finding a smoother path forward to a more open access publishing environment.

Summary of proposed actions to support implementation of the NHMRC's open access policy

Issue to be addressed	Proposed Actions
<p>1. Increased costs of publishing for both researchers and research organisations</p>	<p>1. Establish a dedicated funding scheme to support the costs of publishing</p>
<p>2. Lack of clarity for authors (researchers) about how to implement the new open access policy:</p> <ul style="list-style-type: none"> • What constitutes NHMRC-funded research under this policy? • How should the CC BY licence be applied at the time of publication? 	<p>2. Provide clarity for Australian health and medical researchers and research organisations by:</p> <p>2a. Defining “NHMRC-funded research” in the open access policy, considering the implications for both costs and standing of Australian researchers funded through NHMRC, given the potential for impact on international collaborations.</p> <p>2b. Provide specific directions for researchers (authors) regarding how to apply the CC BY licence at the time of publication.</p> <p>2c. Provide tools to assist researchers to apply the policy (eg cOAlition S’s Journal Checker)</p>
<p>3. Negative impact on researchers’ career progression, particularly for junior researchers (EMCRs):</p> <p>Increased costs, particularly for high impact journals, create a prohibitive publishing environment for junior researchers with fewer financial resources</p>	<p>3. Monitor the impacts of the new policy on publishing behaviour, costs associated with publishing, administrative load on researchers and equality, diversity and inclusion matters.</p>

Requiring immediate open access for publications will have broad negative impacts on the health and medical research sector

The Academy is broadly supportive of the principle to move to a more open access publishing environment and in agreement with the underlying intention of the proposed changes to the NHMRC’s Open Access Policy and Guidance¹. However, while the benefits of such a move are obvious, compulsory and immediate open access publishing is not trivial nor cheap to implement. The policy requires that authors comply, yet not all factors influencing open access publishing lie in their control. **The extent and scale of the potential negative consequences on the health and medical research sector should be carefully considered when introducing these policy changes.**

Without action to mitigate these negative impacts, there is a risk that unintended consequences of the policy change could threaten Australia’s position as a world-class health and medical research nation. As the NHMRC is the major funder for health and medical research in Australia, every researcher working in the Australian sector is likely to conduct and publish NHMRC-funded research at some stage in their careers. Any negative consequences that result from the new NHMRC policy, whether intended or not, will undoubtedly impact the health and medical research community in Australia.

In the sections below, we discuss the three most likely significant consequences of the new open access policy, and propose approaches that the sector and NHMRC can take to mitigate these effects.

1. Increased costs of publishing for both researchers and research organisations

The impact of greatest concern is the potential for a rapid escalation of costs associated with publishing health and medical research findings. The draft NHMRC Open Access Policy describes the international legal precedent for author use of the CC BY licence, which should allow for open access publication without cost. However, publishers could respond by shifting costs to authors through new mechanisms to support their business model and recover their costs. Alternatively, publishers could alter their article submission processes to render it near impossible for authors to apply the no-cost CC BY licence and ensure that authors pay for immediate open access instead.

There has been no indication that additional funding will be available to cover any costs associated with implementing the new policy, whether the final policy will incorporate option A or option B (described in the consultation draft). Consequently, costs will inevitably fall to individual researchers and teams, or their host organisations. Research organisations like universities and medical research institutes already provide significant financial support to researchers to cover the funding needed to conduct NHMRC-funded research. This is mainly because NHMRC grants provide only partial funding for staff (PSPs, Fellowships or Investigators) and research projects (direct costs only), which leaves a significant gap that must be covered just to carry out the proposed research. If the costs of publishing – the primary output for disseminating research findings – escalate on implementation of this policy, it could be financially devastating for the sector. An example of the potential costs of publishing using gold open access options at three different publishers is provided below.

Examples of publishing costs through gold open access

<p>Over five years, there were</p> <p>29,253</p> <p>publications</p> <p>from NHMRC-funded research (2008-2012)²</p>	<p>In Springer Nature journals³: Gold open access would cost</p> <p>\$87 million per year</p>	<p>In Elsevier journals⁴ Gold open access would cost</p> <p>\$2 to 69 million per year</p>	<p>In the Lancet journals⁵ Gold open access would cost</p> <p>\$38 million per year</p>
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Any increased costs could also carry longer term implications for Australian researchers taking part in international collaborations. If two or more research groups are involved in producing a scientific paper, even within the same research organisation, one group may not have the resources to pay open access fees for a high impact journal. This may lead the group with lesser funds to opt for a cheaper option, resulting in a lower level publication and adversely impact future collaborations.

To reduce the impact on the sector, we propose that a separate and dedicated fund should be established to assist with the increased costs of publication associated with providing immediate open access. Such a scheme would require guidelines for the standard of journal that would be supported through the scheme, to avoid essential funds being diverted to predatory journals. This strategy would support principles of research quality through these guidelines and encourage researchers to publish NHMRC-funded work in high quality journals.

Proposed action 1: Establish a dedicated funding scheme to support the costs of open access publishing. This would exclusively provide financial support for researchers and research organisations to assist in implementing the new requirement for immediate open access on publication.

This scheme could provide financial support via authors' research organisations, who would apply for funds to cover the costs of publications from NHMRC-funded research. NHMRC should set guidelines for the standard of journal

2. Lack of clarity for authors (researchers) about how to implement the new open access policy

The open access policy provides advice and a template statement for researchers publishing their work to apply the CC BY licence and gain open access without payment as it is set by an international legal precedent. However, the explanation is general and is likely to create difficulties when researchers are submitting articles and having to navigate author gateways in the online submission process. Publishers could engineer their interactions with authors during the submission and acceptance processes to solely direct authors to a paid option for open access. Without clarity, authors may feel the only option is to choose to pay for open access. This could rapidly escalate costs of publication if the process that an author should take to apply a CC BY licence to their publication is not clearly articulated.

It is also unclear what research falls under the term "NHMRC-funded research", and will therefore be subject to this updated policy. Most Australian researchers are part of research teams and international collaborations. Researchers based overseas may be subject to their own grant policies, leaving Australian NHMRC-funded collaborators to navigate and potentially bear the cost of open access publications under the NHMRC policy, even when they are not leading the research being published. If an Australian researcher is not the lead investigator, the new open access policy could leave an NHMRC-funded middle author to pay for open access on behalf of the entire international research team.

Tools for NHMRC-funded researchers would greatly assist researchers to comply with the policy. While there are tools available for the international community, Australian researchers would benefit from tools that apply in the Australian context. International examples of tools include:

- Journal Checker Tool⁶ – developed by cOAlition S, this tool provides a rapid pathway for authors to identify whether their funder and journal choice is compatible.
- Guide to applying for Creative Commons licences – resources from overseas sources (eg the Netherlands⁷) could be adapted for the Australian context to better assist authors in applying the policy when publishing NHMRC-funded findings.

We propose that greater clarity be provided in the NHMRC open access policy for both a definition of “NHMRC-funded research” and how researchers should apply the CC BY licence when navigating the publishing process, including tools for the Australian context.

Proposed action 2: Provide clarity for Australian health and medical researchers and research organisations (eg universities and medical research institutes) by:

- 2a. Defining “NHMRC-funded research” in the open access policy.
- 2b. Provide specific directions for researchers (authors) regarding how to apply the CC BY licence at the time of submission for publication such that paying for open access can be avoided where possible.
- 2c. Provide tools to assist researchers to apply the policy (eg cOAlition S’s Journal Checker)

3. Negative impact on researchers’ career progression, particularly for junior researchers (EMCRs)

Whilst all Australian health and medical researchers aspire to publish in the highest impact journals, this can be more difficult to achieve for early and mid- career researchers. Given that there is support needed to apply this policy, there is a risk that specific groups of researchers may be disproportionately impacted.

This potential impact of the new policy is of particular concern for more junior researchers (EMCRs) who are building their careers and may be more limited in their strategic choices on where to publish. They are also likely to have reduced access to discretionary funds, and a smaller pool of total grant funds to draw upon. Regardless of the impact and quality of the research, younger and more poorly resourced researchers may be forced to publish in journals with lower publishing fees and correspondingly lower impact factors purely because of the costs involved.

The negative impacts on career progression have been recognised by the European Research Council, where a proposed EU move to genuine open access was refused on the basis of it detrimentally affecting early stage researchers⁸. Furthermore, the US National Institutes of Health have maintained a 12 month embargo period for NIH-funded research, indicating a reluctance to implement a fully open access policy⁹.

We propose monitoring and evaluation of the impacts of the new draft policy, which should include areas of equality, diversity and inclusion. This approach would also allow for a rapid response to any negative trends emerging to support the sector in the transition.

Proposed action 3: Monitor the impacts of the new policy on publishing behaviour, costs associated with publishing, administrative load on researchers and equality, diversity and inclusion matters.

These factors could be informed by data already collected by NHMRC and research organisations. Monitoring impacts in these areas will assist NHMRC-funded researchers, research organisations and the NHMRC to identify any major issues as they emerge and develop approaches to mitigate the effects.

References

- ¹ NHMRC (2021) *Consultation: Proposed revisions to NHMRC's Open Access Policy and Further Guidance (April 2021)* <https://www.nhmrc.gov.au/about-us/resources/open-access-policy>
- ² NHMRC (2020) *Measuring up 2018: NHMRC supported research*. <https://www.nhmrc.gov.au/about-us/publications/measuring-2018>
- ³ Cost of gold open access publication in *Nature* and 32 *Nature* primary research journals (Springer Nature), 9500 Euros (\$14,794 AUD) - <https://group.springernature.com/cn/group/media/press-releases/springer-nature-announces-gold-oa-options-for-nature-journals/18614608>
- ⁴ Cost of open access publication in one of Elsevier's >1000 field specialty journals, 220- 7600 Euros (\$342-\$11,835 AUD), <https://www.elsevier.com/en-au/open-access>
- ⁵ Cost of gold open access publication in one of 10 different Lancet journals, USD \$5000 (\$6,457 AUD) <https://www.thelancet.com/open-access/>⁶ cOAlition S (2020) cOAlition S releases the Journal Checker Tool, a search engine that checks Plan S compliance. Available at: <https://www.coalition-s.org/coalition-s-releases-the-journal-checker-tool/>; Tool available at: <https://journalcheckertool.org/>
- ⁷ Pascal Braak, Hans de Jonge, Giulia Trentacosti, Irene Verhagen, & Saskia Woutersen-Windhouver. Guide to Creative Commons for Scholarly Publications and Educational Resources (Version final) (2020, October 28) Available at: <http://doi.org/10.5281/zenodo.4090923> Note: This publication is focussed on advice for authors in the Netherlands.
- ⁸ European Research Council (2020) *ERC Scientific Council calls for open access plans to respect researchers' needs*. Available at: <https://erc.europa.eu/news/erc-scientific-council-calls-open-access-plans-respect-researchers-needs>
- ⁹ National Institutes of Health (2016) *What is the NIH Public Access Policy?* Available at: <https://www.nih.gov/health-information/nih-clinical-research-trials-you/what-is-nih-public-access-policy>

All websites were accessed on 4 May 2021.