

Submission to McKeon Strategic Review of Health and Medical Research

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Summary: This submission concerns a vital and overlooked aspect of public health and medical research - its publication. It highlights the anomaly whereby most research literature becomes privately owned by journal publishers and surrounded by paywalls, instead of a public resource. The National Health and Medical Research Council recently declared a policy to address this problem, but further action is needed. The submission suggests that the review panel members try to read Australian publicly funded research literature themselves to understand how costly and poorly organized it is.

Why is it in Australia's interest to have a viable, internationally competitive health and medical research sector.

Medical research brings new knowledge with profound economic and social benefit.

How might health and medical research be best managed and funded in Australia?

At present, health and medical research literature representing billions of Australia taxpayer dollars a year is given away to private journal publishers who sell it at fabulous profit to readers. This arrangement is widely considered to be absurd, undemocratic and unethical, yet persists nonetheless. (See references (1-4).

Compared with other countries public research managers in Australia have been slow to address the 'journals crisis'. Recently our main medical research funding body, the National Health and Medical Research Council, announced it will require the research literature it funds to become publicly accessible after 12 months (5), in a policy that is relatively weak. It is beyond the scope of this submission to explain in detail the flaws of the NHMRC 'public access' policy but

1. The policy applies to unofficial literature only (the copyright of official literature will still go with journal publishers) and does not confer immediate public access. It is designed to benefit academia mainly, because users of the journals outside academia might not realise that journal articles will be available unofficially for no cost.
2. It does not address the root cause of the crisis in research publication which is the prevalence of a print age business model among peer-reviewed journals which has paywalls around content. A minority of progressive journals uses a digital age business model which makes research literature a public resource through Creative Commons Licence, but the NHMRC discourages its researchers from publishing through these journals because it does not cover the author charges of the journals.

Those who manage public research in Australia should be less bureaucratic and more accountable to the public and the patients whose lives medical research concerns. I note that most of those associated with the NHMRC are

senior medical administrators or long-term academics who are far removed from the 'pointy end' of healthcare, medicine and research. Conflicts of interest exist because many of the latter have close links with the highly profitable journal publishers, sitting on the editorial boards of journals for career advancement and money.

I believe Australian public research management should represent more sectors of society and the research world. Those who oversee the NHMRC should have better representation from industry, healthcare, the education sector, information science and the general community. It should have input from young academics and researchers as well as senior ones.

What are the health and medical research strategic directions and priorities and how might we meet them?

Research publication is a vital and overlooked aspect of health and medical research. The crisis which currently envelopes it should be addressed in strategic considerations and not treated as a side issue. Research publication on its own should be the subject of independent inquiry and review in Australia. (Similar reviews have been conducted in other countries). It is pointless to pour billions of dollars of public money into basic research, if its main tangible output is then given away.

The overwhelming priority in health and medical research is to ensure that the main literature arising from it becomes a public resource rather than privately owned by a motley bunch of private publishers. This could be achieved by increasing the strength of the NHMRC's recently announced 'public access' policy to match that of the USA's far stricter 2007 law (6). (Ideally, Australia should also legislate in the area). This would mean our research literature could be archived centrally in the central literature database PubMed Central with public access after a minimum of 6 months instead of 12. Any researchers who did not comply with the directive would lose their funding. At the same time researchers could be encouraged to publish through the progressive journals that use Creative Commons Licence and the Open Access business model (this is not part of the US law, but done by other funding bodies and institutions). This could be done by giving money to researchers to cover the publication costs of their work and by making the methods used to assess research impact more meaningful (a description of the methods used to evaluate research are beyond the scope of this submission, but currently rely on the 'brands' of established journal publishers a great deal).

Publicly funded researchers should be prohibited from turning over copyright of their work to publishers (as is the case for most researchers in the USA in both public and private environments).

How can we optimize the translation of health and medical research into better health and wellbeing?

The health and medical research literature which appears in peer-reviewed journals is intended to be part of the 'commons' and it is through historical accident it currently becomes privately owned. Journal literature is basically new knowledge which should be available to everyone. It is by far the most valuable reference source in medicine and healthcare, essentially being their bedrock. Often it comes at the cost of lives, not to mention massive public

investment. It stands to benefit society both socially and economically. (Industry is a particular beneficiary of publicly accessible literature). Currently, only a fraction of Australian publicly funded research literature is published under Creative Commons Licence through the personal choice of researchers who prefer progressive journals. Australia should aim to have all its research published this way. Then our research literature could be properly archived according to subject matter instead of in a maze of private and public databases of which none is complete. The powerful technique of data mining could be applied to the research literature, thus finally applying the power of modern information technology to the valuable resource the literature represents.

Australia should contribute to PubMed Central, the international database which archives official journal literature and makes it available to readers in a sophisticated user friendly fashion.

I am a biomedical scientist who has worked in healthcare, biotechnology and international academia and often have been unable to access Australian publicly funded research because of the paywalls of journal publishers. In addition, I have been a celiac disease patient and found the knowledge of my doctors was woefully outdated in this area, despite an active research effort in Australia on the condition. It is hardly surprising doctors cannot keep abreast of developments in medicine when they must generally pay a journal publisher at least \$30 to read a single publicly funded development.

To appreciate the inaccessibility and poor organization of Australian publicly funded research literature, I suggest the McKeon review panel members try to read it. They could start with the literature output of the NHMRC's 10 best research projects (7), which in total represents tens of millions of public dollars. The papers are notably hard to locate (the NHMRC's booklet on the projects omits any reference to them). If the panel members do manage to locate the relevant literature (for example by searching with the public bibliographic journal database PubMed) they will frequently encounter the paywalls of publishers in trying to read it. This experience is exactly that of health and medical professionals in the community when trying to access and translate the knowledge that Australian research generates (even within academia the literature is not be entirely accessible).

References

- (1) Richard Smith, *The Trouble with Medical Journals* (London: Hodder Arnold, 2011), 211
- (2) George Monbiot, '[Academic publishers make Murdoch look like a socialist](#),' *The Guardian* (29 August 2011)
- (3) Diane Lester, '[Unshackling basic knowledge](#)' *Policy* 27(4) 48-52 Centre for Independent Studies (Summer 2011/12)
- (4) Colin Steele, '[Scholarly licence to print money](#)' *The Australian* (25 January 2012)
- (5) '[Revised policy on dissemination of research findings](#)' 22 February 2012 NHMRC website
- (6) 'American taxpayers are entitled to the research they've paid for' [Alliance for Taxpayer Access](#)
- (7) [10 of the Best Research Projects](#) 2010, NHMRC publications