

Editorial

Quantifying and evaluating research in paramedicine – why our own field of research code matters

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On 1 June 2020, the Australian Research Council (ARC) released the outcomes of the recent review of the Australian and New Zealand Standard Research Classification (ANZSRC) (1). In what constitutes a significant milestone for paramedicine in Australia and New Zealand, we have been allocated our own paramedicine 'Field of Research' (FOR) code for the first time.

So, what is a FOR code and why is getting our own of such significance? The ANZSRC allows measurement and analysis of research and experimental development undertaken in Australia and New Zealand (2). These data have a wide range of applications in government, industry and tertiary sectors, nationally and internationally. A prominent example is the ARC's Excellence In Research (ERA) research evaluation framework (3). ERA uses the ANZSRC to identify excellence in research by comparing Australia's university research effort against international benchmarks, identifying emerging research areas and opportunities for further development, and creating incentives to improve Australian research quality. ANZSRC-informed frameworks such as ERA therefore impact on research grant funding availability and prioritisation, which of course is critical to the conduct of quality research capable of achieving meaningful impact. For universities, ANZSRC data allows evaluation of institutional performance in relation to their strategic research priorities, links to external research funding income success, and facilitates prioritisation and allocation of that funding (4).

The first iteration of the ANZSRC was released in 2008, replacing the Australian Standard Research Classification that had come into effect in 1998. Within the ANZSRC are three classifications: Type of Activity (TOA), Socio-economic Objective (SEO) and FOR. The FOR classification has a three-tiered hierarchical structure consisting of divisions, groups and fields. Within the 2020 classification are 23 divisions, encompassing 213 groups and 1967 fields (1). The hierarchy in which paramedicine sits is as follows:

- Division 32 'Biomedical and Clinical Sciences'
- Group 3202 'Clinical Sciences'
- Field 320219 'Paramedicine'.

Researchers allocate a FOR code to their work. Attribution may be 100 percent to a particular code but can also be partially attributed across several codes. Until now, there has been no systematic method to reliably identify paramedicine-related research for the purposes of evaluation of quantity, focus and quality. Paramedicine research has been anecdotally classified under codes such as 'Emergency Medicine' or 'Clinical Sciences not elsewhere classified', resigning it to be being diluted in among the diverse areas the research may also have connected with.

The creation of the paramedicine code is important for many reasons. First, it constitutes overdue external recognition of paramedicine as a discipline that has and continues to demonstrate strong research growth, in turn indicating our maturation as a profession. Second, it will enable robust future evaluation of the 'epidemiology' of paramedicine research to identify areas of strength and weakness, attention and neglect, impact and engagement. This could help in the development of a research agenda and strategy for paramedicine, and promote wider collaboration and partnership between paramedic researchers (5,6). Third, it will enable paramedic researchers or research centres to quantify their research volume, quality and impact more systematically, resulting in more competitive applications to grant funding bodies and enhanced likelihood of success.

This does not however constitute the end of the journey regarding the ANZSRC. There are no sub-levels at the 'field' level, so the new FOR will serve as a catchall for all paramedicine research regardless of the specialty area it may focus on. Given the ANZSRC reviews currently happen every 10 years, a decadal goal must be the addition of paramedicine at the 'group' level in hierarchy. This would allow multiple paramedicine specialty FOR codes to fall within the group, allowing more precision in allocation and giving recognition to the evolving specialty areas that exist within the profession. It could be argued that we are not quite there yet with regard to having a code at the 'group' level, but the current trajectory in paramedicine research suggests it will most likely be demonstrable in a decade. A group-level code would also give paramedicine an individual presence in ERA reporting, which currently reports down to the group level. Even with our own FOR, our research will be collapsed with other FOR codes and non-specifically reported in ERA under 'Clinical Sciences'. An early initiative to move us toward a group of our own would be to engage in retrospective re-coding of research since 2016 through to 2020, the period that will be documented in the next ERA report due in 2022. While we won't appear distinctly in that report, robust data on the 5-year period will help prosecute the case for a group-level code in the future.

On a related note, the creation of the paramedicine FOR arose following several rounds of public consultation undertaken by the ARC and its ANZSRC partners. The initial discussion document drew 237 submissions in total, and the final consultation draft 238. Of those, only five argued for a paramedicine FOR. Significant developments such as the FOR code creation don't happen by accident. If we are to continue to grow the discipline, broader engagement in consultative processes such as this will be essential. It is incumbent on us all to advocate for our profession across a diversity of forums, using our collective voice to promote the continuing evolution of paramedicine.

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