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COVID-19's impact on Australia's health research workforce

The COVID-19 pandemic has seen health and medical research promoted as countries establish resilient health systems and rapidly responsive prevention, detection, and treatment methods. However, the pandemic will probably negatively affect the capacity and outcomes of the health and medical research sector itself.¹

Research Australia is a national alliance of health and medical research stakeholders. In May, 2020, all members on Research Australia's contact list were invited to participate in, and share with colleagues, a 10 min online survey. The questionnaire contained 52 questions about research and employment and perceptions of the effect of the pandemic on researchers' activities (Deakin Human Research Ethics Committee project number HEAG-H-71_2020). Data were analysed with the use of descriptive statistics and logistic regression.

1212 members responded, with most of the responses from researchers in the university sector (79.4%), who are early in their career (41.7%), working full time (70.9%), and in permanent positions (38.1%; appendix). Overall, 79.6% of participants indicated that their research was affected by the pandemic, with a further 9.7% of participants indicating that it was likely to be affected in the future. Commonly identified issues with current research were regarding participant recruitment in trials (49.3%), an inability to do research remotely (51.2%), and interruptions to the provision of equipment, supplies, and materials (28.4%). Most respondents reported effects on higher degree research students and early career researchers in their teams. Overall, 69.4% expected their own research to be affected after 2020, with the most commonly anticipated effects identified as delays in achieving project milestones (88.7%), publications

(80.9%), and new funding (63.1%); reductions in overall funding (63.1%); and staff losses (45.8%).

Perceived new developments in response to the pandemic included improvements in collaboration within their own organisation (31.5%), their own organisation pivoting existing research (33.2%), and improvements in ethics committee procedures (30.0%).

Respondents from the university sector were less likely to have received extra funding related to COVID-19 from their institution (odds ratio [OR] 0.32, 95% CI 0.20–0.53) and more likely to have noticed an effect on higher degree research students (OR 2.19, 1.61–2.99). Relative to clinical researchers, public health researchers were less likely (OR 0.76, 0.53–1.09) and basic science researchers more likely (OR 1.75, 1.18–2.60) to expect their research outcomes to be affected after 2020, including any effects on higher degree research students (public health OR 0.51, 0.36–0.73; basic science OR 3.09, 2.04–4.67). Relative to early career researchers, mid-career researchers, but not established researchers, were more likely to expect their research outcomes to be affected after 2020 (OR 1.73, 1.25–2.40).

This first Australian national health and medical research sector survey has highlighted that without an injection of funds from the government, this pandemic will have substantial short-term and long-term repercussions on research outcomes. These include a lower capacity to generate new products for industry, health services, and the community, and ensuring a workforce capable of responding to future pandemics with innovation and agility.

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*Anna Peeters, Greg Mullins, Denise Becker, Liliana Orellana, Patricia Livingston
anna.peeters@deakin.edu.au

Faculty of Health, Deakin University, Geelong, VIC 3220, Australia (AP, DB, LO, PL); and Research Australia, Darlinghurst, NSW, Australia (GM)

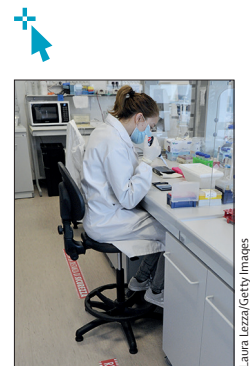
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COVID-19 trial co-enrolment and subsequent enrolment

The COVID-19 pandemic has led to many clinical trials around the world assessing all stages of infection, from prophylaxis to the treatment of severely ill patients who are dependent on a ventilator. In our experience, if the patient's medical condition deteriorates despite the intervention of one clinical trial, the attending physician, patient, or family members might request that the patient be enrolled in a second or third clinical trial.

This request is causing much confusion among clinicians and patients. Industry sponsored trials often prohibit co-enrolment or sequential enrolment and institutional review boards will often not allow this as well.¹ However, there is no regulatory prohibition on co-enrolment in the USA and in many other countries. The enrolment of one patient into more than one study (when a patient fulfils all inclusion criteria and has no exclusion criteria for both studies) has been studied sporadically in trials of mechanical ventilation and resuscitation, and in adult and paediatric critical care.^{2,3}

Concerns about co-enrolment centre on safety, consent issues, health-care worker reluctance, and scientific integrity. Yet available literature suggests that co-enrolment does not influence a patient's safety, the trial outcome, or adverse effects provided that the eligibility criteria of every study are correctly applied and that single-study treatments are



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See Online for appendix

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