RESEARCH AUSTRALIA

CONNECTING • ENGAGING • INFLUENCING

COVID-19 Series: Report 4

A second survey on the impact of COVID-19 on health and medical researchers



ABOUT RESEARCH AUSTRALIA

Research Australia is *the* national alliance representing **the entire health and medical research pipeline** from the laboratory through to the patient and the marketplace.



CONTENTS



FOREWORD 5

EXECUTIVE SUMMARY 6

THE SURVEY 8
Where do they work? 9
Career stages 10
Terms of employment 11
Working from home 13
Care responsibilities 14

Research funding 16
Applications postponed 16

Grant flexibility for existing research 17

Research related to COVID-19 18

Effects of COVID-19 on researchers' work 19

The financial impact on research 21

HDR students and Early Career researchers 22
HDR students 22
Early Career Researchers 22

Impact beyond 2020 23

An opportunity for change 25

Barriers to a rapid research response 26

Facilitators of a rapid research response 27

Long Term restructure supported 28

Ideas for reform 29
Government funding agencies 29
Research organisations 29

Research to respond to COVID-19 30

CONCLUSION 31

ACKNOWLEDGEMENTS

Research Australia acknowledges the assistance provided by Professor Anna Peeters, Director, Institute for Health Transformation, Deakin University and Professor Trish Livingston, Associate Dean, Research, Faculty of Health, Deakin University, in the development of the questionnaire.

This document and the data, ideas and concepts set out in this document are subject to copyright. No part of this document, data, ideas or concepts are to be reproduced or used either in identical or modified form, without the express written consent of Research Australia Limited ABN 28 095 324 379.

COVID REPORT SERIES

In response to the pandemic Research Australia has developed a series of reports to capture the sector's response, the impact on researchers and the effects on the philanthropic organisations supporting health and medical research.



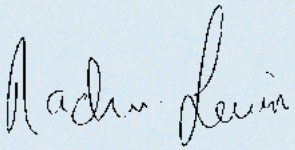
FOREWORD

When this survey was conducted at the end of 2020, most of Australia was relatively free of COVID-19. Victoria was just coming out of a wave of infection that had locked down much of the state for 112 days. There was the hope of vaccines arriving in the new year and a swift transition to a post COVID normal.

Since then, new waves of COVID-19 have swept the globe, once again placing health systems under great pressure and greatly impacting our daily lives and work.

At the time of publication of this report, Sydney is in a lockdown that has already run for weeks; numbers are still climbing and other states are grappling with the prospect of potential outbreaks.

In this context, the findings of this second survey of researchers remain as relevant as several months ago, and it is all the more important that we act on the lessons it gives us. Adapting and protecting our health and medical research workforce and the vital work they undertake for us all, has to be a national priority.



Nadia Levin
CEO and Managing Director
Research Australia





EXECUTIVE SUMMARY

The arrival of COVID-19 in Australia has disrupted the lives of all Australians, including our health and medical researchers.

Our first survey of researchers, conducted in May 2020, identified the short-term effects of COVID-19 on Australia's health and medical research community. The second survey, conducted late last year in November 2020, is the subject of this report. It expands on the findings in the earlier survey and explores the ongoing impact of the COVID-19 pandemic on Australian health and medical research and innovation.

Six months on from the May report, some of the impacts of COVID-19 were more apparent, although of course uncertainty remains one of the hallmarks of COVID-19, in 2020 and beyond.

Since this survey closed in December 2020, COVID-19 has continued to disrupt lives, travel plans and work. Even in Australia, where the loss of life has been very low by international standards, the impact continues to be significant.



Collaboration is the lifeblood of so much research and closing international borders prevented researchers travelling to Australia to collaborate. It also reduced the number of international PhD students able to work in research teams.

Laboratory work could not be conducted from home and so experiments had to be stopped. In many cases, these experiments, which can take weeks and/or months, need to start again from scratch.

Social distancing prevented researchers from meeting with and taking samples from patients involved in clinical trials. Without access to hospitals and clinics, many researchers struggled to recruit new participants in studies.

8 in 10 survey respondents reported that their research had been adversely affected by COVID-19. For those able to estimate the impact on their research budget the most common response was an expectation of a 11 to 20% or a 21% to 40% reduction.

Nearly 7 in 10 expected their research to be affected beyond 2020.

More than 4 in 10 are employed on fixed term contracts, with this ratio higher for early and mid career researchers. There are also gender differences. Even when accounting for career stage, women are more likely than men to be in less secure employment and more likely to be working part time.

We know the pandemic led to increased caring responsibilities for many parents due to school closures and disruptions to childcare. While similar proportions of men and women reported having care responsibilities, COVID-19 had a greater impact on the research of carers who were women.

In better news, the pandemic has led to positive change and there is evidence of some real improvement in collaboration within and outside researchers' organisations, improvements in the time taken to initiate new research, and flexibility in varying existing research.

While there are same variations from the survey undertaken in May, the trend in improvements has been reinforced in the November survey, providing the hope that these changes may persist longer term.

Finally, nearly seven in 10 respondents (69.4%) support a longer-term restructure of Australia's research and innovation funding framework. While not an insignificant undertaking, this sort of reform would set Australian health research up for greater impact far beyond our lifetime.



THE SURVEY

The survey was open between 17 November 2020 and 14 December. Research Australia used a variety of channels to invite participation in this survey, including newsletters, email communications and social media as well as the broader research community networks.

We received responses from 304 individual researchers. 29% confirmed they had participated in the earlier survey in March; 23% advised reported they had not participated in the earlier survey and the balance were unsure.

Respondents to the survey overwhelmingly identified as female (77.5%). One fifth (20.1%) identified as male. One respondent identified as 'other' and six opted not to specify their gender. It is worth noting 54% of all respondents who indicated their location, were from Victoria.

This reflects the relatively higher impact of the COVID-19 pandemic on Victorian researchers due to Victoria's protracted second lockdown, which ended about a week before the survey opened.

While the survey included all the questions contained in the May survey, we took the opportunity to expand the survey in November to explore additional areas, such as carer responsibilities, which can have a bearing on researchers' work. It is these additional questions and findings which are the primary focus of this report.



WHERE DO THEY WORK?

Primary employment

The majority of respondents to the survey, 81.4%, work primarily at a university.

7.7% of all respondents work primarily at a medical research institute.

4% of respondents were primarily employed by a healthcare service or a health provider, including hospitals.

Other respondents to the survey included researchers at private companies (2.6%) and non-government organisations and charities that fund research (1.8%).

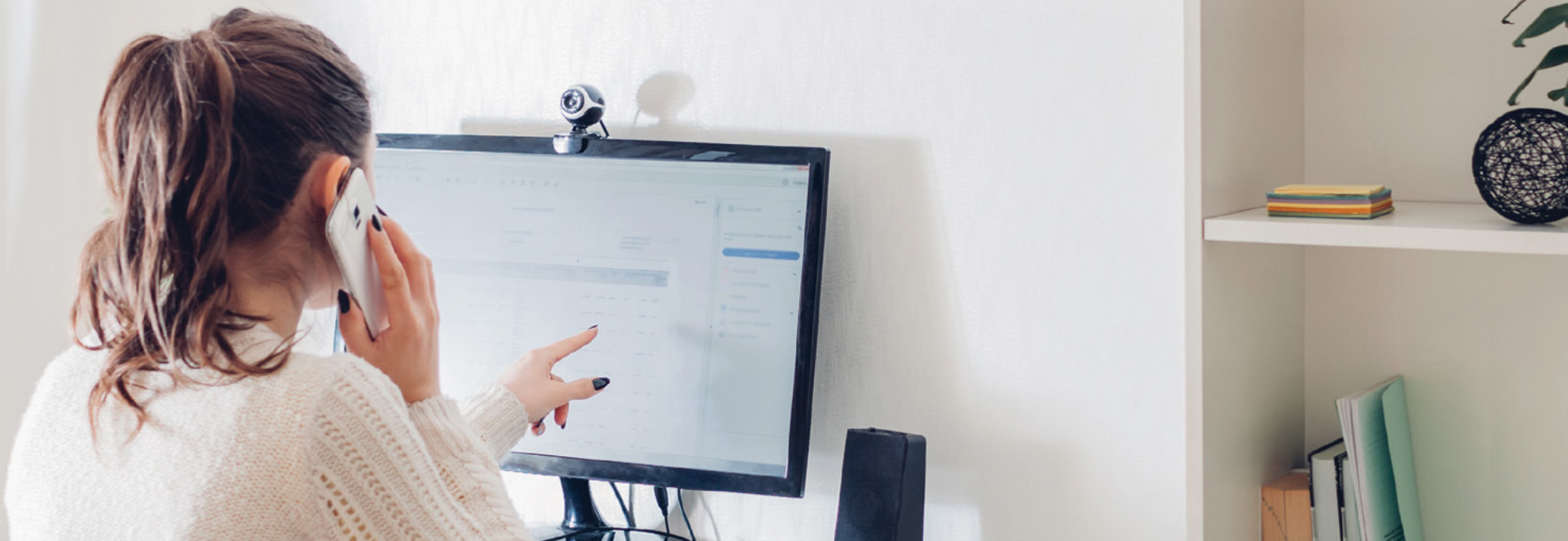
Other employment

Just over one third (37.2%) of all respondents identified one or more **additional** workplaces.

13.5% of university researchers reported also working for a health care service or healthcare provider, and 4.5% for a medical research institute. 8.1% had a position at another university.

Like researchers at universities, many employed primarily at medical research institutes also have other positions. 28.6% reported also working at a university, while 9.5% also have a position with a second medical research institute.

Many of Australia's researchers are clinician researchers; these are doctors, nurses and allied health professionals who combine providing healthcare with research. 27.3% of this group reported having a secondary position at a university while 9.1% also work for a medical research institute.



CAREER STAGES

Researchers are also often divided by the stage of their career. While there are no hard and fast rules, early career researchers are typically up to around six years post the completion of their PhD, with mid career researchers in the subsequent 10 or so years.

Established researchers are at a later stage in their career, often with their own teams, laboratories and/or research fields.

38.3% of respondents to the survey identified as early career researchers; 28.4% of respondents identified as mid career, and 27.7% as established.

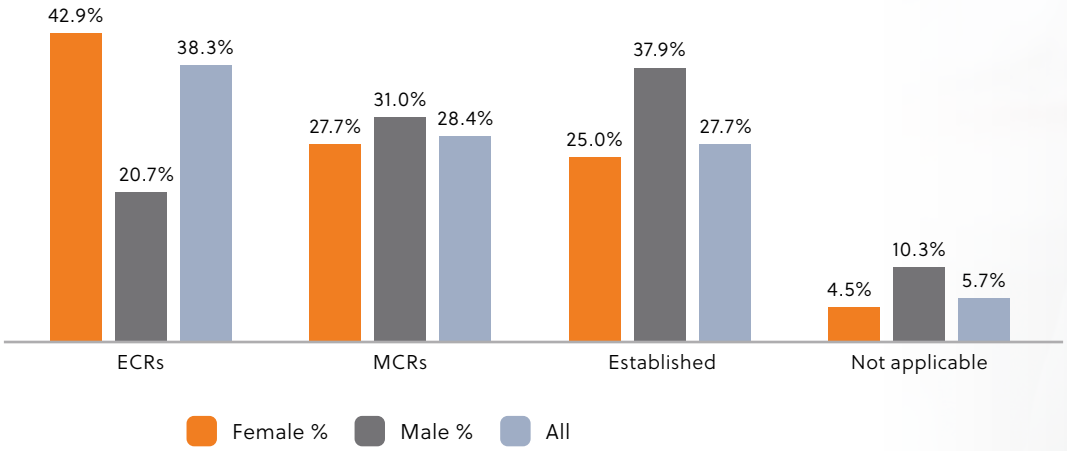
There was a clear gender divide among the respondents, with a greater proportion of women than men at the earlier career stages, and a higher proportion of men in the later career stages.

All respondents to the survey were able to speak to the impact on themselves and their own research, but those who are responsible for a research team or lab have a broader perspective as well as greater responsibility.

37.2% of all respondents to the survey were responsible for a team or laboratory. Teams varied in size from one other team member to 300, with the most common team size being five. The average team size was 17.8.

Once again there was a gender divide with 34.6% of women identifying as being responsible for a lab or team, compared to 51.8% of male respondents.

Figure 1 Career Stage



TERMS OF EMPLOYMENT

The COVID-19 pandemic has revealed differences in the security of employment of different workers and occupations.

Most people would be surprised to learn that for many, a career in health and medical research and innovation is insecure. This is particularly the case for women.

47.6% of all respondents are employed on a full time or part time permanent ongoing basis. 42.2% of all respondents were employed on fixed term contracts. By far the most common contract term was 12 months. A further 5.0% are employed on a casual basis.

A greater proportion of male than female respondents are employed on a permanent full time basis, probably reflecting the relatively higher number of male respondents who identified as being at later career stages. Conversely, a much higher proportion of those employed part time on contract are women, at a ratio more than ten times higher than men. A greater percentage of men than women reported being in permanent full time employment in all career stages except mid career. A greater percentage of women mid career researchers reported being in both full time and part time permanent employment.

A note of caution needs to be sounded on this finding; the number of men participating in the survey was significantly fewer than the number of women, and the number of male mid career researchers who responded to the survey was small (n=18).

While the percentage of casual employees is low compared to industries like hospitality and retail, the number of respondents on fixed term contracts is far higher than the national average.[1]

While perhaps not as insecure as causal employment, this type of fixed term contract employment is also insecure. It means that employment is dependent on the ability to secure grants and funding for the research being undertaken. Delays and disruptions to grants, such as those caused by COVID-19, can mean a loss of income, and no job. Early career researchers are most likely to be employed on a contract (60.5%) or on a casual basis (11%).

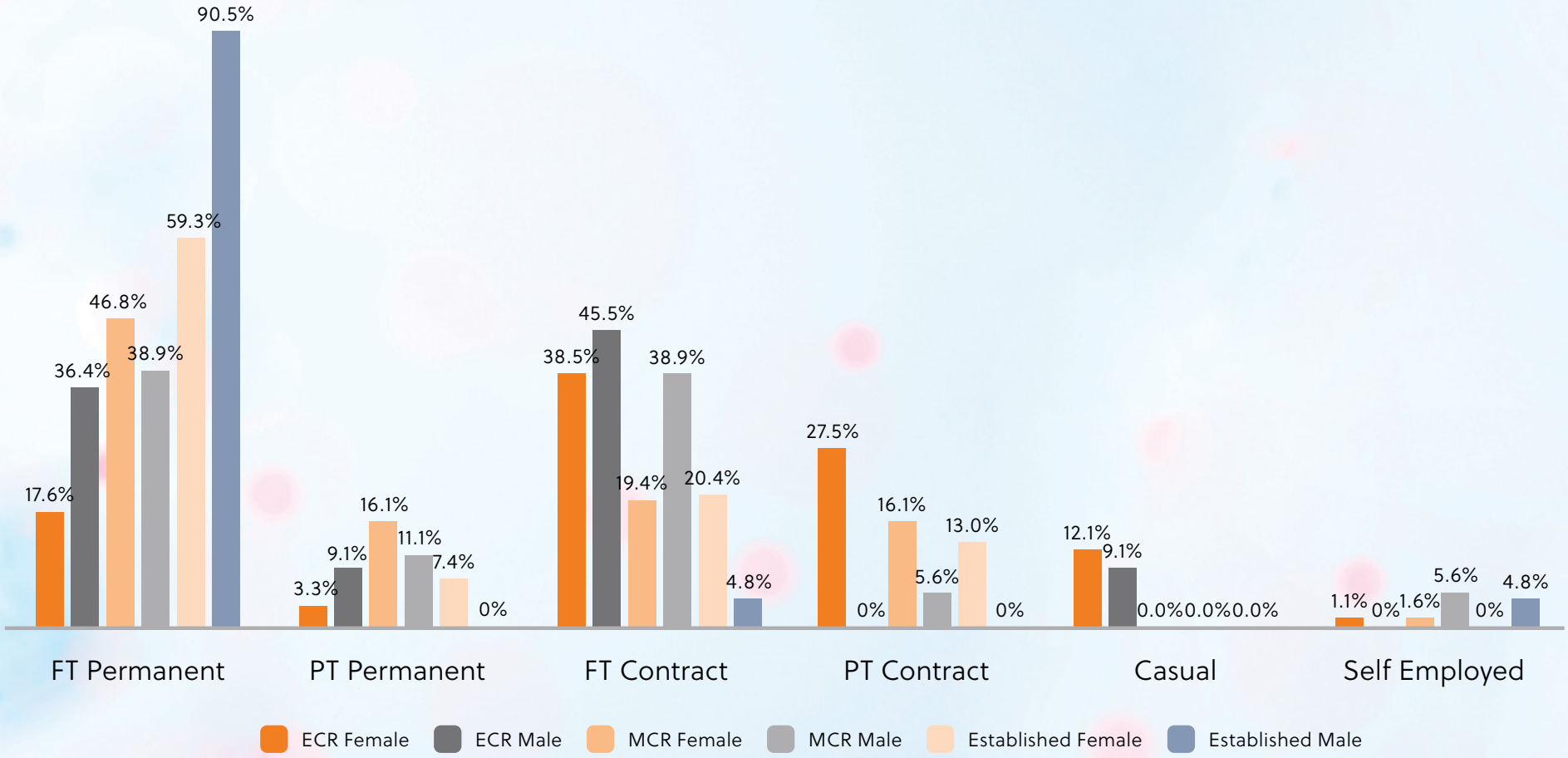
Not surprisingly, established researchers who responded to this survey are predominantly (65.4%) in full time permanent employment. There are proportionally more researchers employed causally or on fixed term contracts at the earlier career stages.

1 G, Gilfillan, Trends in use of non-standard forms of employment, December 2018, Australian Parliamentary Library

TERMS OF EMPLOYMENT cont.

Figure 2 Career Stage by Employment type and gender

Even when accounting for career stage, overall women are more likely than men to be in less secure employment and more likely to be working part time.



WORKING FROM HOME

Like most Australians, the COVID-19 pandemic changed how and where researchers worked. Only 9.3% of respondents reported that their work practices did not change.

Half of all respondents reported working exclusively from home, with a third reporting they worked from home more than before.

What's more, many expect this to be a permanent change. **Nearly three quarters (74.6%) expect to work more from home in the future even when they are allowed to return to their workplaces. Only a quarter (25.4%) expect to return to their pre-COVID work practices.**

Figure 3 Working from home

My work practices have not changed: I was already working entirely/mostly from home and this hasn't changed	2.6%
My work practices have not changed: I continued to work from my workplace	6.7%
My work practices have changed: I have worked from home more than previously	33.3%
My work practices have changed: I have worked from home exclusively	50.0%
My work practices have changed: I worked from home for a period but have now returned entirely to my workplace	7.4%

CARE RESPONSIBILITIES

One of the major effects of the COVID-19 pandemic was the closure of schools, with parents required to undertake home schooling for extended periods.

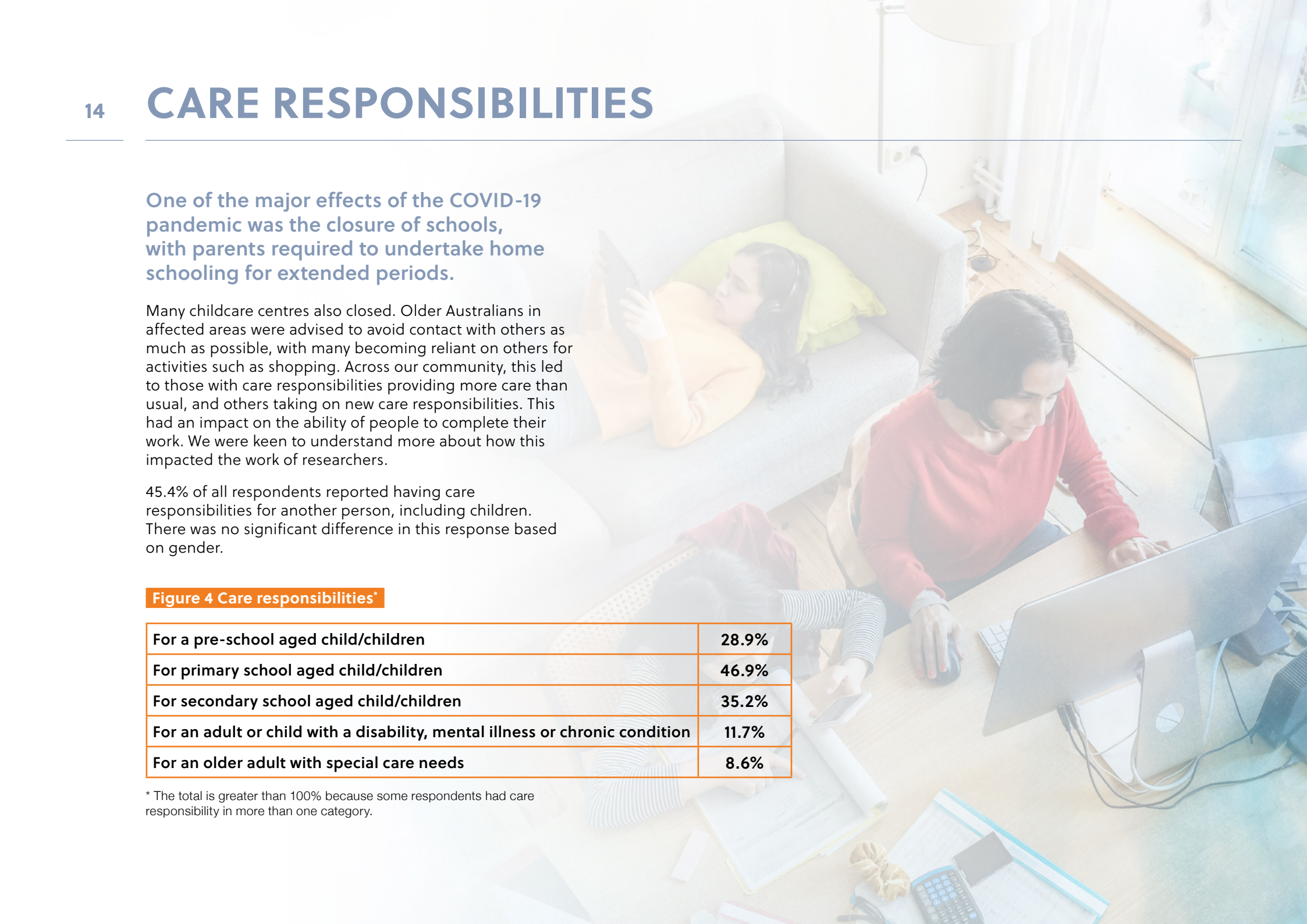
Many childcare centres also closed. Older Australians in affected areas were advised to avoid contact with others as much as possible, with many becoming reliant on others for activities such as shopping. Across our community, this led to those with care responsibilities providing more care than usual, and others taking on new care responsibilities. This had an impact on the ability of people to complete their work. We were keen to understand more about how this impacted the work of researchers.

45.4% of all respondents reported having care responsibilities for another person, including children. There was no significant difference in this response based on gender.

Figure 4 Care responsibilities*

For a pre-school aged child/children	28.9%
For primary school aged child/children	46.9%
For secondary school aged child/children	35.2%
For an adult or child with a disability, mental illness or chronic condition	11.7%
For an older adult with special care needs	8.6%

* The total is greater than 100% because some respondents had care responsibility in more than one category.



CARE RESPONSIBILITIES cont.

Nearly three quarters (72.7%) of those with care responsibilities reported their care responsibilities had increased due to COVID-19. While roughly equal numbers of men and women reported that they had care responsibilities, a slightly greater proportion of women reported their care responsibilities increased due to COVID-19.

Figure 5 Increased care responsibilities

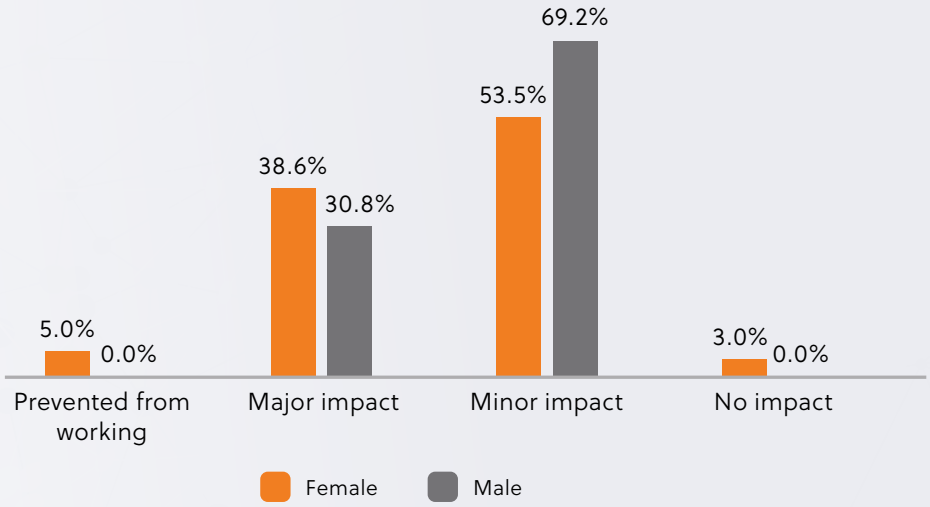
	Care responsibilities	Care responsibilities increased by COVID-19
Women	**46.5%**	**74.3%**
Men	**46.6%**	**69.2%**

The difference is more evident when we consider the impact that care responsibilities had on the ability of male and female researchers to undertake their work.

While 30.8% of males with care responsibilities reported that their care responsibilities had a major impact on their work, 38.6% of women reported a major impact. While 5% of all women with care responsibilities were prevented from working entirely for a period, no men reported this as an impact.

In summary, while similar proportions of men and women reported having care responsibilities, COVID-19 had a greater impact on the research of female carers.

Figure 6 Impact of care responsibilities



RESEARCH FUNDING

Applying for funding, accounting for grants and generally covering the costs of research are a time consuming, stressful and ongoing part of the lives of most health and medical researchers and innovators.

In 2020, grants and funding, like everything else, changed. The following provides some insight into how these changes affected researchers.

APPLICATIONS POSTPONED

Grant processes have been affected by COVID-19 with some annual grant applications in 2020 delayed and others not proceeding at all. In part, the postponement of grants programs in March and April 2020 occurred because of concerns that some researchers would not be able to make applications on time. For example, researchers who are also health workers were working longer hours in our health system, while others were adjusting to working at home and preparing for remote teaching of their students.

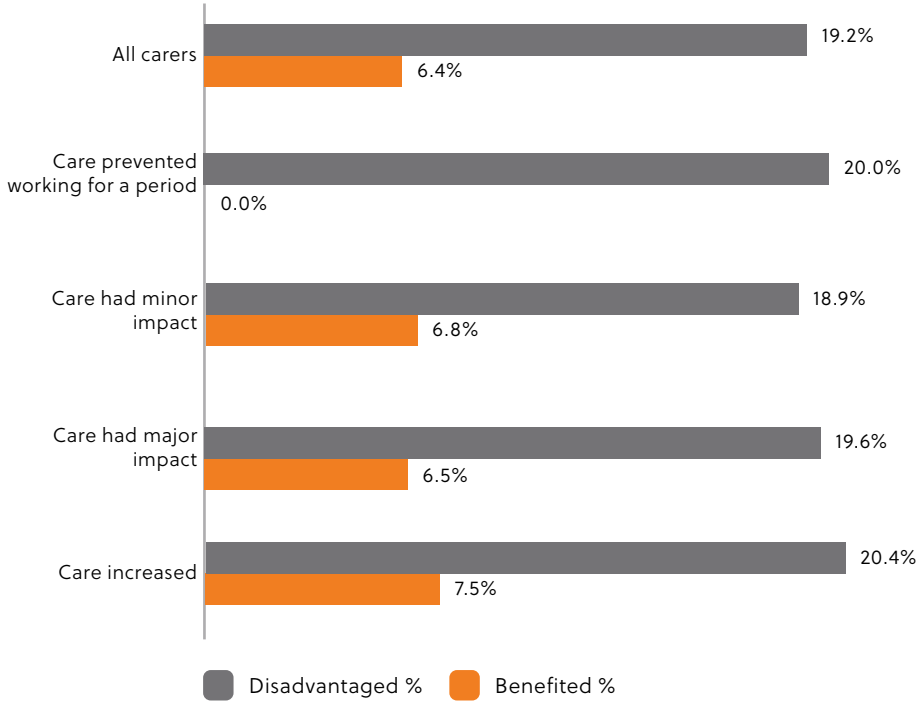
6% of respondents reported having benefited from the delay in grant programs during 2020. 18.2% reported being disadvantaged. There was only a slight variation in responses between men and women.

For those with care responsibilities, one group the changes were intended to help, the situation is more complicated. For those who reported their care responsibilities increased due to COVID-19, 7.5% reported they benefited, but 20.4% reported they were disadvantaged. Similarly, for those who reported their care responsibilities had a major impact on their research, 6.5% reported they benefited and 19.6% reported they were disadvantaged.

None of the respondents who indicated their primary workplace was a hospital or healthcare provider reported either benefiting from or being disadvantaged by the postponement of grant programs.

Overall, it seems the changes to the grant processes disadvantaged more people than they assisted, and this remains the case for the sub-groups they were intended to assist.

Figure 7 Carers and effect of grant postponement



GRANT FLEXIBILITY FOR EXISTING RESEARCH

In addition to the changes made to applications for new grants, the National Health and Medical Research Council (NHMRC) and the Australian Research Council (ARC) announced a number of measures to assist researchers with existing grants.

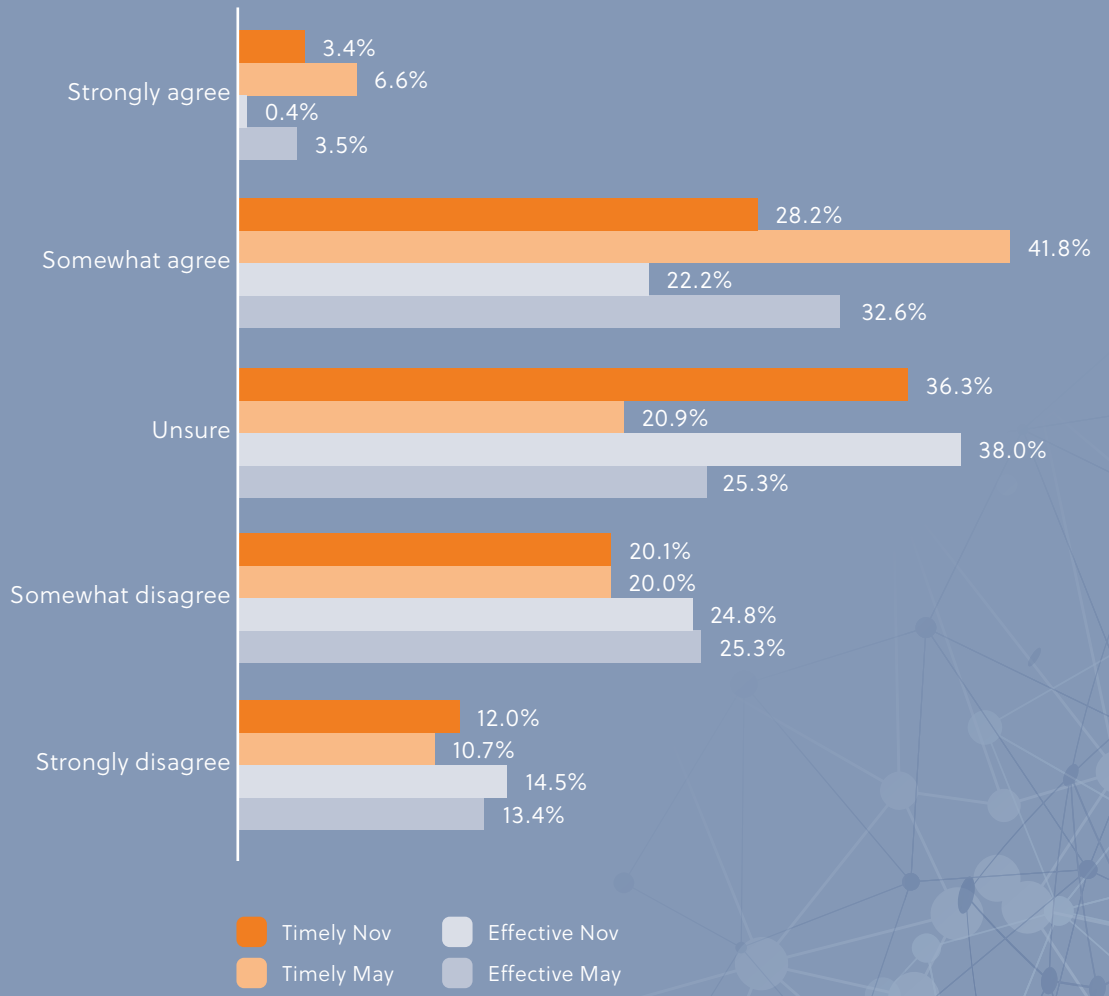
Recognising that research might be disrupted, they agreed to allow extensions of time to complete research and also for certain changes to be made to research projects to accommodate disruptions.

35.7% of respondents reported that these extensions and flexibility have helped them (down from 45.7% in the May survey).

More broadly, we asked researchers about the level of support to researchers from research funding agencies to deal with the effects of COVID-19. While nearly a third (31.6%) thought the responses had been timely, fewer than a quarter (22.6%) thought responses have been effective.

Satisfaction with support for existing grant holders declined over the six months from the May survey. An increased proportion were unsure about the timeliness and the effectiveness.

Figure 8 Support for existing grant holders timely and effective



RESEARCH RELATED TO COVID-19

The COVID-19 epidemic and Australia's response to it has had a range of different impacts on the Australian community.

It has had the most obvious effect on those who have the virus and those who are caring for them, but it has also affected the health and wellbeing of the many more Australians whose employment, education and way of life have been thrown into disarray.

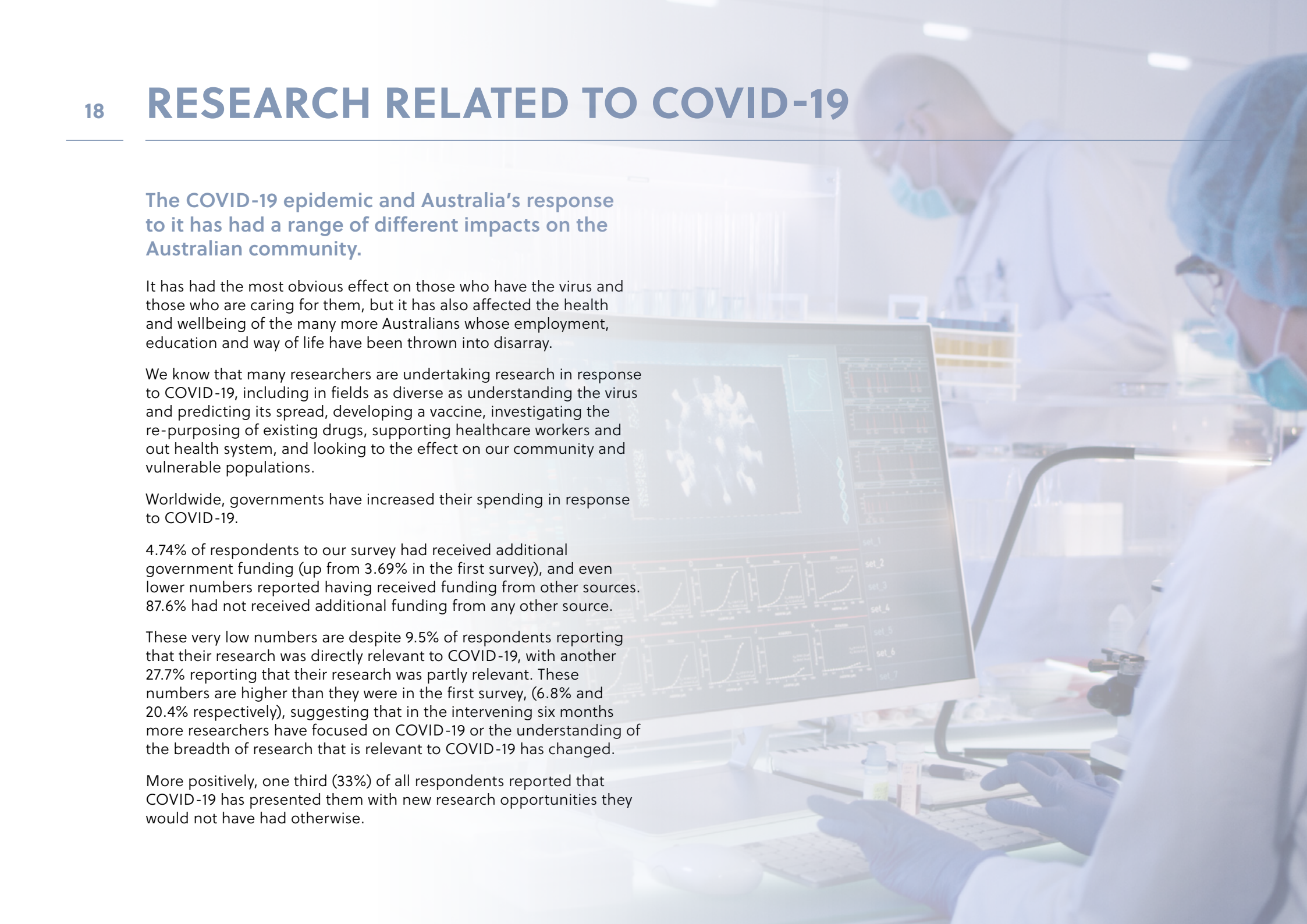
We know that many researchers are undertaking research in response to COVID-19, including in fields as diverse as understanding the virus and predicting its spread, developing a vaccine, investigating the re-purposing of existing drugs, supporting healthcare workers and out health system, and looking to the effect on our community and vulnerable populations.

Worldwide, governments have increased their spending in response to COVID-19.

4.74% of respondents to our survey had received additional government funding (up from 3.69% in the first survey), and even lower numbers reported having received funding from other sources. 87.6% had not received additional funding from any other source.

These very low numbers are despite 9.5% of respondents reporting that their research was directly relevant to COVID-19, with another 27.7% reporting that their research was partly relevant. These numbers are higher than they were in the first survey, (6.8% and 20.4% respectively), suggesting that in the intervening six months more researchers have focused on COVID-19 or the understanding of the breadth of research that is relevant to COVID-19 has changed.

More positively, one third (33%) of all respondents reported that COVID-19 has presented them with new research opportunities they would not have had otherwise.



EFFECTS OF COVID-19 ON RESEARCHERS' WORK

Like most of the workforce, researchers have been affected by measures to curtail the spread of COVID-19, such as physical distancing, working from home requirements and the closure of borders.

80.2% of all survey respondents reported that their research had been adversely affected by COVID-19. 15.8% reported that their research had not been affected by COVID-19. A further 4.03% reported that their research had not yet been affected, but they expected it would be.

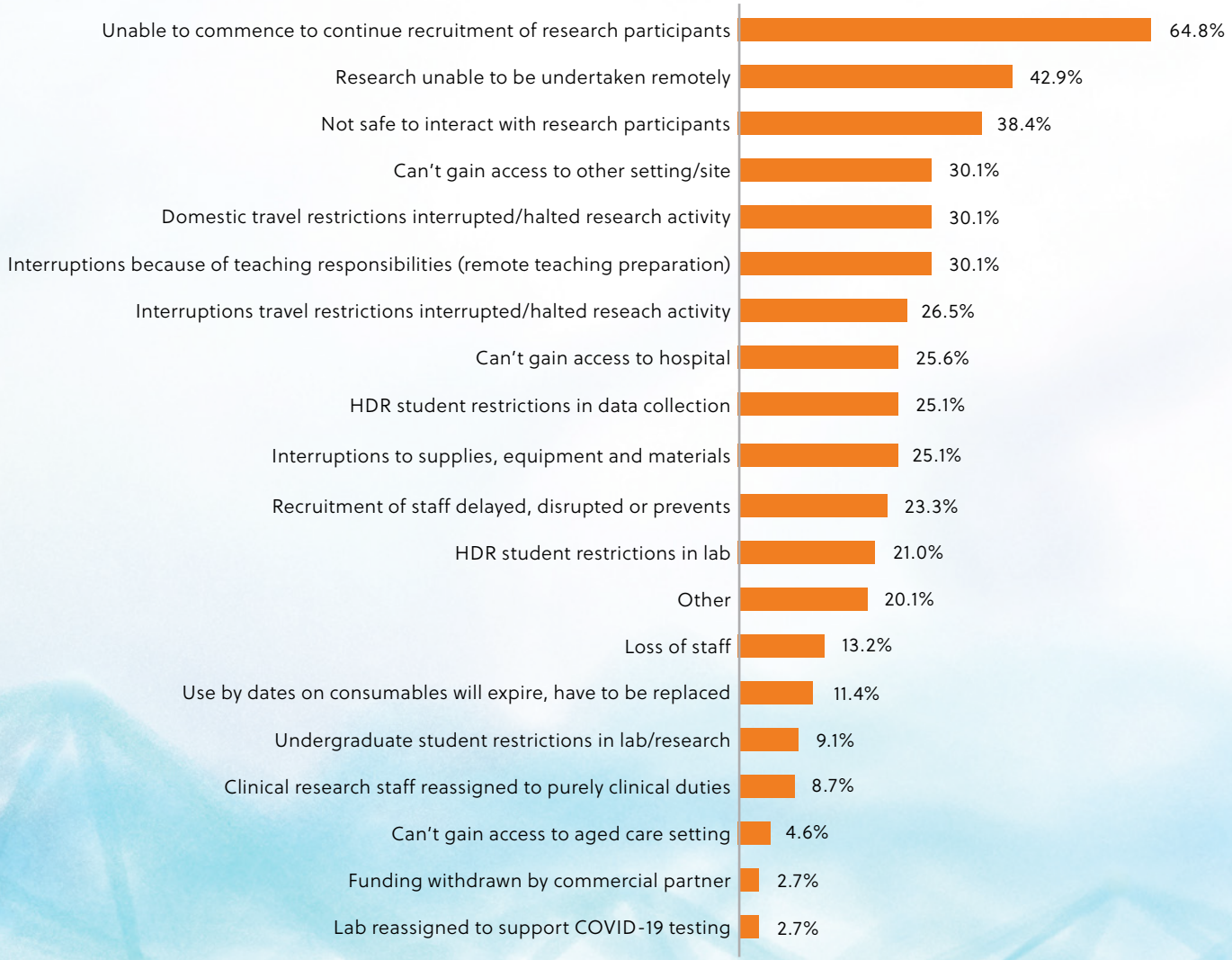
These numbers are similar to those reported in the first survey, in which 80% reported that their research had been adversely affected. For many, the impact has been greater than expected. 45.1% of respondents reported that COVID-19 had more impact on their work than they anticipated six months ago.

Only 14.5% reported less impact than expected six months ago. Perhaps not surprisingly, for researchers based in metropolitan Melbourne, subject to the longest and strictest lockdown in 2020, 52.8% reported the impact had been greater than expected. The full list of effects is provided on the right.



EFFECTS OF COVID-19 ON RESEARCHERS' WORK cont.

Figure 9 Immediate effects of COVID-19 on research



THE FINANCIAL IMPACT ON RESEARCH

While the ARC, NHMRC and Medical Research Future Fund (MRFF) have provided extensions, assistance has not extended to additional funds for existing research, which no doubt influences researchers' views on the effectiveness of the funding agencies' response from funding agencies.

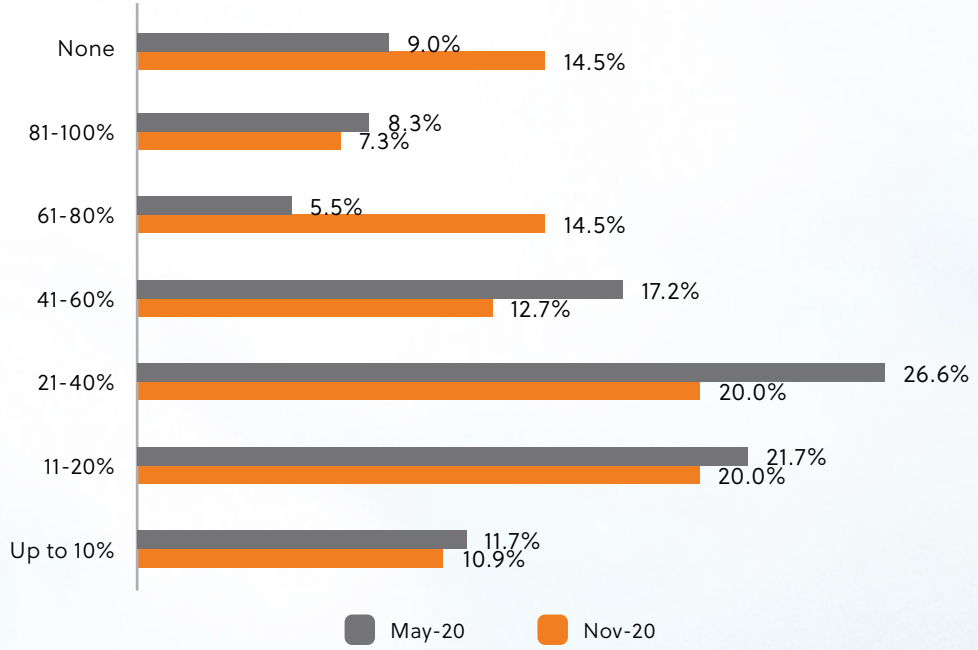
We know that the disruptions caused by COVID-19 have had financial impacts. Projects that take longer to complete will incur additional salary costs; materials with use by dates that expire while research is suspended need to be replaced.

As might be expected, 41.5% of researchers who are responsible for a laboratory or team were unable to provide an estimate. Of those who were able to provide an estimate, 14.5% reported that they expected no financial impact, compared to 9% in the survey six months earlier. The most common response (23.3%) was an estimate that it would have an impact of between $201,000 and $500,000.

Without knowing the size of the research budget, it is difficult to gauge how significant this is and as such we also asked respondents to estimate it as a percentage of their total budget.

Once again, a little more than one third (38.8%) of researchers responsible for a laboratory or team were unable to provide an estimate, and 14.5% estimated there would be no effect. Of the remainder, the most common response (20.0%) was an expectation of a 11% to 20% impact on their budget, or a 21% to 40% impact on their budget. The estimates are provided in the table, with a comparison to the May 2020 survey.

Figure 10 Impact as a percentage of research budget



Together, these are an indication of a very significant financial impact on Australian health and medical research, which must be in the hundreds of millions of dollars if the survey results are extrapolated over the entire sector.

So, are researchers receiving any additional support to meet these expected shortfalls? The answer for most is no. Only 7.9% of respondents reported receiving additional funds from their own organisation to help cover these costs, and 4.7% reported receiving additional government funding. 87.6% reported receiving no additional funding.

HDR STUDENTS AND EARLY CAREER RESEARCHERS

Higher Degree by Research (HDR) students are students completing a PhD or (less commonly) a Master's Degree by Research. HDR students and early career researchers (ECRs) are recognised as being particularly vulnerable to research delays, disruptions and funding cuts.

HDR STUDENTS

HDR students have a fixed amount of time in which to complete the research required to attain their qualification and are typically allocated a fixed term scholarship to support them during this process. Clearly any delay in research can jeopardise their degree, either because the time limit to complete the degree is exceeded or the scholarship funding is exhausted, leaving them without an income or funds for their research materials.

76.5% of all respondents responsible for a laboratory or team reported that HDR students in their team or laboratory would be adversely affected.

82.0% of survey respondents support an automatic 6-month extension to all PhD scholarships. The Australian Government is responsible for funding most scholarships for HDR students. While it is willing to allow universities to provide six month extensions to scholarships to HDR students, it is not providing additional funding for the Research Training Program.[1] This means any extensions to current HDR student scholarships will come at the expense of future HDR students, limiting the number of future scholarships that can be offered and/or their value.

EARLY CAREER RESEARCHERS

As noted above, early career researchers are most likely to be employed on a contract (60.5%) or on a casual basis (11%). They are also a group that is most often funded by their research organisation while they establish their own research career and until they are able to attract competitive grant funding from other sources. This makes them particularly vulnerable to funding cuts and budget blow outs caused by delays.

55.9% of all respondents responsible for a laboratory or team reported that early career researchers in their team or laboratory had been adversely affected by COVID-19, and 60.7% expected that early career researchers would be affected in the next 12 months.

Like HDR students, early career researchers are the future of the health and medical research sector. Disruptions to their careers, leading to fewer researchers rising through the ranks, ensures the short term financial difficulties created by COVID-19 will have long term ramifications.

1 https://www.education.gov.au/research-training-program

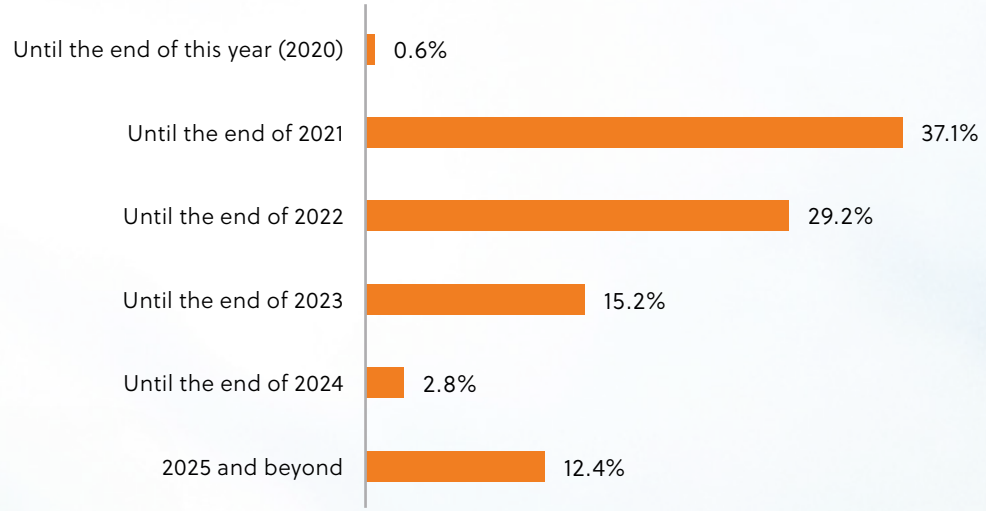
IMPACT BEYOND 2020

The immediate effects of COVID-19 are obvious, but by the end of 2020, Australia had been effective in flattening the curve and was relaxing restrictions.

So was the impact expected to be only temporary? 68.6% expected their research to be adversely affected beyond 2020, similar to 69.4% in the May survey. A further 23% are unsure.

Of the 68.6% who expect their research to be delayed, the majority expect the impact to last until 2021 or 2022. However, a significant minority expect to be affected as far as 2025 and beyond.

Figure 11 Anticipated duration for those affected





IMPACT BEYOND 2020 cont.

For those who expect their research to be affected beyond 2020, the biggest expected impacts are delays to the research (89.4%) and publication delays (84.9%). In addition to delaying publications, over half (53.6%) expect COVID-19 will reduce their overall number of publications.

40.2% of those whose research will be affected beyond 2020 expect to lose staff, an unavoidable consequence of the financial impacts described above. (This is down from 45.9% in May.)

Nearly half (46.9%) of those who expect to be affected anticipate they will be unable to complete current projects. This represents a lot of wasted effort and an enormous opportunity cost- research that will never be completed, or which may have to be started again at a later date.

Despite COVID-19 demonstrating the importance of health and medical research and thrusting it into public prominence, more than two thirds (68.2%) expect reductions in future government funding as governments seek to repair their balance sheets.

Figure 12 Anticipated effects of COVID-19 beyond 2020



On a more positive note, four respondents reported they had been positively affected by COVID-19, with their research benefiting. It not surprising that some researchers would benefit from an epidemic that has driven a concerted scientific response; perhaps only surprising that it is such a small number.

AN OPPORTUNTIY FOR CHANGE

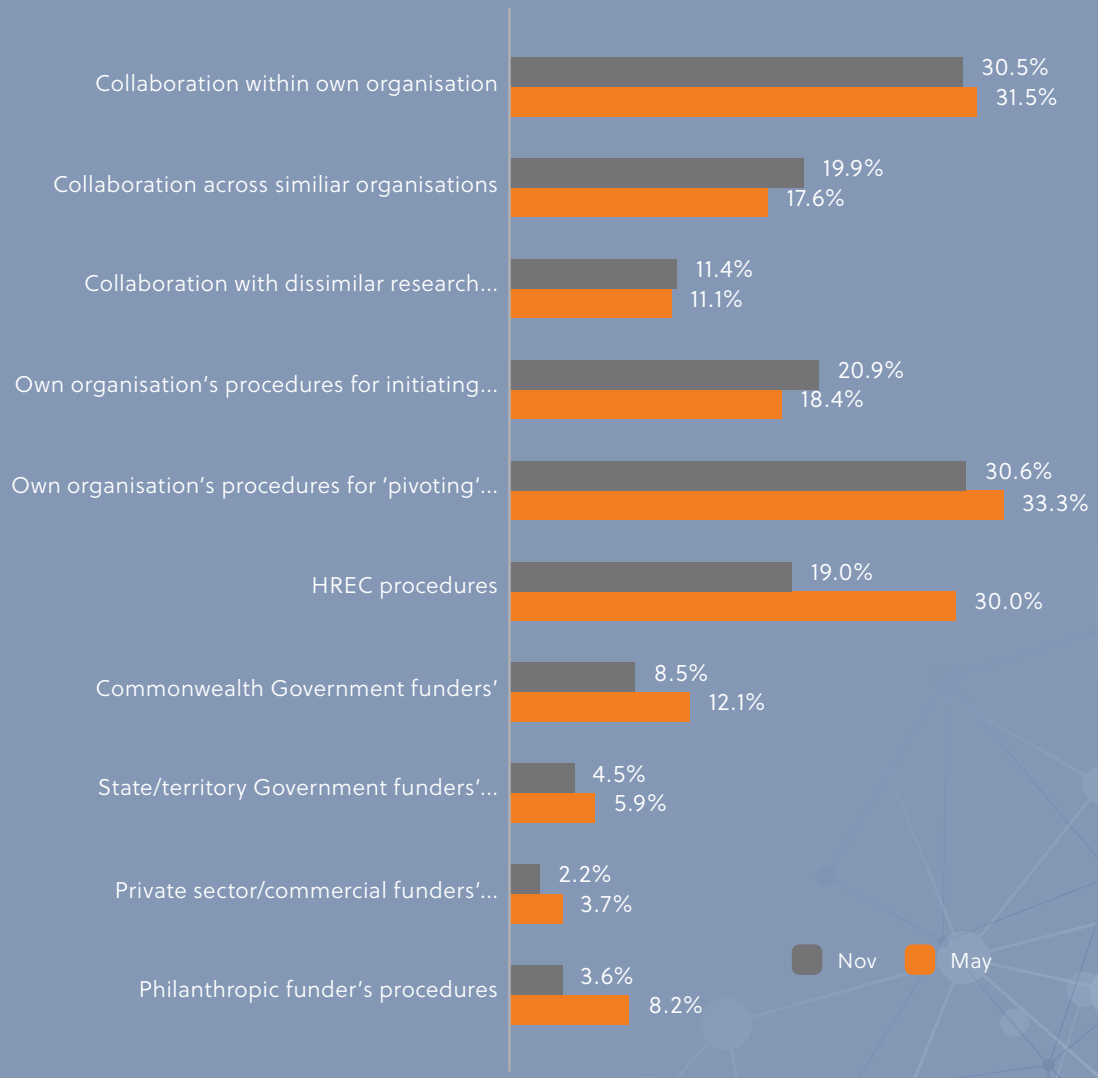
A crisis often drives change. We have seen remarkable examples of rapid change and adaptation in our community, including from business, governments and community groups.

In the health and medical research sector we have seen researchers pivot their research to focus on the response to COVID-19.

In our May survey we collected some evidence of new opportunities. We were curious to learn in the second survey about these opportunities, and whether more had materialised with the passage of time.

While there are some variations from the survey undertaken in May, the trend in improvements has been reinforced in the November survey, providing hope that these changes may persist longer term. The results for both surveys are provided in Figure 13.

Figure 13 Improvements in processes and practices



BARRIERS TO A RAPID RESEARCH RESPONSE

We were also interested to learn more about the perceived barriers to a more rapid research response to COVID-19, and whether these had changed since the survey in May.

Tellingly, many of these were the same areas where recent improvements had been identified by some respondents.

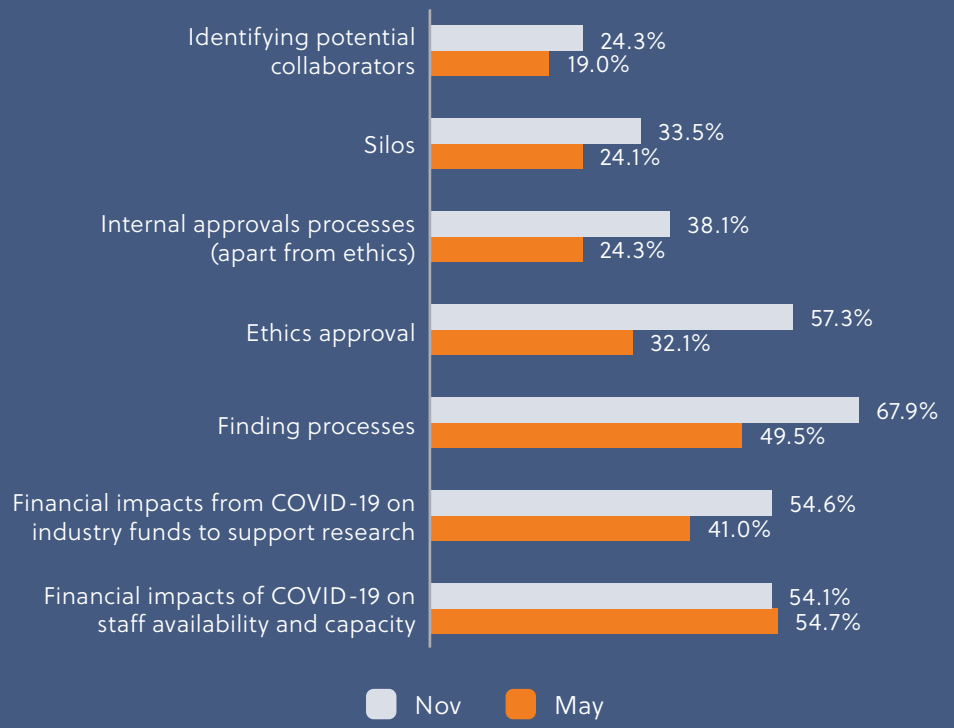
Funding processes and ethics processes are identified as the most significant barriers, followed by the financial impact on industry funds for research and the financial impact of the COVID-19 pandemic on staff availability and capacity. There have been some significant shifts in the prevalence of some of these issues in the six months between the first and second surveys, as illustrated in Figure 14.

As noted earlier, collaboration is the key to modern research, and many pointed to improvements in collaboration in response to COVID-19. So it is significant that identifying potential collaborators was a barrier for one fifth (24.3%) of respondents and the existence of silos was a barrier to nearly one quarter (33.5%) of researchers responding rapidly to COVID-19. Tellingly, these are identified as barriers by more respondents to the later survey.

Providing greater visibility of research currently being undertaken across the research sector has perhaps become more difficult but ever more important as the volume of research conducted in Australia and globally has increased in the last few decades.

Addressing silos in research, which prevent collaboration across disciplines and between institutions, remains an ongoing problem, notwithstanding improved collaboration in some areas in response to the COVID-19 pandemic.

Figure 14 Barriers to a rapid research response



FACILITATORS OF A RAPID RESEARCH RESPONSE

Having identified improvements in processes and the barriers to undertaking research, we were keen to understand what people identified as facilitators of a rapid research response to COVID-19.

Not surprisingly, it is the same factors at play: ethics approval, funding, internal approval processes and finding collaborators.

Figure 15 Facilitators of a rapid research response



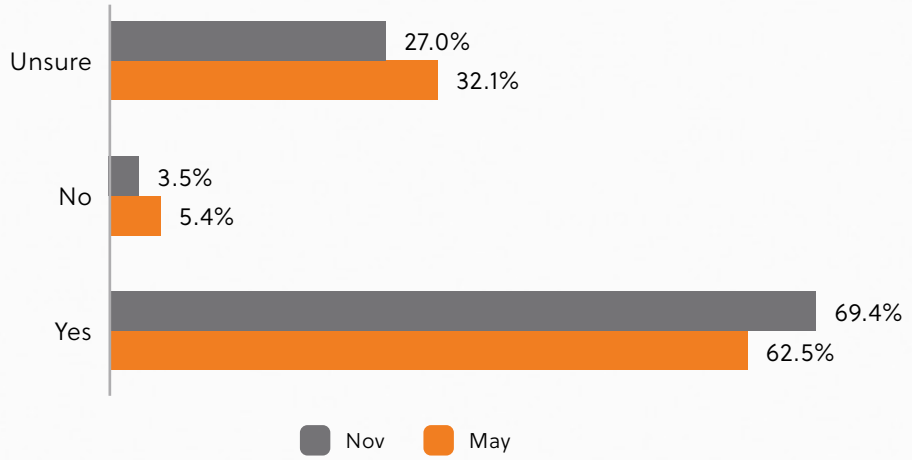
LONG TERM RESTRUCTURE SUPPORTED

While the COVID-19 pandemic has focused attention on the short term impact on research funding, the pandemic has highlighted some more fundamental issues with the way we do things.

This is evident to Australia's health and medical research and innovation community, with nearly seven in ten respondents (69.4%) supporting a longer-term restructure of Australia's research and innovation funding framework. Support for a long term restructure increased between the May and November surveys.

More than three quarters (76.1%) of respondents believe Research Australia has a role to play in consulting with key stakeholders to inform policies as part of a new research funding framework.

Figure 16 Longer term restructure of funding required



IDEAS FOR REFORM

GOVERNMENT FUNDING AGENCIES

We asked people to think about the types of response that government funding agencies and/or their own research organisations could make to improve the resilience of the health and medical research and innovation sector to a future pandemic or other catastrophic events.

68 respondents nominated measures that governments could implement. The majority focused on funding, from broad calls to provide more funding for research and universities, and longer term grants, to calls for funding of salaries independent of research project grants, to improve job security.

Strategic funding reserves to be deployed in pandemics and other emergencies was also suggested. Making JobKeeper available to universities was raised by seven people.

Many of the comments indicated a belief that COVID-19 had highlighted underlying tensions and cracks in the system related to long term under funding.

RESEARCH ORGANISATIONS

60 respondents nominated recommendations for research organisations, and there were several similar themes. Providing greater security of employment, particularly for casual and short term contract staff was central.

'Seek greater protections for research staff who are on short-term contracts year by year over a lifetime with no job security, particularly in such times. These roles have become as critical at universities as teaching, especially as they bring in huge research dollars, yet there has been no change to job security over the past decades. This leads many of us to work overseas at Australia's disadvantage.'

The idea for contingency funds and strategic reserves was repeated, particularly for long term programs and to provide bridging funding for early and mid career researchers whose funding is nearing the end of the funding cycle (a proposal Research Australia has advocated in its Pre-Budget submissions.)

Concerns about career disruption and the additional care burden were clear, with proposals for targeted support.

'Do a better job of ensuring that women can properly account for the impact of childcare on their research outputs. The current RTO and career disruption allowances do not reflect the long-term ongoing impact and women are profoundly disadvantaged as a result.'

Better support for HDR students was raised, as was a need for universities to be less dependent on international student revenue to fund research.

The pandemic has also caused some to reflect on what research we fund, and how.

'Better recognition and long term support for cross and interdisciplinary research that examines the broader implications of pandemics and public health emergencies, as well as what happens at the bedside or in a test tube.'

The similarities between the proposals for funding agencies and research organisations reflects the shared roles and responsibilities of each in undertaking research. Funding agencies' programs and the structures they create have an influence on how research organisations employ people and structure their workforces; similarly, research organisations also provide funding for research, both in support of the indirect research costs associated with government funded research, and independently of government funding.

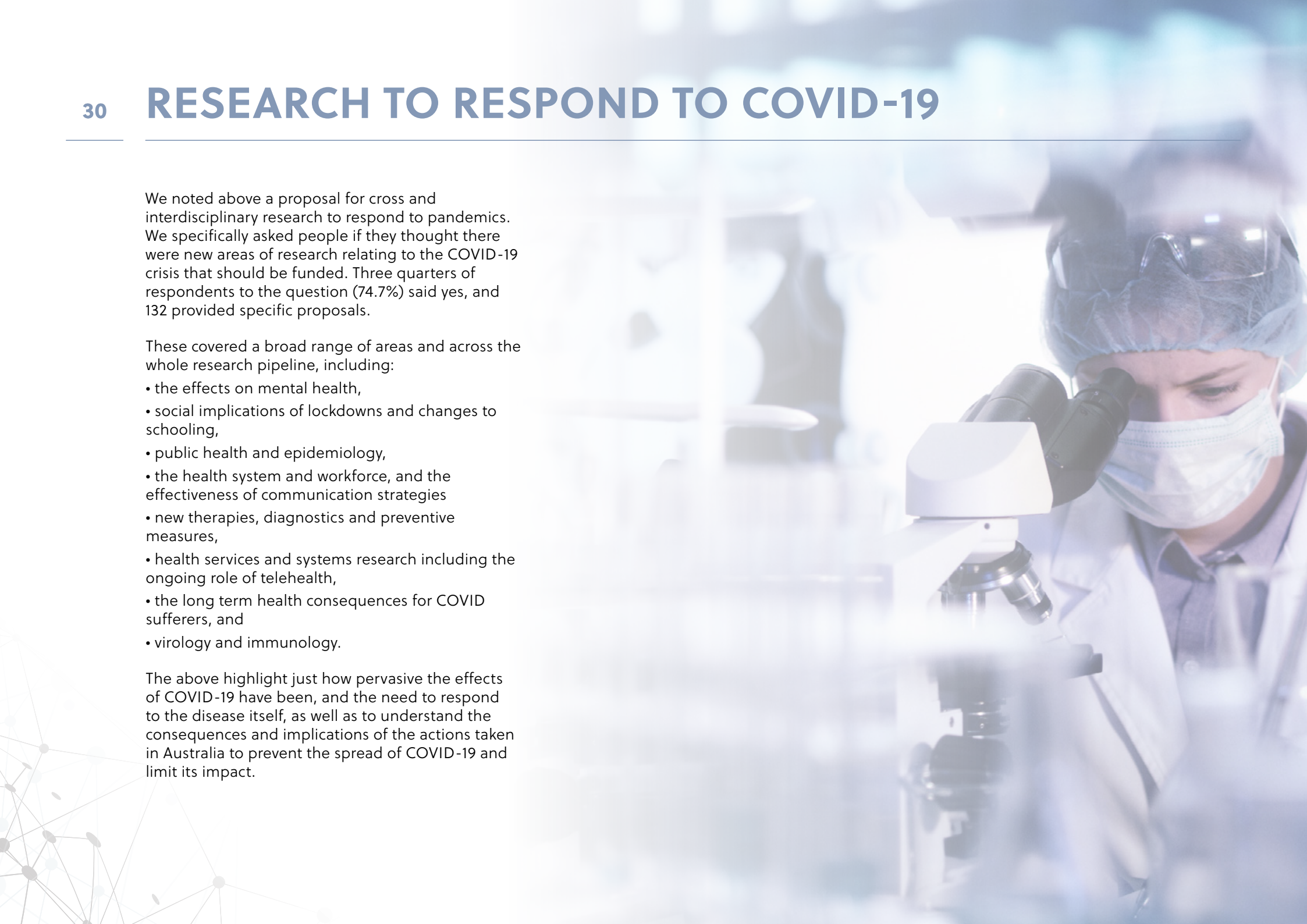
RESEARCH TO RESPOND TO COVID-19

We noted above a proposal for cross and interdisciplinary research to respond to pandemics. We specifically asked people if they thought there were new areas of research relating to the COVID-19 crisis that should be funded. Three quarters of respondents to the question (74.7%) said yes, and 132 provided specific proposals.

These covered a broad range of areas and across the whole research pipeline, including:

- the effects on mental health,
- social implications of lockdowns and changes to schooling,
- public health and epidemiology,
- the health system and workforce, and the effectiveness of communication strategies
- new therapies, diagnostics and preventive measures,
- health services and systems research including the ongoing role of telehealth,
- the long term health consequences for COVID sufferers, and
- virology and immunology.

The above highlight just how pervasive the effects of COVID-19 have been, and the need to respond to the disease itself, as well as to understand the consequences and implications of the actions taken in Australia to prevent the spread of COVID-19 and limit its impact.



CONCLUSION

The COVID-19 pandemic has been disruptive to Australia's health and medical research and innovation sector, as it has been elsewhere in our economy and society.

What it has highlighted for our sector is that just as it is being asked to provide vital support to Australia's response to COVID-19, its capacity to respond is being reduced because of the short, fixed term nature of much of the employment and research funding, and the inability to absorb the financial and other impacts imposed by delays to research.

The greater impact of COVID-19 on female researchers is also evident; they are generally in less secure employment and more likely to have their research affected by care responsibilities.

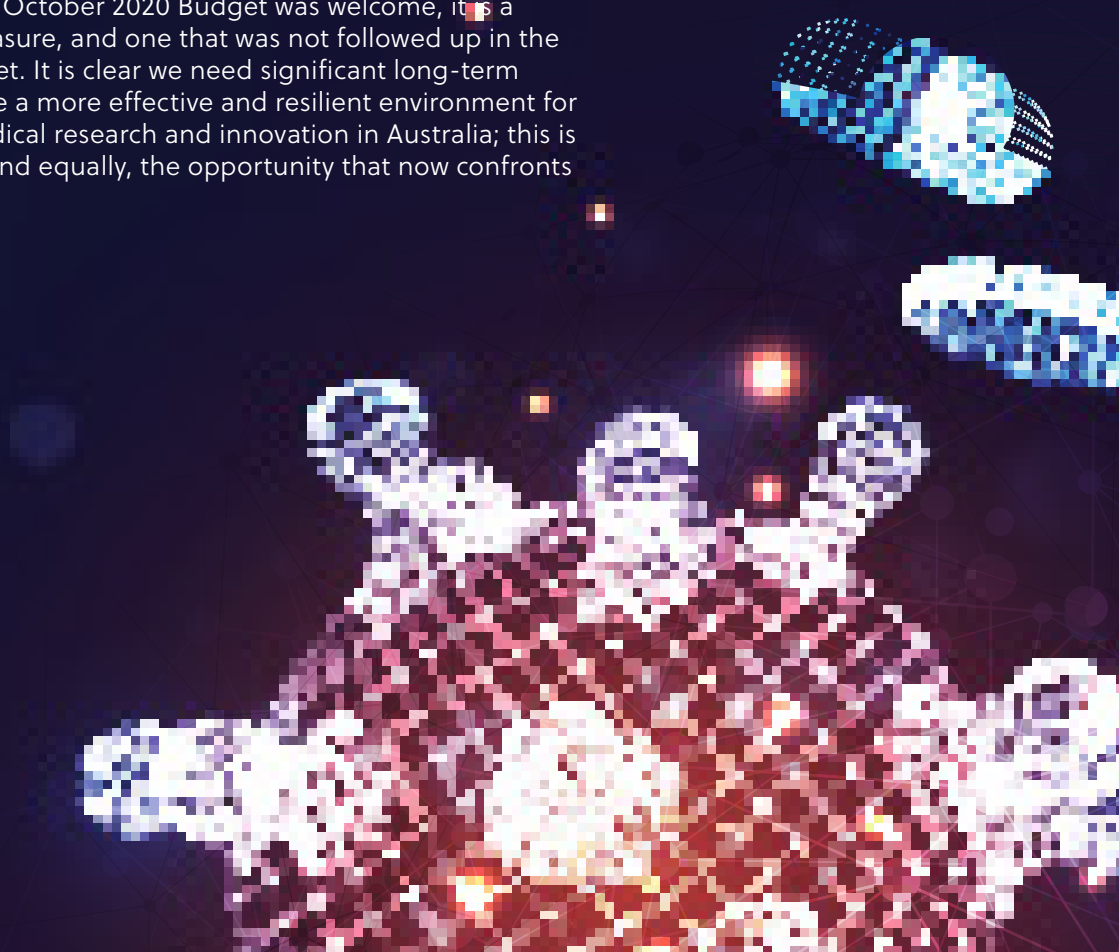
The reliance of universities on international student revenue, of universities and medical research institutes on philanthropy, and of governments on everyone else to meet part of the costs of the research they fund has created a fragile funding system.

The funding schemes have grown up and around each other, accommodating each other while pursuing their own objectives. The resulting fragmentation leads to duplication of effort and wasted time and money.

It is inevitable that the COVID-19 pandemic would disrupt Australian health and medical research and innovation. The long term effects could have been ameliorated with a better planned and more resilient approach to both the conduct and funding of health and medical research and innovation in Australia.

The lessons for the future are clear.

While the $1 billion injection of funds into the Research Support program in the October 2020 Budget was welcome, it is a short-term measure, and one that was not followed up in the May 2021 Budget. It is clear we need significant long-term reform to create a more effective and resilient environment for health and medical research and innovation in Australia; this is the challenge and equally, the opportunity that now confronts us all.





RESEARCH AUSTRALIA

CONNECTING ▪ ENGAGING ▪ INFLUENCING

www.researchaustralia.org

SYDNEY

384 Victoria Street
Darlinghurst NSW 2010
P 02 9295 8545
E admin@researchaustralia.org

MELBOURNE

Level 5, 215 Spring Street
Melbourne 3000
P 03 9662 9420
E admin@researchaustralia.org