

AUSTRALIA: FROM ELIMINATION TO LIVING WITH THE VIRUS

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Until just a few months ago, most Australians thought they'd avoided the worst of the COVID-19 pandemic. In March 2020, we closed our international borders and soon after instituted mandatory quarantine for returning Australians. A strategy of virus suppression and, in some states, elimination has been systematically pursued. Occasional outbreaks have been managed through testing, contact tracing, home isolation, state border closures, a range of public health measures including social distancing, closure of high-risk businesses and masks, and one of the longest and toughest lockdowns in the world during Melbourne's second wave. The people of Melbourne emerged from 112 days of lockdown in 28 October 2020 having successfully eliminated the virus.



FEW COVID DEATHS AND LOWER MORTALITY ACROSS AUSTRALIA

The result is that just over 1,000 people have died in Australia from COVID-19 since the pandemic began (Figure 1). And with no COVID-19 circulating in the community for much of the past 18 months, between lockdowns life in Australia has felt relatively normal.

In a recent [research report](#)¹ published for the Actuaries Institute Australia, authors Karen Cutter, Jennifer Lang and Richard Lyon examined mortality in Australian throughout 2020, comparing overall mortality to prior years, as well as COVID-specific mortality. Predicted deaths were modelled based on prior years' experience and factoring in a general trend of mortality improvements of 3.5% over five years.

Overall, Australian mortality was much lower than recent trends, with around 3,900 (2.7%) fewer deaths in 2020 than predicted (Figure 2).

This is a remarkable contrast to much of the rest of the world and largely due to lower deaths from respiratory illness - around 3,200 fewer than predicted (Figure 3). The public health measures used throughout 2020 meant that common respiratory illnesses like influenza simply weren't able to spread. Indeed after border closures in 2020, just 3 people died from influenza. Dementia deaths were also lower, perhaps because respiratory illness can contribute to dementia-related deaths.

FIGURE 1: COVID DEATHS BY WEEK, AUSTRALIA 2020

Weekly scaled actual doctor-certified deaths

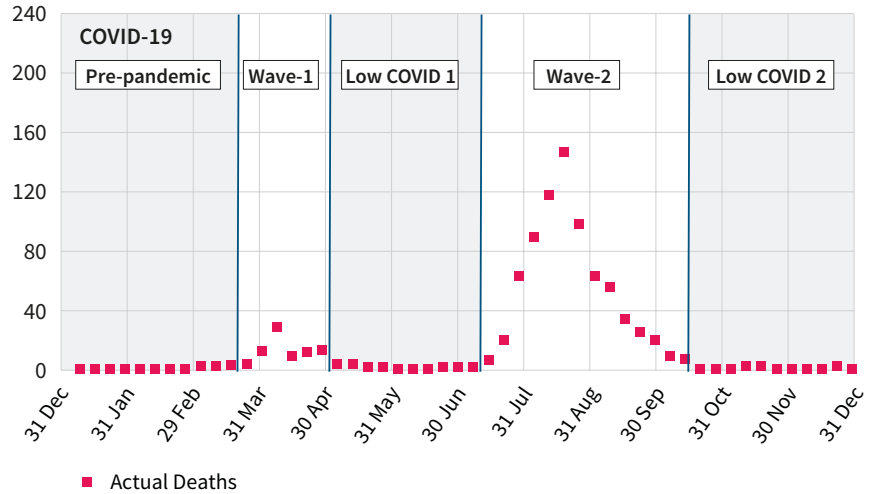


FIGURE 2: ALL DEATHS BY WEEK, AUSTRALIA 2020

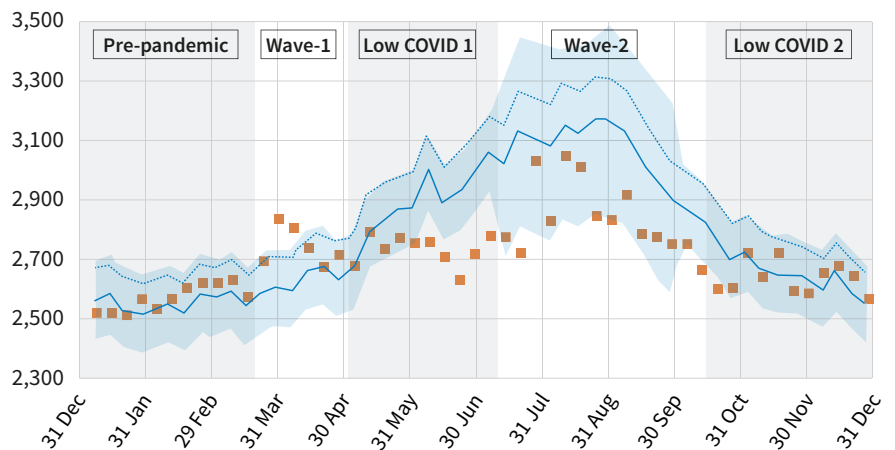
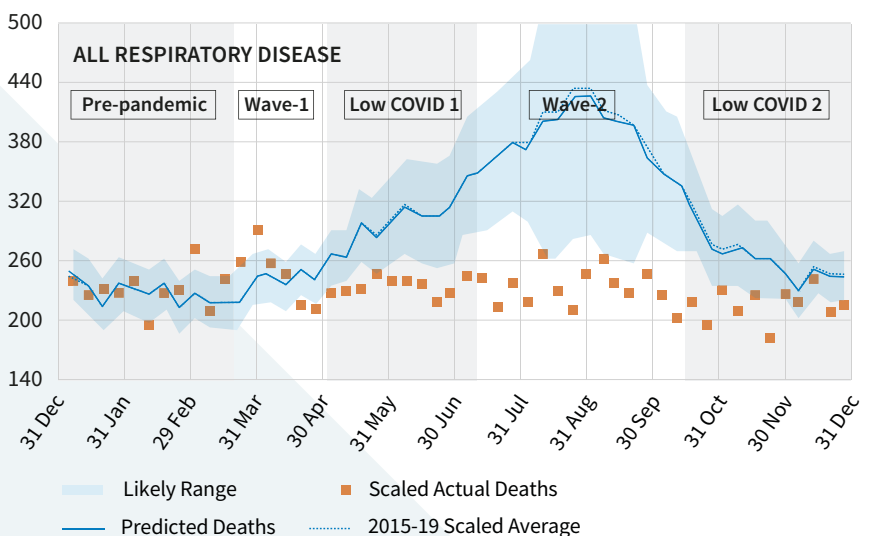


FIGURE 3: WEEKLY SCALED ACTUAL AND PREDICTED DOCTOR-CERTIFIED DEATHS



Actual deaths are scaled to 2020 allowing for population growth and change in age profile; 2020 deaths include allowance for late reporting. Predicted deaths come from the linear trend in each week's scaled deaths in 2015 to 2019.

Source: Cutter K et al (2021)

MENTAL HEALTH SERVICES HAVE INCREASED SIGNIFICANTLY AND TO DATE SUICIDES HAVE NOT RISEN

Throughout 2020 and 2021, significant investments have been made to boost crisis mental health services, increase publicly-funded psychology services and provide easy access through telehealth. Mental health lobbyists raised alarm bells early that social isolation, uncertainty and economic downturn could all increase mental health risks and suicides if not addressed early. I explored this issue with Matt Dabrowski in a [presentation](#)² to the Actuaries Summit 2021.

Psychology services funded through the national public insurance system Medicare (MBS) increased by 10% in 2020 compared to 2019 while private health insured (PHI) services declined by 8% (Figure 4). This was a result of expanding Medicare-funded services from 10 to 20 per person, first in Victoria and nationally in October 2020. Overall, the net increase in services was 9% compared to 2019.

Throughout the pandemic, psychological distress as measured through the Kessler-6 scale has remained higher for young people but surprisingly lower for older people – surprising because it is older people who are most at risk from COVID-19 (Figure 5). The public health measures used in Australia have undoubtedly led to higher levels of distress amongst younger people,

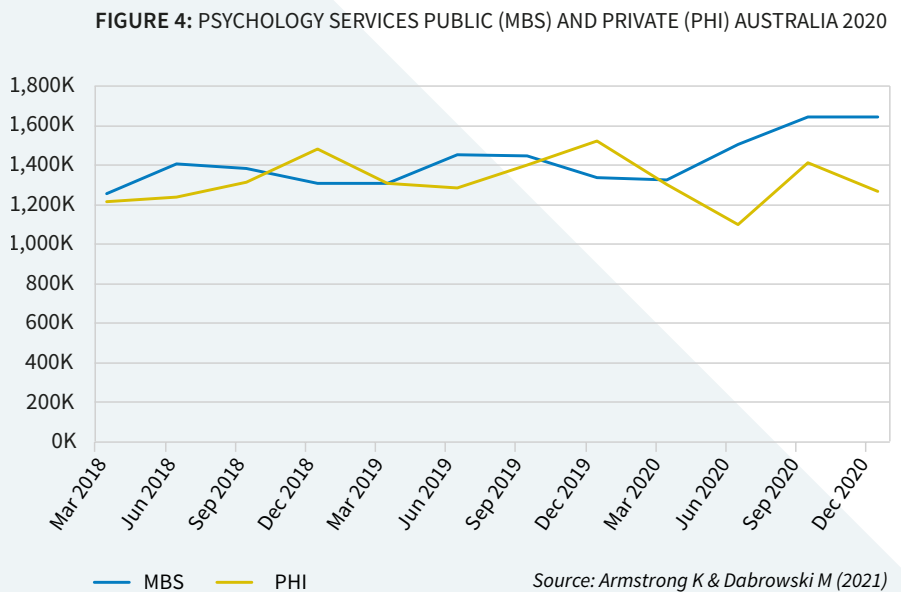
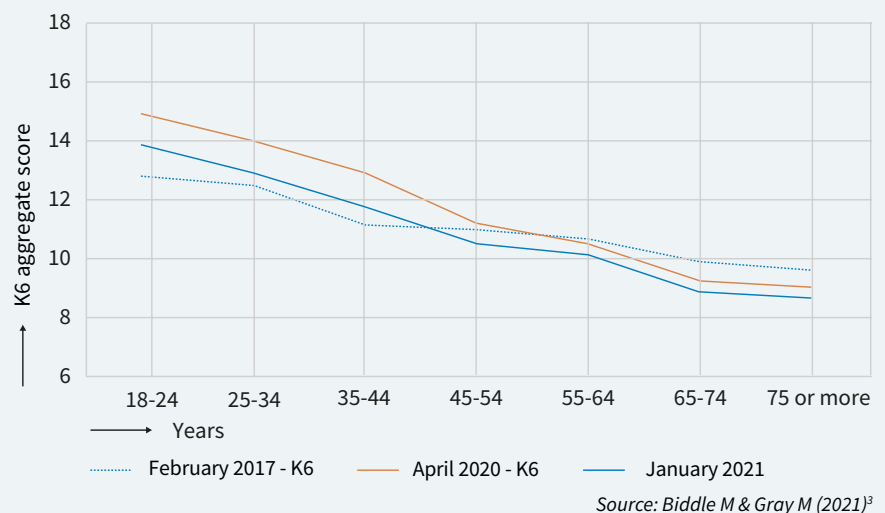


FIGURE 5: K-6 MEASURE OF PSYCHOLOGICAL DISTRESS, FEB 2017, APR 2020, JAN 2021



though thankfully this has not to date translated into higher suicide deaths (Figure 6).

DELTA HAS CHANGED OUR STRATEGY

Australia’s suppression strategy had been challenged by the delta variant and 2021 is looking very different to 2020. As I write, 60% of Australians – some 15.3

million people - are in lockdown as a result of outbreaks of the delta strain that originated when the virus was transmitted from international flight crew to a Sydney-based limousine driver.

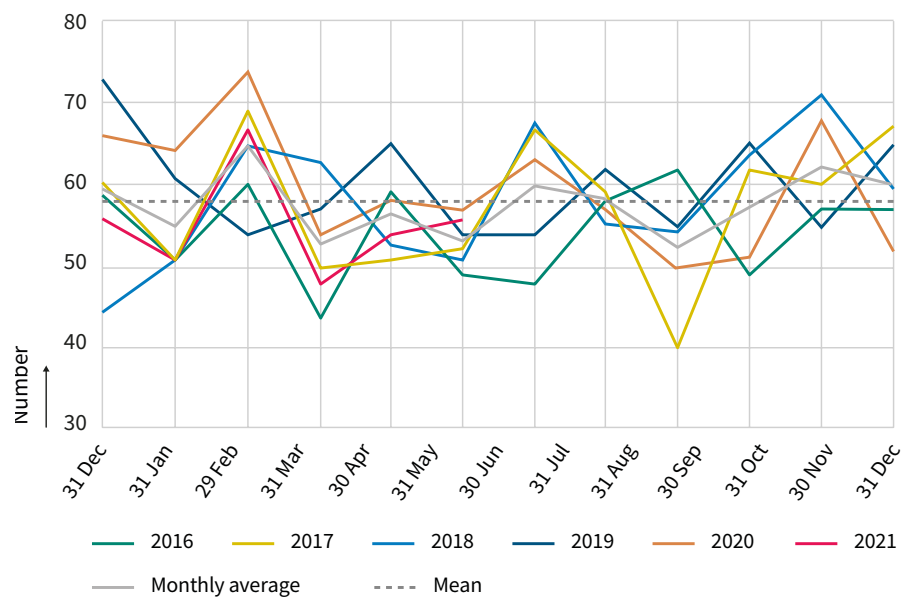
Vaccination coverage was until recently the lowest in the OECD, due to inadequate vaccine supply, poor access and a reticence to get vaccinated

with so little risk of COVID in the community. That's changed with a significant increase of vaccine supply, the arrival of the delta variant and recent vaccine mandates for some workers. Indeed, Australia is currently increasing vaccination coverage at a rate not seen elsewhere in the world (Figure 7). It is hoped that lockdowns and other public health measures will be adequate to keep this latest outbreak in check until 80% of the adult population is vaccinated.

It remains to be seen whether mortality in 2021 will be higher or lower than previous years. Deaths from COVID-19 are currently running at about 3-4 per day, but large increases in cases in Sydney in the past week are yet to filter through and more cases are predicted in the coming weeks. 87% of over-70s have had at least one vaccination, and we have not seen the major outbreaks in residential aged care facilities that punctuated Australia's first and second wave.

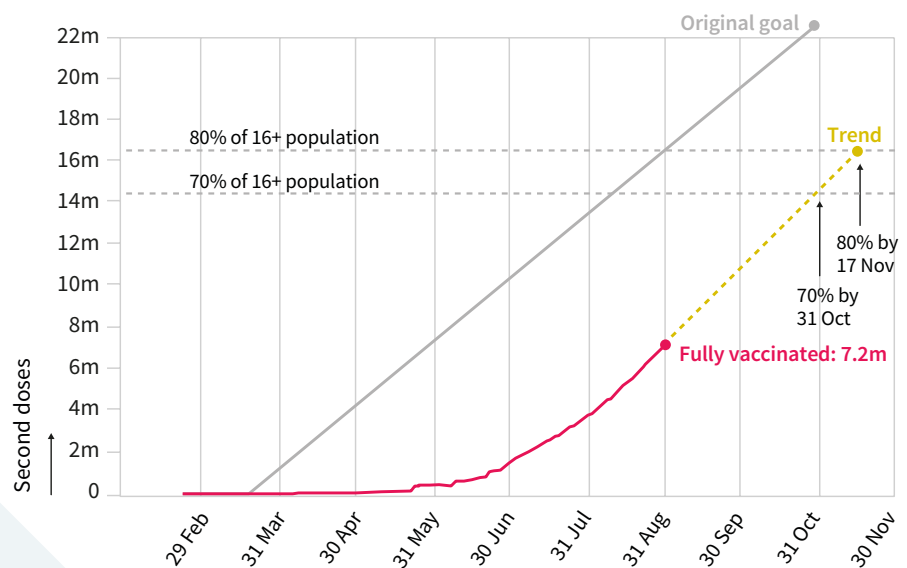
Debate has shifted to what it means to live with the virus and how many COVID deaths we might be willing to accept in order to return to some sort of normal living. Three large purpose-built quarantine centers for returning international travelers have been approved in the past two weeks, suggesting international quarantine will continue to be a feature of our plan. For the time being, lockdowns continue, schools in several states remain closed and debate continues.

FIGURE 6: SUSPECTED DEATHS BY SUICIDE VICTORIA 2016-JUNE 2021



Source: Australian Institute of Health & Welfare (2021)⁴

FIGURE 7: ACTUAL AND PROJECT FULLY VACCINATED AUSTRALIANS, 1 SEPT 2021



Source: The Guardian

- 1 Cutter K, Lang J & Lyon R (2021), Impact of COVID-19 on Mortality and Morbidity in 2020, Actuaries Institute, June 2021
- 2 Armstrong K & Dabrowski M (2021), Mental health and COVID, presentation to 2021 All-Actuaries Virtual Summit, Actuaries Institute, May 2021
- 3 Biddle N & Gray M (2021), Tracking outcomes during the COVID-19 pandemic (January 2021) – Cautious optimism, Australian national University, February 2021
- 4 Australian Institute of Health and Welfare (2021), [Suicide and Self-harm monitoring](#), accessed August 2021