



Road to Recovery, Part 2: Investing in Australia's Mental Wealth

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Key Messages

Distress-related productivity losses are significant, but not inevitable: Over the next 5 years, the additional cost to the Australian economy from those suffering from heightened psychological distress who remain employed but at reduced productivity is estimated at \$114bn. This is due mainly to absenteeism and presenteeism, including \$11.3bn (9.9%) attributable to psychological distress among 15-24 year olds. The additional health care expenditure associated with the consequences of this increased distress over the next 5 years is projected to be \$874m. These costs may be avoided and must be properly considered when formulating both economic and health policy.

Urgent boost to community-based services needed: A direct investment of \$2.2bn is needed to boost community-based specialist mental health service capacity to address the current service deficit and address unmet need. This would likely be a cost-effective investment through substantially reducing distress levels, ED presentations (23,029), suicides (863) and results in a productivity gain of \$1bn to the economy as people return to work quicker and work more effectively.

A strategic approach to mental health policy is vital: Increasing demand for services through mental health awareness campaigns and the Better Access initiative without boosting the supply of community-based specialised services is likely to be harmful and costly, leading to huge waiting lists, a 22% increase in patients dropping out of care, and reduces economic productivity by \$605m from increased distress.

Opportunity to modernize health care delivery: There is an opportunity to modernize the delivery of patient-centered services through investing in technology-enabled coordination of team-based care. This is projected to reduce health care costs by \$226m, improve mental health outcomes, and increases economic productivity by \$1.3bn

More reasons to retain JobKeeper and invest in education: The combined strategy of retaining JobKeeper for 2 years and investing in education programs that provide financial support to students who have become unemployed as well as boosting enrollments by 20% not only avoids unnecessary unemployment, but averts further distress-related productivity losses of \$3.2bn from those remaining in employment but who would further fear for their job security. This would also reduce health sector costs by \$333m, representing sound public health policy.

Investing in mental health is everyone's business: To manage our way through COVID-19 and the recession, a whole of government approach is needed. Budgetary decisions taken in October 2020 need to be cognizant of the consequences of the current crisis on mental distress and avoid unintended, costly, consequences. There is a need to maintain employment schemes, boost education, and take a strategic approach to strengthening community-based specialist mental health services. Collectively, these reduce psychological distress, save lives and boost productivity. Investing in mental health creates wealth and at a time when the economy most needs it. The failure to not invest appropriately will likely cost lives and economic potential.

The National Mental Health Model

An unexpected challenge of our times

The course of COVID-19 and extent of the economic impact is not certain, nonetheless policy decisions must be taken amidst uncertainty to avoid unnecessary impacts. We are in a mental health crisis where the potential scarring effects may have enduring and lasting impacts, long after the effects from COVID-19.

Real world decisions won't wait for traditional academic surveys to tell us what happened after the fact. Policy needs to get ahead of the curve, before serious problems arise to avoid the projections of business-as-usual.

Advanced decision-analysis in the form of dynamic simulation modelling provides the ability to support policymakers in the present by bringing together the latest data, expert knowledge, and computer simulation to track the current situation but, more importantly, help policymakers manage the country through uncertain times by investing more wisely.

The national mental health model

A prototype national mental health model was developed at the University of Sydney's Brain and Mind Centre (BMC) to simulate the interplay between the economy, mental health and the impacts of a variety of economic, social and health sector policies. This model draws together key and current data sources, the best research evidence, and the latest advances in computer technology. The ultimate purpose of the model is to support decision-makers by testing out policy responses before they are implemented to inform best value investments. This is also to avoid the enormous opportunity cost of unplanned expenditure that would result in poor health outcomes and reduced economic productivity. The first report drawing from the model entitled the 'Road to Recovery' (July 2020) includes a detailed description of the national model and its assumptions, definitions, key parameters and the different policy interventions that were tested (see references).

Importantly, the modelled projections are continuously updated as the impact of COVID-19 and recession develops. The latest RBA economic projections (7th August 2020) provided a less optimistic outlook in terms of scale and duration of high unemployment than previous RBA forecasts. The effective unemployment rate is now projected to peak at 14% in 2021 and 28% for youth (15-24 years) by 2025. The national mental health model was then updated with the revised economic forecasts, with consequent updated projections for mental health consequences, and a second report was published in August 2020. The revised prevalence of psychological distress is now estimated to peak at 45.3% by April 2022 and among youth (15-24 years) at 60% by November 2021. The proportion of youth not in employment, education or training (NEET) is projected to rise to a peak of 37.7% in major cities and 41.7% in regional areas by November 2020. In youth (15-24 years) mental health-related ED presentations will increase by 26.1%, self-harm hospitalizations (indicative of suicide attempts) by 27.9%, and suicide deaths by 30.3% over the period 2020-2025.

This report is the third in the series from the Brain and Mind Centre and focusses on the economics of mental health. The aim was to identify best-buy investments that Government can make now to reduce psychological related distress, improve mental health outcomes, and increase economic productivity. While the future is uncertain, as the COVID-19 and economic situation evolves, the modelling worked through multiple scenarios to arrive at a set of recommendations that are robust across all best-worse scenarios. That is, while and modelled numbers may be revised (up or down) the modelling process itself revealed key policies and investments that unequivocally best value investment.

This short report, provides projections over a 5-year period (2020-2025), is based on the RBA current “most likely” scenario for the economy, estimates are valued in net present value terms (discounted at 5%). Health costs are aligned with and replicate estimates from the Australian Institute of Health and Welfare (AIHW). The impact of policy interventions simulated here exclude transfer costs and wider social costs beyond mental health. Productivity estimates are adjusted for employment projections, take a Frictional Cost Approach, include impacts on carers. The estimates are based on the Australian Bureau Statistics (ABS) sources regarding impacts of distress on the ability to work, with average weekly earnings used to estimate productivity. A fuller exposition, including sources, assumptions, key parameters, the costing and valuing processes including uncertainty analysis, will be published in due course.

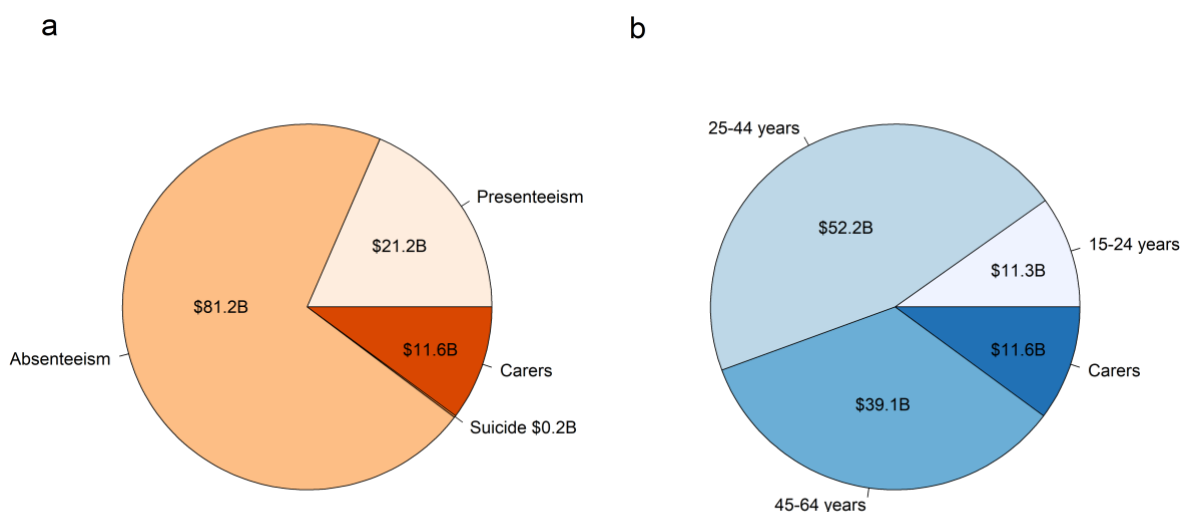
What did we find?

The true cost of business-as-usual: accounting the impact of psychological distress on the economy

In the best case COVID-19 scenario, the model projects a \$114bn loss in productivity associated with psychological distress over the next 5 years which is an increase of 15% (over the projected levels of distress had COVID-19 not occurred). Further, there is an additional \$874m increase in health service costs to manage the consequences. These productivity losses are not traditionally accounted for in Treasury or RBA projections. Distress-related productivity losses result from those that remain in employment but where the elevated levels of distress can leads to: (i) absenteeism, which is time away from work, (ii) presenteeism, which is attempting to work but at lower levels of effectiveness, and (iii) time away from work due to self-harm hospitalization and/or from suicide.

Figure 1a shows the breakdown of distress-related productivity losses by source, where absenteeism accounts for \$82.1bn (71%), presenteeism \$21.2 (19%), and with respect to those who commit suicide and for carers of those in distress, the overall productivity loss (absenteeism and presenteeism combined) is \$11.8bn (10%). Figure 1b shows that the productivity losses for people aged 25-44 years (\$52.2bn) and 45-65 years (\$39.1bn) account for 80% of productivity losses, and the Australian youth, 15-24 years, account for significant \$11.3bn (10%).

Figure 1 Productivity loss due to psychological distress and suicidal behaviour, disaggregated by cause and age bands, March 2020 to March 2025



The urgent need to strengthen front-line health service capacity

We focus on the current spending deficit in two pivotal areas in the mental care system. First, community-based specialist mental health services (including mental health GP services, psychiatrists and allied services, and community mental health care services) which have been growing at a mean rate of 4.6% per year, are insufficient to meet demand. A doubling of the growth rate would require an injection of \$1.8bn over 5-years, which then leads to additional referrals elsewhere in the health care system costing a further \$563m which is necessary to ensure complete patient care and avoid further acute events. Overall, the net cost (direct cost plus flow-on cost) is estimated at \$2.4bn.

Table 1 Investing in community-based specialist mental health services, 2020-2025

Services	Direct intervention cost (\$M)	Net health services cost (\$M)	Productivity gain (\$M)
1. Doubling of services capacity growth	1,811	2,373	1,025
a. Mental health GP services	384	661	196
b. Psychiatrist and allied services	234	446	469
c. Community mental health care services	1,078	1,044	261
2. Post-attempt care	398	355	12
Total	2,209	2,728	1,037

* Net cost accounts for indirect or flow-on costs resulting from investments e.g. increase/decrease in referrals services elsewhere in system

Second, for those people who survived a suicide attempt there is a need for intensive post-attempt care to avoid further self-harm and suicide. The direct cost of scaling-up current services to reach sufficient national coverage would be \$398m over 5 years, which then leads to a reduction in the flow-on costs associated with acute hospital events (\$43m). The overall net cost from investing in post-attempt care is \$355m. Together, a boost in community-based specialist mental health services and expansion of post-attempt care requires a direct investment of \$2.2bn at an overall net cost to the health system of \$2.7bn.

These investments are projected to reduce population prevalence of medium-to-high distress by 1.1 percentage points, reducing ED presentations by 1.3%, and suicides by 4.0%. The improvement in quality of life (from reducing distress) can be combined with expected increases in life expectancy (from the reduction in suicides) into a measure termed quality-adjusted life years (QALYs). Addressing the service deficit to provide needed care is projected to increase QALYs by 1.7million at a national level leading to a cost per QALY gained (compared to no additional investment) of \$1,328. This represents excellent value for money as a health sector investment.

To capture the full value of investing in key mental health interventions it is important to account for the flow-on impacts to the economy from a healthier workforce which, in turn, also helps finance the health system. These investments are projected to increase productivity by over \$1bn by reducing distress-related absenteeism, presenteeism, self-harm hospitalizations and suicides, including \$65m from 15-24 year olds.

Increasing demand for services without boosting supply is harmful and costly

Expanding both national Awareness Campaigns and the Better Access initiative that offers additional Medicare subsidized services is well-intentioned and costs \$1.01bn over 5-years. However, without a simultaneous increase in available services this is projected to lead to huge waiting lists for services, resulting in a 22.2% increase in people disengaging from care entirely. The unintended consequences of this are a 0.3 percentage point increase in the population prevalence of medium/high distress and increases in ED presentations by 4.1% (72,394), suicides by 0.2% (46) with associated productivity losses of \$605m.

These initiatives are well intentioned. However, without having a system-wide perspective to account for how interventions interact there is a risk of creating imbalance between the demand for and supply of services and the price is lost lives (most importantly) and also economic productivity.

This is an example of why a national model based on system modelling is required to see the bigger picture, not only rely on individual studies or data points, and support Government to pursue a balanced approach to investment in policy portfolios to improve and sustain health and economic returns.

The huge investment opportunity to modernize healthcare coordination

There is an opportunity to develop and implement technology enabled team-based care so that key service providers can coordinate to provide patient-centered care in the 21st Century. Technology enabled care coordination involves the use of online technology to facilitate delivery of multidisciplinary team-based care, in which medical and allied health professionals consider all relevant treatment options and collaboratively develop an individual treatment and care plan for each patient. The roll out of technology-enabled coordination of team-based care is projected to reduce health service costs by \$226m, including 21,318 fewer ED presentations, 184 suicides prevented and an increase in productivity of \$1.3bn over the next 5 years, with \$101m from 15-24 year olds.

Yet more reasons to retain JobKeeper and invest in education

Now is not the time to cut JobKeeper before the economy recovers which, to reiterate, is now projected by the RBA to be a slower recovery than first anticipated. Just as the Government rightly requires households and business to either be in lockdown and/or socially distance to protect health, it would appear equally as important that the Government provides sufficient financial support to those households to then cover basic living expenses. This expenditure has knock-on benefits to other sectors across the wider economy and back to Government in taxation receipts.

Extending JobKeeper is also sound public health policy. Maintaining such employment programs for a total of 2 years is estimated to reduce the peak prevalence of psychological distress (March 2022) by 5.0 percentage points, and prevent 122,461 mental health related ED presentations, 14,833 self-harm hospitalizations, and 1,509 suicide deaths across Australia over the period 2020-2025.

There are, in addition, further benefits from retaining JobKeeper that have not been fully considered by public discourse so far. Retaining such employment schemes not only avoids losses to the economy associated with unemployment, but also averts \$3.2bn in distress-related productivity losses from those who remain in employment. This psychological distress relates to anxiety about potential unemployment (including a partner or family member becoming unemployed). There is also a saving of \$333m to the health sector from distress related presentations avoided. Maintaining employment and investing in education is also sound public health policy.

What is recommended?

A mental health crisis is unfolding in Australia. If we don't act proactively and at sufficient scale there will be scarring effects that may last well beyond the pandemic. This is not inevitable. There are opportunities for smart investments that will deliver real impacts and help us get ahead of the curve rather than deal with the aftermath. Our modelling demonstrates the important interplay between the economy, mental health and government policies. The future is inherently uncertain. Nonetheless, there are key policy investments which are robust across modelled scenarios. These are:

1. Direct investment of \$2.2bn to strengthen community-based services.
2. Invest to expand technology-enabled team-based care to coordinate patient needs.
3. Avoid investing in awareness campaigns and Better Access initiatives until service capacity constraints are addressed.
4. Maintain employment schemes until the economy recovers and boost education enrolment.
5. A whole of Government approach is needed to invest in multi-sector policies to protect and nurture Australia's mental health which is essential to national wealth.

Next steps?

The National Suicide Model will be updated and refined as revised estimates of key health and economic data are revised, such as unemployment, underemployment, participation, psychological distress and presentations to emergency care. To that end, we recommend national investment in data and modelling to enable continuous tracking of the real-time situation to then enable on-going decision-support to policymakers.

This national model will be further refined so that issues related to, for example gender, and youth, can be investigated in detail, and insights generated across other specific place-based (regional) models will be further explored and contrasted to inform how national policy can be nuanced at a local level. Finally, the model and economic analysis will be extended to consider the longer-term impacts of employment and education especially on youth development, and the full value of policy investments that promote development and avoid the negative social and cultural consequences from lost potential. Ultimately, the modelling is seeking to support investment in our communities, health systems and economic potential.

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