Centre for
Mental Health

Covid-19 and the nation's mental health
Forecasting needs and risks in the UK: May 2021
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Summary

- This is the fourth Centre for Mental Health forecast of the mental health impacts of the Covid-19 pandemic in England.

- After reviewing high quality evidence published during the six months since our previous forecast, we calculate that the equivalent of 8.5 million adults and 1.5 million children and young people will require mental health support as a direct impact of the pandemic during the next three to five years. The total increase in demand is around 10 million people.

- Key groups of people who face an especially high risk of poor mental health include people who have survived severe Covid-19 illness (especially those treated in intensive care), those working in health and care services during the pandemic, people economically impacted by the pandemic and those who have been bereaved.

- There are major gaps in robust evidence, including for children and young people and for the experiences of people from racialised communities in the UK.

- The predicted levels of demand are two to three times that of current NHS mental health capacity within a 3-5 year window. This is not a scenario where services can grow incrementally to meet steadily rising levels of need. Instead, Government and the NHS must take action now to meet a very steep increase in demand for mental health support.

Purpose and context

This forecast creates the opportunity for the UK Government, health and care providers and Integrated Care Systems in England to prepare for the impending impact of Covid-19 on the nation's mental health.

It presents objective facts from robust research. In the absence of another comparable pandemic or similar experience from which lessons can be drawn, it uses the research data to predict the numbers of people who will need mental health support and services as a direct result of Covid-19 in England.

This forecast is calculated using a model for mental health need arising from Covid-19 which was developed by clinicians, researchers and economists from the NHS and Centre for Mental Health in 2020 following a comprehensive review of available research, offering robust estimates for the impact of Covid-19 on different groups.

The first national forecast based on this model was published in October 2020 and should be read in conjunction with this report.

Over 200 research papers have since been reviewed, with the aim of updating the model. The model has been updated for adults. For children's mental health, the evidence used in the first model is still considered to be the most robust on which to base estimates of future need. The estimates of demand for children's mental health services are therefore the same as we forecast in October.

The current situation

At the time of writing this forecast, the Covid-19 pandemic has hospitalised 460,000 adults in the UK and at least 127,000 people have died. Its implications are wide-reaching. The economy has shrunk by 9.8% – the worst contraction in 300 years – and over six million people are on Universal Credit, which is double the figure a year ago. Government borrowing is at its highest since war-time levels.

The impact on mental health is still unclear, but early evidence is negative, including the recent survey of people with a Covid-19 diagnosis by Taquet and colleagues (2021). They found that, among 236,379 patients diagnosed with Covid-19, the estimated incidence of a neurological or psychiatric diagnosis in the following six months was 33.62%. For those receiving their first neurological or psychiatric diagnosis, the incidence is 12.8%. For patients admitted to intensive care units (ICUs), the estimated incidence was 46.4%, with a quarter of ICU patients subsequently receiving their first ever diagnosis of a neurological or psychological diagnosis.

These are the data for the first six months following a Covid-19 diagnosis (March 2020 to August 2020). Because Covid is still so novel, it is unknown what those numbers will be after the first 12 or 24 months. This is genuinely uncharted territory.

Even comparisons to countries with similar health care systems who suffered the SARS-1 pandemic offer limited comparative data. Canada's experience in 2003 was brutal, but mercifully only 44 people died. Crucially, a patient was only infectious once symptoms had developed; a key difference to the lengthy period of asymptomatic spreading with Covid-19. The human toll was vastly lower.

Similarly, much of the latest research on Covid-19 – particularly on the impact of lockdown – is from the early summer of 2020, because that is the available dataset once peer review and publication processes have been completed. It is only with more time that understanding will improve.

However, this forecast is based on the most robust evidence available, and as with the October 2020 report, it makes clear that large-scale mental health care capacity will be needed to meet growing demand. In the scenario presented here, we assume that only 25% of people affected will seek an actual service. If a greater proportion seek help, demand will grow further than we have forecast.

Forecast calculations

Increasing research has enabled this forecast to expand the number of population groups measured. This includes staff working in critical care Covid wards, social care workers, and people who have experienced different severities of Covid-19.

Overall, the estimate of total numbers of adults who will be seeking mental health support is 8.52 million. This is 58,210 fewer than in the October forecast, but it is still three times the current capacity, assuming increased demand is observed over a three-year period.

This is not a business-as-usual scenario where services can grow incrementally to meet steadily increasing levels of demand.

Specific groups of people

Critical Care Unit staff

There are approximately 13,312 staff who have worked in Covid critical care wards. News reports have conveyed the stress and misery staff have felt, with feeling 'never more exhausted' and looking 'dead behind the eyes' being common experiences of their day-to-day life. This group of NHS employees is likely to face significant after-effects, with 50% estimated to experience one or more mental health problems. Predictions that post-traumatic stress disorder (PTSD) will affect 40% are particularly worrying.

Frontline health and care staff

For this forecast, we have added staff working in care homes and social care to NHS staff from the October 2020 results. Expected incidence of depression, anxiety and PTSD in this group translates into service demand of 692,134 people. This is largely driven by the sheer volume of people who work in the sector, often on low wages, who found themselves wrapped in PPE, living in care homes or hotels and isolating from family members, as well as having to care for residents or patients in the absence of their relatives.

Adults recovering from severe Covid-19 in ICU

Studies of people who have survived an ICU admission with Covid show significant new risks of anxiety (9.8%) and mood disorders such as depression (5.8%). This was 'first incidence' diagnosis: that is, people with no previous mental health diagnosis. The figures for those with existing mental health problems were much greater.

Adults hospitalised by Covid-19 but not admitted to ICU

Again, just taking first incidence data only for those without an existing mental health diagnosis, anxiety (6.9%), mood disorder (4.5%) and psychotic disorder (0.9%) creates 8,068 people needing mental health care. For those with encephalopathy (damage to or disease of the brain), a further 5,594 people will need mental health services.

Adults diagnosed with Covid-19 but not hospitalised

Some 3.3 million people in England have been diagnosed with Covid-19 but not needed hospital treatment. Even among this group, 'first incidence' rates of mental ill health were still high at 3.9% for mood disorder and 6.8% for anxiety. This equates to 90,516 people requiring mental health care.

People who are bereaved

Many people have experienced the agony of saying the final goodbye to a parent via a video-call; of not being able to travel with a partner in the ambulance to the hospital; of donning goggles, gowns, masks, gloves and plastic aprons to hold a loved one's hand in their dying moments. This has often been followed by a funeral where all physical contact is forbidden. When grief is further complicated by feelings of guilt, shame, isolation and abandonment which are unique to Covid-19, post-traumatic stress (14%), depressive symptoms (18.4%) and prolonged grief (9.8%) account for nearly 50,000 people in our forecast needing mental health support.

Carers for adults and children with learning disabilities

These carers have been included as a specific group because there is published research about their experience of the first lockdown. Disappointingly, it is difficult to retrieve accurate figures on the numbers of people with learning disabilities as GP data, national prevalence data, schools data and local authority data are all conflicting. This issue has already impacted on the vaccination programme. Carers are known to have already high levels of mental health challenges because of isolation, stress and general endurance, and we forecast that 21,225 people in this group will need mental health support. This is likely to be an underestimate.

People economically impacted by Covid-19

The numbers of people claiming Universal Credit have risen by three million people in the last year. Approximately 2% of Universal Credit recipients will translate into additional demand for mental health services in this forecast, so whilst the population group is large in number, the resulting increase in demand is comparatively low (61,780 adults).

General population and people with existing mental health conditions

'General population' refers to any adult who was not part of another population group within the forecast (such as an NHS worker, or patient diagnosed with Covid). The figure for people with 'existing mental health conditions' was calculated using the Adult Psychiatric Morbidity Study (McManus *et al.*,2016).

In the October 2020 forecast, most of increased demand for mental health services was driven by these two groups. This is because:

- They are the largest groups by several magnitudes

- There was limited/no data on other groups, some of which are now included in this latest forecast.

Increased research means other groups now account for 10 million of the 43 million adult population examined in this study. Reassuringly, this has still resulted in a broadly similar forecast of service demand for mental health care.

For the general population, it is estimated that new demand for services will be 1,038,963 for severe anxiety and 1,421,403 for severe depression. For those with existing mental health conditions, the estimate is 2,530,778 for severe anxiety and 2,596,944 for severe depression. These are big numbers and the most robust estimation we can offer.

Even if these figures were viewed as totally implausible, if one took the extreme position of assuming that '80% of that will never happen', this forecast would still show that new demand for services will still be over 2.4 million people. Even if the forecast were only half right, 4.25 million adults would still need support as a result of the pandemic.

Total demand

The best estimate of increased demand for mental health services resulting from Covid-19 is 8.52 million adults, observed in a 3-5 year period, front-loaded to years 1, 2 and 3.

Over 200 new research studies have been reviewed for this new forecast. This is in addition to those reviewed for the October 2020 report. Despite the challenges of time-series, incomparable historic events and limited raw data, this forecast has significantly expanded the number of population groups so that these categories of need are identified by specific evidence which captures their specific experience. This increases the accuracy of the total estimate and our ability to identify what kinds of support will be required to meet people's specific needs and circumstances.

The result is that the overall expected increase in demand remains above 8.5 million adults, specifically 8,523,133.

Including demand from children and young people from the October forecast, of 1.5 million, the total increase in demand resulting from Covid-19 in England is 10,023,453 people.

Gaps in data

Whilst appreciating that Covid-19 has deployed the element of surprise, there are four significant gaps in data:

- Children and young people. It has not been possible to find new research on children and young people which provides better estimates of need than cited in the October forecast. Subsequent papers have limited use of clinically validated measures and sparse information on the proportion of young people falling into clinical groupings. Secondly, circumstances and safety measures for children and young people have changed radically in comparison to adults. This makes it difficult to forecast future need based on mental health at any given timepoint or series of timepoints during the pandemic.

- Studies which have captured a baseline of mental wellbeing before Covid-19 and use the same measures on the same sample to determine the change in health over the last year. This leaves a gap in measuring the specific changes observed during the pandemic.

- Research which uses data captured over more than six months. Again, there are valid reasons for this, such as peer review and publication timescales. We hope that future forecast revisions will enable us to incorporate data using longer time series.

- People from racialised communities. The absence of this data speaks to two significant points. First, that the infrastructure for measuring the experiences and outcomes of people from different communities appears to be largely absent, such that when a surprise pandemic emerges, there is little or no research that can be executed with rapidity. Second, where ethnicity is included in data or research, studies rarely go beyond outdated and homogenised comparisons of 'white' and 'BAME'. Research that focuses on specific groups is needed to truly understand the variances in health and outcomes that will emerge between different communities.

Conclusion

The purpose of this forecast is to point ahead at what is coming.

Meeting the mental health needs that arise from Covid-19 is a huge challenge, but it is not optional. Just as responding to the threat of the virus itself has tested every nation's resilience and resources, so will addressing the psychological and emotional consequences. There is time to prepare, but the window to do so is even more limited than when similar concerns were presented in the October forecast.

This model estimates mental health services for England will need a combined capacity for 8.5 million adults and 1.5 million children and young people – a total of 10 million people.

These numbers will be revised as further research becomes available, but the primary message is clear. Increased demand is going to be high and it is imperative that at a national, regional and local level, services ready themselves to respond. Just as the virus is novel, so too are some of the mental health challenges which emerge. Reacting and responding with creativity and adaptability will be key to success.

References

HM Government (2021) *Daily Summary: Coronavirus in the UK*. [Online] Available at: **https://coronavirus.data.gov.uk/** [Accessed on 19 April 2021]

Office of National Statistics (2021) *Gross Domestic Product Monthly Estimate: February 2021* [Online] Available at: **https://www.ons. gov.uk/economy/grossdomesticproductgdp/ bulletins/gdpmonthlyestimateuk/ february2021** [Accessed 4 May 2021]

Royal College of Psychiatrists (2021) *Country in the grip of a mental health crisis with children worst affected, new analysis finds*. (Based on NHS Digital SDCS data collection - Children and Young People with an Eating Disorder. Comparison of Q3 2020 and Q3 2019.) [Online] Available at: **https://www.rcpsych.ac.uk/news- and-features/latest-news/detail/2021/04/08/ country-in-the-grip-of-a-mental-health-crisis- with-children-worst-affected-new-analysis- finds** [Accessed on 16 April 2021]

Department for Work and Pensions (2021) *People on Universal Credit Provisional Figures*. [Online] Available from: **https://stat-xplore. dwp.gov.uk/** [Accessed 15 April 2021]

Davidson, J., Jones, C. and Bienvenu, O.J. (2012) Family response to critical illness: postintensive care syndrome-family. *Crit Care Med.* 2012 Feb;40(2):618-24. doi: 10.1097/ CCM.0b013e318236ebf9. PMID: 22080636.

Economou, M., Madianos, M., Peppou, L.E., Patelakis, A., Stefanis, C.N. (2013) Major depression in the era of economic crisis: a replication of a cross-sectional study across Greece. J Affect Disord. 2013 Mar 5;145(3):308- 14. doi: 10.1016/j.jad.2012.08.008. Epub 2012 Aug 30. PMID: 22939388.

Fancourt, D., Steptoe, A., Feifei, B. (2020) *Trajectories of depression and anxiety during enforced isolation due to COVID-19: longitudinal analyses of 59,318 adults in the UK with and without diagnosed mental illness*. London: University College London. DOI:10.1101/2020.06.03.20120923

Greene, T., Harju-Seppänen, J., Adeniji, M., Steel, C., Grey, N., Brewin, C.R., Bloomfield, M.A., Billings, J. (2021) Predictors and rates of PTSD, depression and anxiety in UK frontline health and social care workers during COVID-19, *European Journal of Psychotraumatology*, 12:1, DOI: 10.1080/20008198.2021.1882781

Greenberg, N., Weston, D., Hall, C., Caulfield, T., Williamson, V. and Fong, K. (2021) Mental health of staff working in intensive care during Covid-19. *Occupational Medicine*, Volume 71, Issue 2, March 2021, Pages 62–67, **https://doi. org/10.1093/occmed/kqaa220**

Lundorff, M., Holmgren, H., Zachariae, R., Farver-Vestergaard, I. and O'Connor, M. (2017) Prevalence of prolonged grief disorder in adult bereavement: A systematic review and meta- analysis. J *Affect Disord*. 2017 Apr 1;212:138- 149. doi: 10.1016/j.jad.2017.01.030. Epub 2017 Jan 23. PMID: 28167398.

Maunder, R.G., Lancee, W.J., Balderson, K.E., Bennett, J.P., Borgundvaag, B., Evans, S., Fernandes, C.M., Goldbloom, D.S., Gupta, M., Hunter, J.J., McGillis Hall, L., Nagle, L.M., Pain, C., Peczeniuk, S.S., Raymond, G., Read, N., Rourke, S.B., Steinberg, R.J., Stewart, T.E., VanDeVelde-Coke, S., Veldhorst, G.G., Wasylenki, D.A. (2006) Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. *Emerg Infect Dis*. 2006;12(12):1924-1932. doi:10.3201/ eid1212.060584

McManus S, Bebbington P, Jenkins R, Brugha T. (eds.) (2016) *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital

Taquet. M., Geddes, J.R., Husain, M., Luciano, S., and Harrison, P.J, (2021) 6-month neurological and psychiatric outcomes in 236 379 survivors of COVID-19: a retrospective cohort study using electronic health records. *The Lancet Psychiatry*, Volume 8, Issue 5, 416 - 427.

Willner, P., Rose, R., Kroese, B.S., Murphy, G.H., Langdon, P.E., Clifford, C., Hutchings, H., Watkins, A., Hiles, S. and Cooper V. (2020) Effect of the COVID-19 pandemic on the mental health of carers of people with intellectual disabilities. *J Appl Res Intellect Disabil.* 2020;33:1523–1533

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BRIEFING

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