

The Covid-19 Mental Health Forecast Model is designed to help local areas calculate the increase in mental health needs that will result from the Covid-19 pandemic. The precise impact is unknown and predictions are difficult. However, this tool is designed to help local areas think through the specific demographics of their communities and determine the services that may be required.

The model has been designed through an informal collaboration of doctors, clinicians, researchers and economists. It is a simple spreadsheet that

- Identifies key groups whose mental health is likely to suffer during/after the pandemic
  - Presents the most robust evidence/research available to estimate the increase whilst noting that the findings will be limited because the subject area is entirely new
- Combines this information to offer a total for each group
- Offers a total increase in need for a given community

**THE SPREADSHEET MUST BE USED IN CONJUNCTION WITH THE ATTACHED POWER POINT SLIDE-DECK WHICH EXPLAINS THE RESEARCH AND ASSUMPTIONS**

The spreadsheet is designed so that individual areas can input their own assumptions and local data. Whilst it will produce a series of indicative totals, the model should not be used to create concrete predictions of future need. It is intended to guide commissioners and clinicians in their conversations from which they can discern where to focus resources

There are three important points to note

1) The model will be revised as more research becomes available. This will change the calculations. Therefore, please ensure you are using the correct version by contacting the Team before you start to use it.

2) The 'Discount Rate' column reflects the risk of double-counting people who are included in more than one group. The higher the chance, the higher the discount rate. Where some groups are small – people in ICU for example – we have placed the discount rate at zero. We This may lead to a small over-estimation. The user is able to change these rates if they prefer. Please note that we have not discounted for co-morbidity and services may wish to consider this.

3) The 'Percentage or number requiring services' column estimates how need translates into service use and discounts accordingly. The estimates we have used are from clinicians and not a scientific fact. You are free to change these assumptions, or reduce them to zero.

Finally, this is a work in progress. We welcome input, ideas and corrections from you. Ultimately, we are trying to predict the unknown and this is hard. If there are changes you can see that would help improve the model, please tell us. We are particularly interested in other groups and communities where we anticipate increased mental health needs, but for whom we have not been able to identify robust research to predict that increase.

For questions pertaining to the spreadsheet, please contact Nick O'Shea at Centre for Mental Health on [nick.oshea@centreformentalhealth.org.uk](mailto:nick.oshea@centreformentalhealth.org.uk)

For questions on the adult research references please contact Rebecca Cummins from Cheshire and Wirral NHS Trust, [rebecca.cummins1@nhs.net](mailto:rebecca.cummins1@nhs.net) or Katrina Lake, NHS England and Improvement on [katrina.lake4@nhs.net](mailto:katrina.lake4@nhs.net)

For questions on Children and Young People research references, please contact Gavin Lockhart, NHS England and Improvement [gavin.lockhart1@nhs.net](mailto:gavin.lockhart1@nhs.net)

ENDS



Population group	Research study author	Number of people in population group (pre-Covid)	Research determined increase (percentage)	Mental health condition	Calculated predicted new cases of mental health condition	Percentage or number of people who may access services	Predicted extra demand for services	Discount rate	Most likely predicted new demand for services	Mental health condition	Confidence rating of study
General population without pre-existing mental health conditions	Fancourt et al	35,479,863	16.3%	Moderate severe anxiety	5,783,218	25%	1,445,804	8%	1,328,264	Moderate severe anxiety	Amber
	Fancourt et al	35,479,863	22.3%	Moderate severe depression	7,912,009	25%	1,978,002	8%	1,817,195	Moderate severe depression	Amber
People with pre-existing mental health conditions	Fancourt et al	7,524,777	67.4%	Moderate severe anxiety	5,071,700	49.9%	2,530,778	0%	2,530,778	Moderate severe anxiety	Amber
	Fancourt et al	7,524,777	56.3%	Moderate severe depression	4,236,449	61.3%	2,596,944	0%	2,596,944	Moderate severe depression	Amber
Healthcare workers	Mauder et al	1,072,352	30.4%	Burnout	325,995	25%	81,499	0%	81,499	Burnout	Green
	Mauder et al	1,072,352	13.8%	Post traumatic distress	147,985	25%	36,996	0%	36,996	Post traumatic distress	Green
	Mauder et al	1,072,352	44.9%	High psychological distress	481,486	25%	120,372	0%	120,372	High psychological distress	Green
People recovering from severe Covid-19	Bienvenu et al	6150	41.0%	Anxiety (38%-44%)	2,522	25%	630	0%	630	Anxiety (38%-44%)	Green
	Bienvenu et al	6,150	29.5%	Depression (26-33%)	1,814	25%	454	0%	454	Depression (26-33%)	Green
	Bienvenu et al	6,150	23.0%	PTSD (22-24%)	1,415	25%	354	0%	354	PTSD (22-24%)	Green
Adult family members of those recovering from severe Covid-19	Davidson et al	9041	19.5%	Anxiety (15-23%)	1,763	25%	441	0%	441	Anxiety (15-23%)	Green
	Davidson et al	9041	6.0%	Depression	542	25%	136	0%	136	Depression	Green
	Davidson et al	9,041	35.0%	Post traumatic stress disorder	3,164	25%	791	0%	791	Post traumatic stress disorder	Green
Bereaved people	Lurndorff M et al	348,881	9.8%	Prolonged grief disorder	34,190	25%	8,548	0%	8,548	Prolonged grief disorder	Green
	Lurndorff M et al	348,881	14.0%	Post traumatic stress disorder	48,843	25%	12,211	0%	12,211	Post traumatic stress disorder	Green
People economically affected by Covid-19	Gries et al	348,881	18.4%	Depressive symptoms	64,194	25%	16,049	0%	16,049	Depressive symptoms	Green
	Paul K et al	1,448,006	8.2%	Major depression	118,736	25%	29,684	0%	29,684	Major depression	Amber
<b>TOTAL</b>		<b>91,766,556</b>			<b>24,236,026</b>		<b>8,859,691</b>		<b>8,581,343</b>		

**KEY**

Master cell - this will change the rest in the same section

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Children and Young People General population	Alisic et al	9,982,684	5.6%	Post traumatic stress disorder (Range 4.7%-22.9%)	559,030	35%	195,661	33%	131793	Post traumatic stress disorder (Range 4.7%-22.9%)	Green
	Tang et al. Wang et al.	9,982,684	19.5%	Depression (1.6%-44.8%)	1,946,623	35%	681,318	33%	458922	Depression (1.6%-44.8%)	Green
Children and young people experiencing quarantine and social isolation	Loades et al	3,248,640	35.85%	Depression (10.1% - 81.8%)	1,164,637	35%	407623.104	0%	407623	Depression (10.1% - 81.8%)	Amber
	Loades et al	3,248,640	14.05%	Anxiety (4.2%- 32.3%)	456,434	35%	159751.872	0%	159752	Anxiety (4.2%- 32.3%)	Red
	Sprang et al	3,248,640	30.0%	Post traumatic stress disorder	974,592	35%	341107.2	0%	341107	Post traumatic stress disorder	Amber
Bereaved children	Stikkebroek et al	9,853	22.5%	Internalising disorder	2,217	35%	776	0%	776	Internalising disorder	Red
	Pharm et al	9,853	10.0%	Post traumatic stress disorder	985	35%	345	0%	345	Post traumatic stress disorder	Red
Children who are recovering from severe Covid-19	Nelson & Gold	66	11.75%	Post traumatic stress disorder (5%-28.5%)	8	35%	3	0%	3	Post traumatic stress disorder (5%-28.5%)	Amber
<b>TOTAL</b>		<b>29,731,061</b>			<b>5,104,527</b>		<b>1,786,585</b>		<b>1,500,320</b>		