The Networked Data Lab: Analysis plan for Topic 1 on shielding patients during COVID-19

Satellite analysis for NDL Wales

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Background and research question

- Whilst there is some work underway exploring the impact of COVID-19 on presentations to health care services with mental health related issues in Wales, a focus on depression and anxiety of people who were shielding, and of those who were young is lacking.
- Feeling raised levels of anxiety since the COVID-19 pandemic was commonly reported with a marked increase at the beginning of lockdown. 37% adults in the UK were reporting high levels of anxiety in May 2020¹. One in five adults in the UK were likely to experience depression during the pandemic². One study suggests that 35% of the shielded people reported worsening mental health since the shielding guidance but differ by age and gender³. There is less evidence of the impact on depression and anxiety for those who were shielding in Wales.
- Evidence reviews suggest a determination impact of lockdown on children's mental wellbeing across many countries⁴. In the UK, a number of cross sectional surveys have reported a detrimental impact on children and young people's mental health⁵ and in Wales⁶. However, the short and longer-term impact on mental wellbeing of amongst children and young people who were shielding is not well understood. Whereas there is little known about those affected by depression and/or anxiety, in particular. Such information can help to direct support in the longer term.

Aims

- The satellite analysis will allow us to have a better understanding of mental health needs for depression and anxiety of shielded individuals including children and young people (up to the age of 24) in Wales, and the change on patterns of health care usage before and since the shielding period started. The satellite analysis will utilise our access to primary care data to explore the mental health needs on anxiety and depression.
- The findings will help to identify the level of demand for mental wellbeing care and support amongst shielded children and young people during the pandemic and beyond.
- Considering these findings alongside the population surveys we will consider the
 potential unmet demand for mental health care for shielded individuals and the longer
 term implications. This will add to the discussions into health and care system
 recovery in the medium to longer term.

¹https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavirusandanxietygreatbritain/3a pril2020to10may2020

²https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavirusanddepressioninadultsgre atbritain/june2020

³https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/coronavirusandshieldingofclinicallyextremelyvulnerablepeopleinengland/28mayto3june2020

⁴https://www.mentalhealth.org.uk/publications/impacts-lockdown-mental-health-children-and-young-people

⁵https://youngminds.org.uk/media/3904/coronavirus-report-summer-2020-final.pdf

⁶https://www.childcomwales.org.uk/wp-content/uploads/2020/06/FINAL_formattedCVRep_EN.pdf

Data and data linkages

- We will link Shielded Patient List (SPL) with primary care data to obtain diagnosis and/or prescriptions of depression and/or anxiety. The study cohort includes every individual on the SPL and the estimated sample size is N≈128,000. The study period is between 01/03/2018 and 31/10/2020. It covers 01/03/2018 to 29/2/2020, and 01/03/2020 to 31/10/2020 corresponding to before and since the shielding period started.
- We will construct a comparison cohort of randomly selected individuals registered with a general practice in Wales⁷ who were at similar age but not advised to shield.

Methods

We will flag up all individuals in both study and comparison cohorts with at least one
diagnosis or prescription regarding to anxiety or depression during the study period.
We will summarise the number of patients by demographic characteristics including
age, gender and deprivation, as well as whether a person had pre-existing condition
related to depression and/or anxiety 2-year prior to shielding.

Local audience

 Our intended audience include Public Health Wales - Director for Health and Wellbeing, Public Health Wales Local Public Health Teams, Health Board leads for mental wellbeing, Early Years Programme leads, Technical Advisory Group in Welsh Government, Future Generations Commissioner for Wales, educational settings including schools, colleges and universities.

Dissemination plan

- The Health Foundation will summarise key findings from all satellite analyses in a publication and the RMarkdown files outlining findings will also be published online.
- We plan to produce an academic publication for the findings alongside other dissemination materials for our mixed audience including infographics, webinars, media extending potentially to social media with voluntary sector partners.
- We would aim to share and discuss the findings and implications with those involved in the Wales Together for Mental Health strategy, Health boards and Regional Partnership Boards, Local Government, Social Care, and groups with an interest in health policy and mental health including the Future Generations Commissioners office, and third sector organization (eg Children in Wales, MIND Cymru, Mental Health Foundation) and academics in Wales through the National Centre for Mental Health
- We would also like to share the findings with young ambassadors in Wales to hear their views.

⁷ We will only consider the general practices with data available in SAIL Databank. The coverage is around 80% currently.

•	This would then help to inform potential future work on the mental wellbeing of children living in households with shielded patients, and the impact on children's educational outcomes.