The Networked Data Lab: Mental Health of Shielding Patients during COVID-19

Satellite Analysis for North West London

Contents

Background and research question

The North West London partner of the NDL held a PPIE workshop with 50 local community members to inform the first satellite analysis priorities. Of those who filled out a survey on demographic information, 40% of attendees were from ethnic minority backgrounds.

The workshop focused on identifying key health and care research priorities for North West London citizens since the beginning of the COVID-19 pandemic that could be answered by analysing the Discover dataset, with a particular focus on aiming to reduce health inequalities. For example, areas of concern raised at the workshop included mental health, digital exclusion to health care and delays to treatment and diagnosis of other conditions. The research topics from the workshop were reviewed by an analyst to exclude any that the Discover dataset could not be used to answer.

The seven topics of interest from the workshop included in the prioritisation exercise were:

1. **Virtual consultations** - Which people might be missed in the move to "virtual" consultations (i.e. talking to your doctor on video or telephone instead of face-to-face)? For example, older people, people living in data poverty, people who aren't confident with technology and those with specific access needs e.g. language barriers.

2. **Seldom-reached communities** - What health and care services have and haven't been provided to people in need during lockdown (including people who are shielding, people on low incomes, people of colour, older people)? How have services been delivered and what impact has it had?

3. **Local availability of services** - Are there "postcode lotteries" in terms of what health and care services are available in different areas? Vulnerable people and people on low incomes are being asked to travel across London to access services during the pandemic. How does the availability of services line up with patients' needs?

4. **Diagnosis of other conditions** - What has been the impact of COVID-19 on other conditions, such as cancers? During the pandemic, are fewer people coming in with symptoms of cancer like lumps? Have there been fewer cancer diagnoses or emergency care (like people going into A&E)?

5. **Worse COVID-19 outcomes for people of colour** - Looking at links between people who are part of Black, Asian and Minority Ethnic groups and increased hospitalisations and deaths during the pandemic in North West London.

6. **Mental health** - Are any particular groups impacted the most e.g. those who are shielding or at high risk to COVID-19? What has the care and support been like for young people and people with existing mental health conditions? Has there been an increase in people having suicidal thoughts or dying by suicide?

7. **Social and community care** - Has there been less social and community care available to those in need? Have social and community care contacted those who should receive support? Has care been delivered in a different way? What impact has it had and on whom?

An online prioritisation exercise (through Qualtrics) was then sent to the workshop attendees and local community groups, including being posted on Twitter, Instagram and Facebook groups for local COVID-19 Mutual Aid Groups, in order to reach as many North West Londoners as possible.

A total of 112 community members completed the ranking survey. The team has summarised the results which can be seen in Table 1 below (with the rank of 1 being the highest ranking and 7 the lowest ranking, after summarizing the results). The demographics of the survey responders was not collected, to help ensure the survey was not discouraging and was quick to do.

Table 1: Summary of topics of interest by priority

Overall rank	Topic
1	Diagnosis of other conditions
2	Underserved communities (e.g. people on low incomes)
3	Mental health
4	Local availability of services
5	Access to video consultations
6	Social and community care
7	Worse COVID-19 outcomes for people who are part of BAME groups

The team reviewed the top three priorities from the survey for the satellite analysis and selected Mental Health as the topic of interest for the satellite analysis within the shielded patients population. Mental Health can be directly explored within the shielded patients population and will provide further insight into this cohort along with the First Central Analysis. The top two topics, Diagnosis of other conditions and Underserved communities, are also very important topics however it was decided that the scale and reach of those topics extended beyond a satellite analysis, therefore the team will bring these two topics for a wider discussion on further priorities within the Networked Data Lab.

This satellite analysis explores two topics:

1. Mental health needs of shielded patients

2. *Suicide risk assessments and coding in Discover data (From the community workshop, the following question was noted: Has there been an increase in people having suicidal thoughts or dying by suicide?)*

Aims

The satellite analysis explores the mental health needs of all shielded patients in North West London. The satellite analysis is built on the central analysis[1] with a special focus on mental health, and follows the same shielded patients definition period as the central analysis (detailed in Methods). Additionally, we explore the coding for suicide risk before and after the shielding period for the shielded patients' cohort.

Methods

Data and data linkages

In this study we use the longitudinal Discover dataset. This dataset provides linked coded primary care, acute, mental health, community health and social care record for over 2.5 million patients who live and are registered with a GP in NWL. This dataset extracts data from over 400 provider organisations including 360 GP practices, 2 mental health and 2 community trusts and all acute providers attended by NWL patients (in the form of Secondary Uses Service (SUS) data). This dataset contains linked data from primary care, secondary care, community, mental health, social care and high cost drugs.

We utilise the shielded patients list from the central analysis, along with primary care data on diagnosis, through Read Codes and Long-Term Conditions (LTC) table in the dataset and secondary care data on admissions.

Cohort: all patients on the shielded patients list (SPL) by 31st of July 2020

- The shielding cohort was defined as any patient who was on the SPL at any point in the period prior to 31 July 2020. As the shielding list was updated every Monday, the date was adjusted to follow the timelines for the First Central Analysis

Time period: 01/03/2018 to 31/12/2020

- 2 years prior to shielding (01/03/2018-29/02/2020), during shielding (01/03/2020-31/07/2020), and after shielding up to the reintroduction of shielding in 2021 (01/08/2020-31/12/2020)

Additional points of interest following a clinician's review:

- Demographics
    - Employment (coding to be clarified)
    - Deprivation (confounding)
    - Ethnicity
    - Body Mass Index (BMI)
    - Age
    - Gender
    - Electronic Frailty Index (eFI)

- Geographical location
- Mental health diagnosis
  - Anxiety
  - Depression
  - Serious Mental Health Illness

The team identified the following Read Codes of interest to explore suicide risk:

Read Code	Read Code Description
1BD..	Harmful thoughts
1BD1.	Suicidal ideation
1BD3.	Suicidal plans
1BD4.	Suicide risk
1BD5.	High suicide risk
1BD6.	Moderate suicide risk
1BD7.	Low suicide risk
1BD8.	At risk: deliberate self harm
1BS4.	No suicidal thoughts
146A.	H/O: attempted suicide

Local audience

- North West London Community
- Data Access Committee for North West London

Dissemination plan

- The Health Foundation will summarise key findings from all satellite analyses in a publication and the RMarkdown files outlining our findings will also be published online.
- We will summarise key findings and share them with the NWL community through community engagement workshops, reports to key stakeholders, and the Data Access Committee meetings.