North Kensington Population Health Monitoring

Introduction, methodology and findings to date

April 2024



Introduction

The Council and the NHS routinely monitor the health and wellbeing of the population following the Grenfell tragedy.

We work with partners each responsible for different aspects of the monitoring, including:

- a. Air quality monitoring UK Health Security Agency
- b. Soil monitoring RBKC Environmental Health
- c. Clinical monitoring NHS North Kensington Team
- d. Population health data monitoring RBKC Public Health
 - A five-year health and wellbeing survey: In the community's own voice, the aim is to understand the impact of the Grenfell tragedy. The survey focuses on perceptions around health, wellbeing, and recovery and to help shape services accordingly to local need.
 - Population Health Monitoring

Population Health Monitoring tracks the health and wellbeing of the population in Notting Dale over a long period of time, comparing it to similar locations to identify changing needs.

We use NHS data (patients cannot be identified from the data) to review health conditions, medication that has been prescribed and the use of services to identify any trends. If we find any changes, there is a process in place to investigate these further and decide on possible necessary service changes.



Index

These slides describe:

- How Population Health Monitoring was developed
- What conditions are monitored?
- Where does the data come from?
- How do we monitor health and wellbeing?
- Bereaved and Survivor Residents
- How are the findings considered?
- What have we found to date?
- The future of population health monitoring

Link to narrative as described in the JSNA Appendix



How it was developed

The local program of Population Health Monitoring was instigated following the Coroner's Prevention of Future Deaths Notice in September 2018 with support and guidance from Public Health England (as it was known at that time).

The methodology and the conditions considered to be relevant to the type of tragedy were agreed with local clinical experts, academics and resident input.



Abbreviations:

NWL WSIC = North West London Whole Systems Integrated Care team; PHE = Public Health England; CNWL =Central and North West London NHS Foundation Trust; PHIG = Public Health Implementation Group



What conditions are monitored (1 of 4)?

We monitor overall health and wellbeing as well as conditions relevant to this type of tragedy:



Illnesses of the lungs and airways

This includes conditions such as asthma. Annually, we also monitor rarer lung conditions such as asbestosis, a lung condition caused by breathing in dust from asbestos used in construction, and mesothelioma, a type of cancer affecting the lining of lungs linked to asbestos. We also monitor the prescribing of medications.

Cancer

Diagnoses and treatment for cancer is monitored quarterly, and annually we also monitor specific types of cancer, in particular lung cancer, prostate cancer, bone cancer and blood cancer.







Mental health and wellbeing

This includes for example, depression, anxiety, sleep disorders and post-traumatic stress disorder. We also monitor the prescribing of medications such as antidepressants or sleeping tablets.

Pregnancy, childbirth and infants

This includes pregnancy and labour complications, conditions affecting a baby's development and health during pregnancy and conditions present at birth.

Other physical health conditions

Other physical health conditions monitored include conditions of the heart and blood vessels, diabetes, and conditions of the digestive system



What conditions are monitored (2 of 4)?

For each condition we look at data from different health services and within different age groups, covering:

- GP visits, GP referrals to other services and prescribing of medications by GPs
- Admission to a hospital bed, including planned and emergency inpatient admissions
- Day visits to hospital for treatment, including first and follow-up outpatient appointments

among adults aged 20 years and over and children and young people aged 0-19 years.

General practice (WSIC)	
A1 Total GP events, 20+	A2 Total GP referrals, 20+
B1 Respiratory cond, 20+	B6 Respiratory referral, 20-
B2 Asthma, 20+	C10 Mental health ref, 20+
-B3 COPD, 20+	D2 Referral Cancer, 20+
B4 Lower resp tract, 20+	E6a Referral Cardiac, 20+
B5 Lung cancer, 20+	E6b Referral Neuro, 20+
C1 Mental disorders, 20+	F3a Referral Endo, 20+
C3 Sleep disorders, 20+	F3b Referral Diabetes, 20+
C4 Depression, 20+	G3 Pregnancy care, 20+
-C5 Anxiety, 20+	I3 Referral gastro, 20+
-C6 Psychosis, 20+	J2 Smoking, 20+
-C7 PTSD, 20+	I3 Exercise therapy 20+
-C8 Substance misuse, 20+	- Jo Excreise merupy, 201
C9 Headache, 20+	A9 Total GP events, 0-19
C2 Injury/poisoning, 20+	B14 Respiratory cond, 0-19
D1 Neoplasms, 20+	LB15 Asthma, 0-19
E1 Circulatory system, 20+	C18 Mental disorders, 0-19
E2 Atrial fibrillation, 20+	C19 Injury/poisoning, 0-19
E3 Coronary heart dis, 20+	F8 Endocrine/metaboli 0-19
E4 Heart failure, 20+	H2 Congenital, 0-19
E5 Hypertension, 20+	19 Digestive system, 0-19
F1 Endocrine/metabolic 20+	
F2 Diabetes, 20+	
G1 Pregnancy/birth, 20+	A10 Total GP referrals, 0-19
G2 Pregn complications, 20+	
H1 Congenital, 20+	
11 Digestive system, 20+	
LI2 Liver disease, 20+	
J1 Current smoker, 20+	
	Mental health
service delivity respiratory	

Indicators North Kensington Population Health Monitoring (116 indicators)

Total elective, 20+	
3 Neoplasms, 20+	
D5 Lymphoma, 20+	
7 Circulatory system, 2	0+
4 Endocrine/metabolic	20+
Digestive system, 20+	
1 Unexplained sympt, 2	.0+
2 Chronic kidney dis, 20)+

C12 Mental health, 20+

D4 Cancer, 20+

E10 Stroke, 20+

C11 Injury/poisoning, 20+

E8 Circulatory system, 20+

E9 Conges heart failure, 20+

F5 Endocrine/metabolic 20+

k3 Unexplained sympt, 20+

G4 Pregnancy/birth, 20+

-I5 Digestive system, 20+

A11 Total elective, 0-19

Circulatory system

A12 Total emergency, 0-19

Outpatient appointments (WSIC) A5 Total first appointm, 20+ -B8 Respiratory, 20+ -E11 Cardiac, 20+ -E12 Neuro/stroke, 20+

A6 Total follow-up app, 20+ B9 Respiratory, 20+ E13 Cardiac, 20+ E14 Neuro/stroke, 20+ F7 Endocrine/metaboli, 20+ G6 Pregnancy care, 20+ I8 Gastro, 20+ K6 Kidney, 20+

A13 Total first appoint, **0-19** -E15 Cardiac, 0-19 -E16 Neuro/stroke, 0-19



E18 Neuro/stroke, 0-19

Diabetes Pregnancy and childbirth Congenital

F9 Endocrine/metabol, 0-19

Urgent care (WSIC) A7 Total A&E activity, **20+** A8 Total Walk-in Centre, **20+** A15 Total A&E activity, **0-19** A16 Total Walk-in Centre, 0-19 Prescribing (pharmacy team) B10 Respiratory presc, 20+

20+: adults aged 20 years and over; 0-19: children and young people younger than 20

B12 Antihistamines, 20+ B13 Corticosteroids, 20+ C14 Mental health, 20+ -C15 Antidepressants, 20+ C16 Hypnotics, 20+ C17 Psychosis, 20+

-B11 Bronchodilators, 20+

B17 Respiratory presc, 0-19 B18 Bronchodilators, 0-19 B19 Antihistamines, 0-19 B20 Corticosteroids, 0-19

C21 Mental health, 0-19 C22 Antidepressants, 0-19 C23 Hypnotics, 0-19

Specific conditions Data for subgroups (for example mesothelioma) is also available but due to small numbers these are not monitored quarterly

Digestive Public Health

Other

What conditions are monitored (3 of 4)?

Three further conditions (18 'indicators') were added in 2023, incorporating feedback from residents and clinicians:



Autoimmune conditions

Your immune system is your body's defence against infection and disease. If you develop a problem with your immune system, it can start to attack your own healthy tissues and organs. This is called an autoimmune disorder. The immune system is sensitive to stress and research studies have suggested a link between post-traumatic stress disorder and development of autoimmune conditions. Autoimmune conditions we monitor include for example inflammatory bowel disease, rheumatoid arthritis, psoriasis and multiple sclerosis.



Musculoskeletal conditions

These are conditions that can affect your joints, bones and muscles and sometimes associated tissues such as your nerves. There is some evidence that psychological trauma and stress is related to muscular pain, and there may also be an indirect link via a lack of exercise. Musculoskeletal conditions we monitor include joint, soft tissue, neurological and degenerative conditions and injuries.



Skin conditions

Stress can aggravate skin conditions such as eczema and psoriasis. Skin conditions we monitor include skin rashes, skin infections and lesions.



What conditions are monitored (4 of 4)?

Annually, a further 337 indicators are reviewed, covering 71 conditions.

These are **subcategories** of the indicators monitored quarterly. For example, GP activity relating to all illnesses of the lungs and airways is monitored quarterly while activity specific to asbestosis is monitored annually.

These include:

Illnesses of the lungs and airways: asthma, COPD, lower respiratory tract, lung cancer, asbestosis, pulmonary embolism, pulmonary fibrosis, pulmonary hypertension, mesothelioma

Mental health and wellbeing: sleep disorders, depression, anxiety, psychosis, Post-Traumatic Stress Disorder, substance misuse, headache, alcohol dependency, bedwetting, fatigue, health anxiety, learning disability, obsessive compulsive disorder, suicide, nightmares, bipolar affective disorder, injury and poisoning

Cancer: lung cancer (see 'illnesses of the lungs and airways'), lymphoma, prostate cancer, thyroid cancer, bone cancer, leukaemia, myeloma

Pregnancy, childbirth and infants: pregnancy complications, placenta praevia, labour complications, obstetric hypertension, foetal problems, abortive outcome, foetal abnormalities, perinatal conditions, congenital abnormalities

Conditions of the heart and blood vessels: atrial fibrillation, coronary heart disease, heart failure, hypertension, myocarditis, pericarditis, stroke

Diabetes: diabetes, pre-diabetes, Addison's disease, Cushing's disease

Other: liver disease, smoking, exercise therapy, unexplained symptoms, chronic kidney disease, motor neurone disease

Autoimmune conditions: rheumatoid arthritis, inflammatory bowel disease, psoriasis, systemic lupus erythematosus, multiple sclerosis

Musculoskeletal conditions: arthropathies, degenerative conditions, injury, neurological conditions, soft tissue conditions

Skin conditions: infection, lesion, skin rashes, other skin conditions.

Where does the data come from?



Public Health at the local authority has access to pseudonymised (removing any identifiable information and using random code instead) patient level data through **Whole Systems Integrated Care Data (WSIC)** for analysis to ensure data security and maintain confidentiality.

No person can be identified from the analysis findings.

This covers GP visits and referrals, planned and emergency inpatient admissions, and first and follow-up outpatient appointments.

We also use primary care prescribing data as shared by the pharmacy team.



How do we monitor health and wellbeing (1 of 3)?

We monitor the health and wellbeing of:

- \circ Survivors of the tragedy
- Those bereaved by the tragedy
- Residents of the Notting Dale ward
- Residents of the other four wards which comprise the North Kensington Area (Colville, Dalgarno, Golborne, St Helen's)

We look at these groups alongside a comparator area: residents of the Queen's Park ward in Westminster – an area with similar characteristics and make up to Notting Dale.

 Kein
 Queen's-Park

 Dalgarno
 Westborne

 Notting Dale
 Colville

 Notting Dale
 Keing Hall

We do not track the health of individuals, but instead look at the needs of a population as a whole each quarter. This means each year the number of individuals that lived in Notting Dale at the time of the tragedy will decrease as residents may move out of the area.

Age and other social and demographic factors may differ between the areas and affect health but these are not taken into account, although findings are compared to an area selected because of its similar characteristics and make up to Notting Dale.



How do we monitor health and wellbeing (2 of 3)?

Data for the 134 'indicators' is reviewed every three months:

- Is activity significantly above or below the previous quarter / before the covid-19 pandemic / before the tragedy?
- Is activity significantly different between the three areas?
- Any other patterns of interest observed





Example chart showing one of the indicators (Total outpatient first appointments in aged 20 years over)

How do we monitor health and wellbeing (3 of 3)?

In addition, an annual review covers a further 337 'indicators'. Data is combined for 2 years so that the numbers are large enough to compare.



Survivor Bereaved Notting Dale North Kensington Area (Excluding Notting Dale) Queen's Park (Comparator)

Example chart showing one of the annual indicators (GP events for pulmonary embolism, adults 20+) For this indicator the number of visits is below 5 in Survivor cohort and Bereaved cohorts.



Bereaved and survivor residents

From September 2022, data sharing agreements are in place between the NHS and RBKC and Public Health to regularly monitor and assess health data for the Bereaved and Survivor Residents (in addition to residents of the five wards surrounding the Grenfell Tower).



To assist NHS services in identifying individuals affected by the Grenfell tragedy, two discreet codes were created to distinguish Survivors and Bereaved. These codes were then assigned to patients by their GPs.

GPs have also assigned the survivor code to patients born as survivors, while the bereaved code is also applied to patients who have self-identified as bereaved following the incident.

Data is only available for those patients that are still registered with a North West London GP

There are **437** patients coded as Survivors and **489** coded as bereaved.



How are the findings considered?

Data monitoring and interpretation is a joint endeavour between local authority and NHS colleagues.

Data analysts and clinicians meet quarterly to look at data trends to pick up on any changes early.

When a change is observed, the team go through a process of checking the data more thoroughly, triangulating this with the experience of clinicians on the ground and trying to understand what might be driving this change.

Often, findings are explained by data quality, such as duplicate entries for the same patient. For example, an increase in GP visits related to asthma may be explained by a single practice changing the code they use to record routine annual asthma reviews and not an increase in new diagnoses or worsening of symptoms.

If there are any signals in the data that might be a real increase in disease, there is a process in place to investigate this further and decide on necessary service changes.

Findings are shared regularly in clinical reference meetings with NHS colleagues to contextualise with clinical understanding of the services and arrive at meaningful conclusions and actions.

NHS then interpret the data, as the local authority do not have full access to the information contained within NHS services.



What have we found to date (1 of 8)?

From the 116 local NHS indicators we monitor routinely for Notting Dale, **very few have identified an increase in health needs**, when compared to the borough as a whole, or to Queen's Park, a ward with a similar population profile.



For some conditions and long-term health impacts, we would not necessarily expect to see an increase in the current timeframe as these may not present for a long time.

Findings shortly after the tragedy:

As described in the 2018 JSNA (the journey of recovery – annex 3) there were some increases shortly after the tragedy, which were to be expected, but have fortunately since returned to activity levels prior to the tragedy and the comparator area:

- In the month of the tragedy (June 2017) there was an increase in overall use of urgent care by Notting Dale residents compared to June 2016, and in particular for conditions of the lungs and airways.
- Following the tragedy, there was increased GP activity in Notting Dale ward for mental health diagnoses in adults including post-traumatic stress disorder, sleep disorders and the prescribing of medications used to assist with sleep disorders.



What have we found to date (2 of 8)?



Illnesses of the lungs and airways

We have not seen any increases in the occurrence of respiratory conditions in Notting Dale or the North Kensington Area other than for seasonal influenza or due to the COVID-19 pandemic. This is also the case for the rest of Kensington and Chelsea, and Westminster.

• There was an increase in GP appointments for asthma in adults, however investigation established the increase was due to coding activity by the GP practice and not due to an increase in the diagnosis of asthma.





What have we found to date (3 of 8)? Millnesses of the lungs and airways

Respiratory prescribing in Notting Dale during the COVID-19 pandemic was above the comparator area, due to increased inhaler prescription used to relieve symptoms of asthma and chronic obstructive pulmonary disease (COPD) such as coughing, wheezing, and feeling breathless. Following the pandemic this has returned to a lower rate of prescribing that is similar to before the pandemic, before the tragedy and the comparator area.

b10 Total prescribing respiratory, age 20+ years





What have we found to date (4 of 8)? Millnesses of the lungs and airways

 In all areas GP visits relating to respiratory health by children and young people show seasonal fluctuation, with winter peaks relating for example to influenza or RSV. No change in pattern is observed compared to before the disaster and the comparator area.

b14 GP events for respiratory system, age 0-19 years





What have we found to date (5 of 8)?



Mental health and wellbeing in adults

In both adults and children, there has been an increase in the prescribing of medication for mental health conditions, which is in line with a longer-term increasing trend also observed in the comparator area and the wider North Kensington area. This may reflect increased anxiety in general and the impact of the COVID-19 pandemic and the rising cost of living.



c14 Total mental health prescribing, age 20+ years



c21 Total mental health prescribing, age 0-19 years

What have we found to date (6 of 8)?

Cancer

d1 GP events for neoplasms, age 20+ years

The Public Health Population Health Monitoring programme has not detected any increased occurrence of cancer in the Notting Dale population or within the wider North Kensington area to date.

12 70 Grenfell Tower disaster Covid-19 pandemic Grenfell Tower disaster Covid-19 pandemic 60 10 Crude rate per 1,000 population 50 40 000 30 4 0 Q1 2016/17 Q1 2017/18 2017/18 Q4 2016/17 22 2016/17 Q3 2016/17 Q3 2017/18 Q4 2017/18 Q4 2020/21 2018/19 2018/19 2018/19 2019/20 2020/21 2020/23 Q1 2021/2: Q2 2021/22 Q3 2021/22 2022/23 2018/1 2019/2 23 2020/2 24 2021/2 Q1 2022/2 2018/19 2018/19 2018/19 2019/20 2019/20 2019/20 2019/2 2019/2 2019/20 2020/21 2020/21 2020/21 Q1 2017/18 22 2017/18 Q3 2017/18 Q4 2017/18 Q1 2018/19 Q1 2016/17 Q2 2016/17 Q3 2016/17 Q4 2016/17 52 51 22 22 03 Q4 44 Ω Ω2 33 Quarter

North Kensington Area (Excluding Notting Dale) — Queen's Park (Comparator) — Notting Dale — Kensington and Chelsea — Westminster

b5 GP events for lung cancer, age 20+ years



Q4 2021/22

Q1 2022/23 Q2 2022/23 Q3 2022/23

24 2020/21 Q1 2021/22 Q2 2021/22 Q3 2021/22 Q4 2022/23 Q1 2023/24

What have we found to date (7 of 8)?

Pregnancy, childbirth and infants

GP activity for pregnancy and childbirth is in line with the pattern before the tragedy and not different from the comparator area.

g1 GP events for pregnancy and childbirth, age 20+ years





The future of population health monitoring

The introduction of a Grenfell Dashboard that is being produced by the North West London Whole System Integrated Care (WSIC) team will allow for better transparency and ease of reporting.



