Homelessness in Greater Manchester

Alex Otway | Greater Manchester Combined Authority
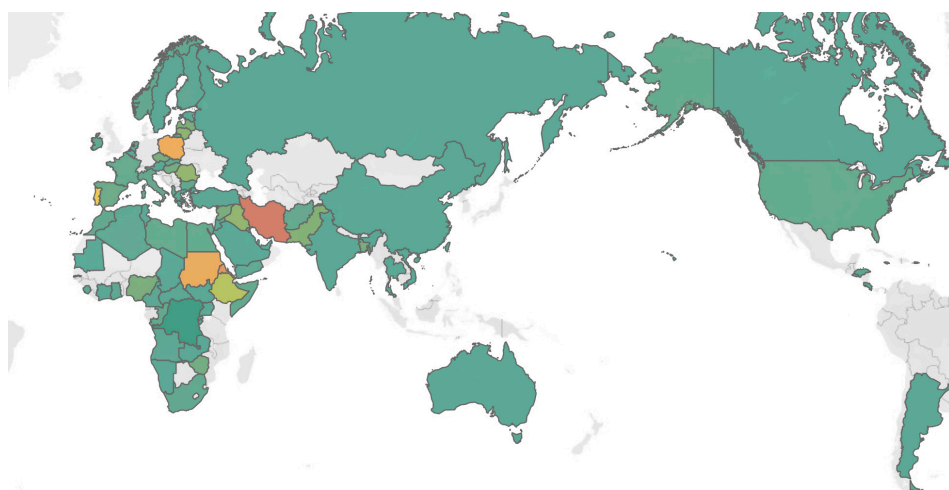
Overview of the Data Fellowship

The GMCA combines the ten boroughs of Greater Manchester, a city-region of nearly 3 million people. Its elected Mayor, Andy Burnham, has made tackling homelessness a priority. The flagship scheme, A Bed Every Night (ABEN), is one part of a systemic approach, aiming to tackle the rough sleeping crisis by providing shelter, and a range of support.

The bulk of my work was cleansing, analysing and presenting all existing individual-level data collected on ABEN for each borough, amid the move to a new system of handling the data.

Data Analysis

The data I used was from 10 separate Excel spreadsheets for each borough, updated monthly. This anonymised dataset contained individual-level data on several things such as demographics, time spent rough sleeping, immigration status and various support needs.

I used PivotTables to extract this data to produce separate borough-level reports. I later learnt Tableau to produce an interactive dashboard for the GM-wide data, on areas of interest and KPIs. The map of nationalities below is from this dashboard.
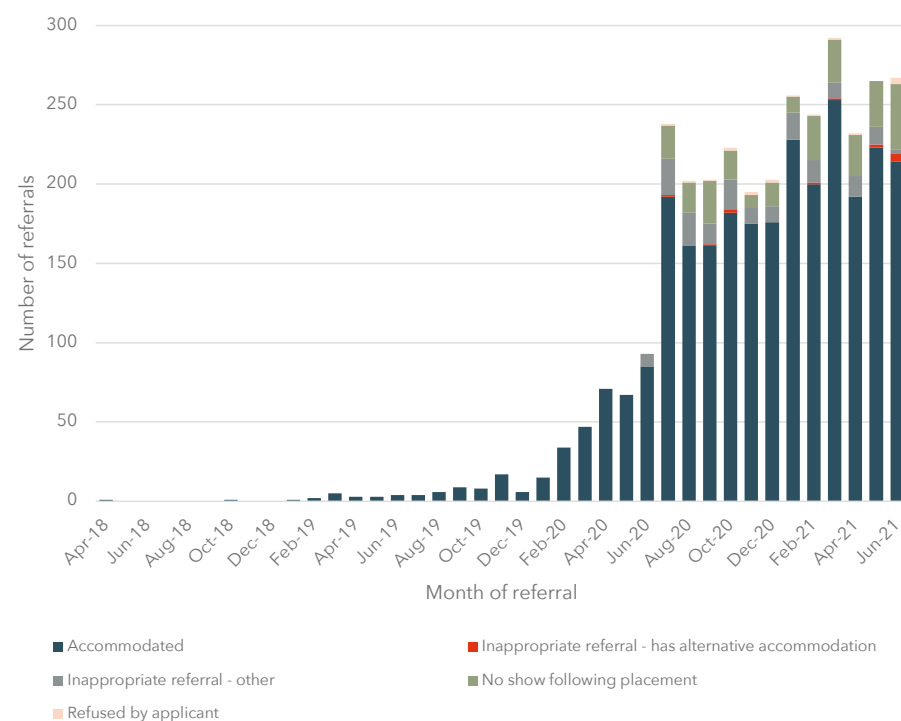

Map shows frequency of nationality of ABEN users (excluding UK), made on Tableau

My main challenge was the quality of the data, filled in by busy frontline workers. Mistakes and inconsistency meant I had to learn how to cleanse this data accurately and quickly.

Collating this provides an evidence base to allocate funding based on need, and to evaluate differences in needs and delivery across boroughs and providers. Especially important is data on individuals with No Recourse to Public Funds, who cannot access key services, and are unevenly geographically distributed.

I also used data on external events like weather and COVID-19 to conduct exploratory analysis into potential correlations with

Referrals increased significantly after the pandemic started in 2020

ABEN referrals.

Findings

- **Referrals to ABEN increased significantly in 2020**, with a smaller proportion accommodated each month after this rise

- **8 out of 10 referrals were men**, unlikely proportional to the actual gender split of rough sleepers, as women rough sleep differently to men so are not picked up in rough sleeper counts

- **Salford had the highest number of individuals** in the data; however, Manchester is certain to have the actual highest number of rough sleepers but does not record as many

- **Delivery of ABEN varies across boroughs**; for example, one had a high proportion of repeat referrals, reflecting their policy of frequent evictions

Key Skills Learnt

- Cleansing large and messy datasets

- Excel skills such as PivotTables and LOOKUP

- Data visualisation in Excel and Tableau

- Mapping in QGIS and Tableau

- Practising cost-benefit analysis

- Practising regression analysis

- Professional skills, including presentations, teamwork, time management, and networking

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