

# Islington Insights population register: linking council data to understand local population needs for a fairer, healthier society

Authors: Laura Scott,<sup>1</sup> Helen McDonald,<sup>2</sup> Mahnaz Shaukat,<sup>1</sup> Laurence Vandervoort,<sup>1</sup> Logan Robertson,<sup>1</sup> Jessica Sheringham,<sup>2</sup> Sarah Dougan.<sup>1</sup> 1. London Borough of Islington 2. University College London

**Key messages:** Developing the *Islington Insights* population register was challenging, requiring locally-developed methods to manage variable data content and quality. It has enabled a greater understanding of the local population and complex issues, allowing council services to be delivered more effectively and fairly.

## BACKGROUND

Councils hold information on many aspects of people's lives. Data are in multiple databases with no common key identifiers, with no standard approaches to recording.

### Aims:

- create the Islington Insights population register by linking data across the council.
- use these data to understand the population's needs, improve council services, and identify opportunities for prevention and service integration.

## METHODS

### Creation:

- Over 90 data sources were brought together using locally developed algorithms using combinations of name, date of birth, address and other identifiers.
- A 'golden record' generated for each individual with a single best set of demographics.
- Co-resident adults were grouped as households and assumed to move together to manage high within-Borough mobility and variable recording of address changes. Each child was assigned to a responsible adult and assumed to remain with that adult.

**Validation:** The population profile was compared with Greater London Authority (GLA) population estimates.

## RESULTS & DISCUSSION

The register has a population profile similar to GLA estimates. (Fig. 2)

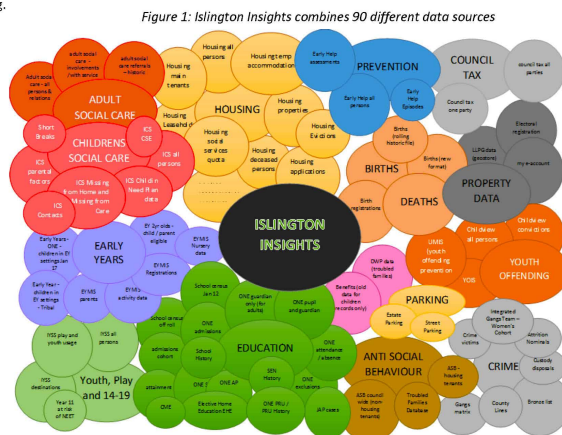


Figure 1: Islington Insights combines 90 different data sources

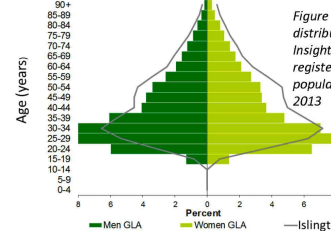


Figure 2: Age-sex distribution of Islington Insights adult population register is similar to GLA population estimates for 2013

### Challenges and opportunities:

- Building the database required significant time and expertise.
- Each dataset varied in quality and personal identifiers available for linkage.
- Grouping household members was needed because of high mobility and variable recording of address changes but allows exploration of how issues affect whole households (e.g. domestic violence).

Figure 3: Islington Insights has been used for many purposes



**Uses:** Islington Insights has already led to greater understanding of complex local issues (Fig. 3). It will enable external data linkages, e.g. with local health data to better understand the social determinants of health.