



# PIONEER

## Health Data Research Hub

**NIHR** | Birmingham Biomedical Research Centre

**UKRI** UK Research and Innovation

## Admission Patterns In Multiple Long-Term Conditions: NIHR/UKRI ADMISSION Dataset

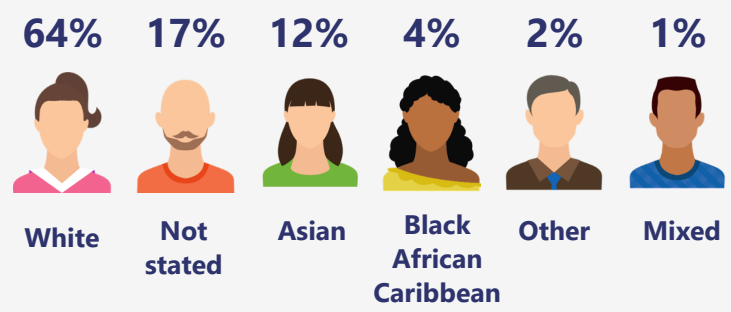
Data range for infographic: 01.01.2018-31.12.2018  
Other extended time periods are available on request

Longitudinal data (> 10 years) for >70,000 patients, including accrual of comorbidities, acute admissions and outcomes, detailed demographics, ICD10 codes, and time-stamped acute care data including acuity, physiology, investigations and medicines.

### Demographics

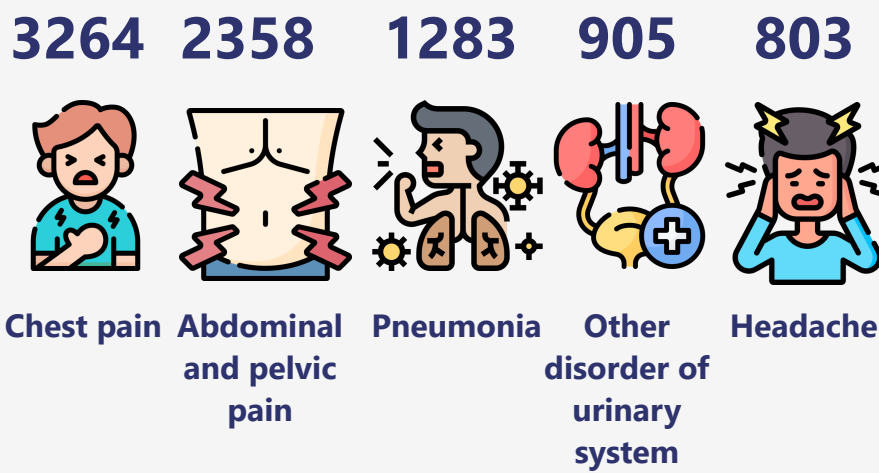
The dataset includes:

- young adults **8%** (ages 18-25)
- adults **53%** (ages 26-64)
- elderly **39%** (ages 65+).



Based on patients postal codes and the index of multiple deprivation; **41%** of patients come from most deprived areas and **8%** are from least deprived areas.

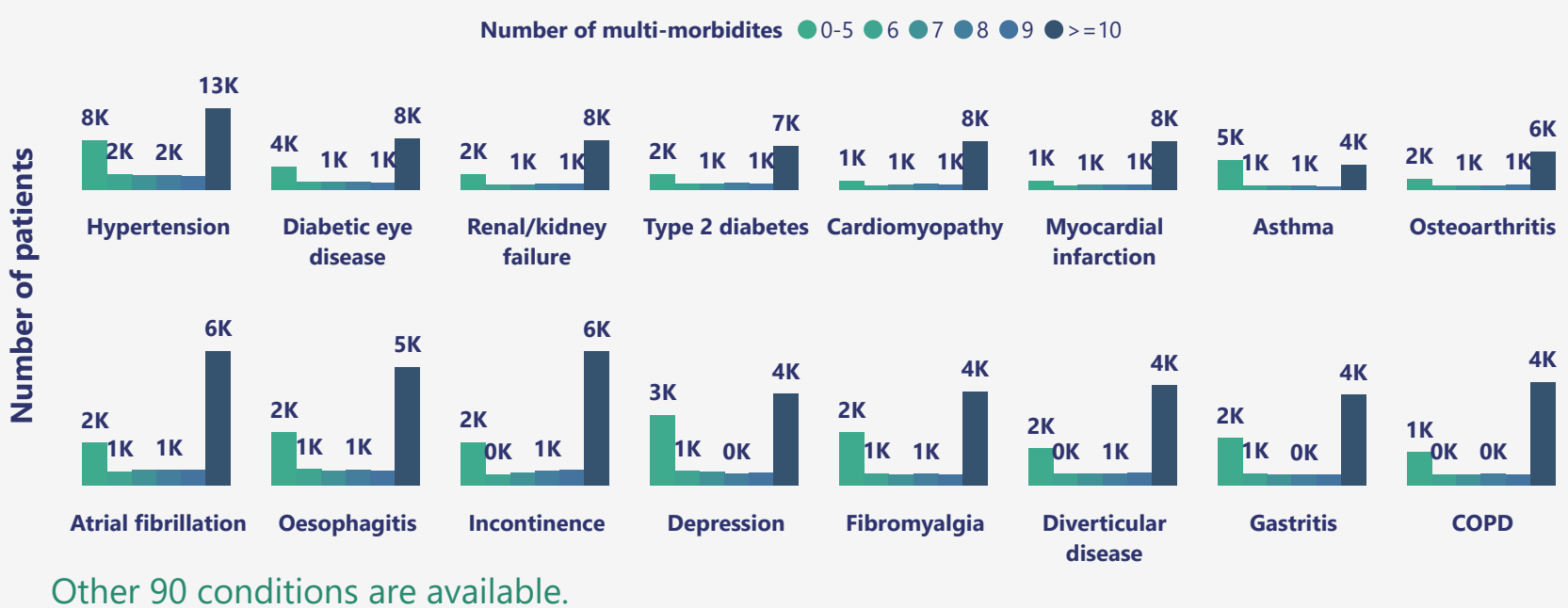
### Top 5 primary ICD10 diagnoses



### Diagnoses

- **Over 6M** diagnoses recorded
- **5M** Discharge diagnoses recorded
- **328K** Presenting conditions recorded
- **181K** Admitting diagnoses recorded
- **117K** Clinical diagnoses recorded
- **10K** distinct ICD10 diagnoses
- **4K** distinct SNOMED diagnoses

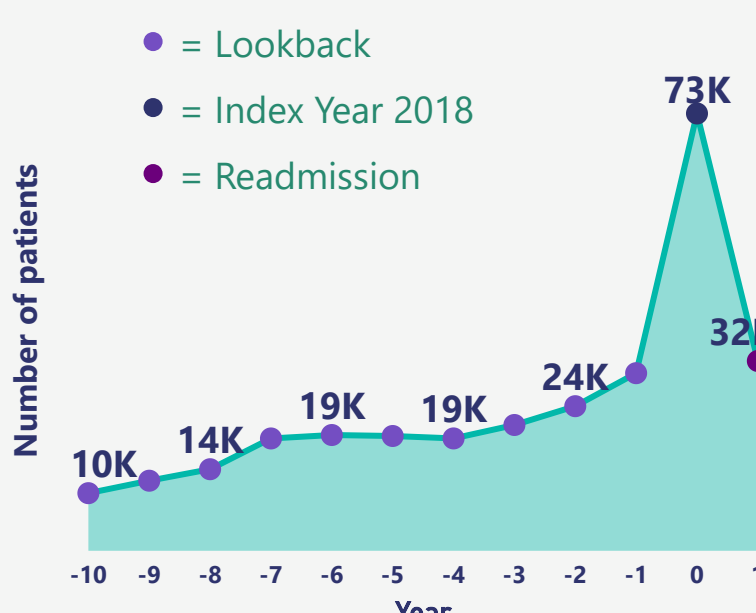
### Top multi-morbidity



### Inpatient care

- **8.19GB** worth of data, one of Europe's most diverse and non-transient populations
- **72,862** unique patients with at least one hospital admission in the calendar year 2018
- **42.6%** of patients were readmitted to hospital within one year post discharge
- In-hospital mortality rate of 1.11% and 91% of patients surviving 12 months after discharge

### Lookback and readmission



### Mortality by comorbidity

Over **70K** clinically coded ICD10 spells with an average of 4 diagnoses per patient

