



# PIONEER

Health Data Research Hub

# HDRUK

Health Data Research UK

## NHS Priority Challenge: Developing Tools To Prevent Avoidable Admissions

Data range for infographic: 01.10.2021-30.09.2022

Other extended time periods are available on request

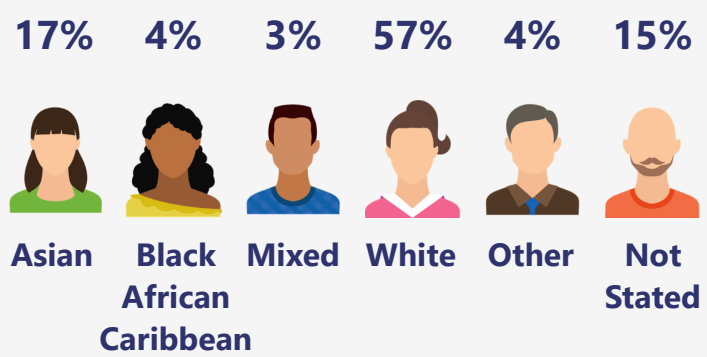
A highly granular dataset of 503,154 Emergency Department presentations curated by PIONEER, working with HDR-UK. The data includes admission details, demography, presenting symptoms, serial physiology and acuity, investigations, treatments, and outcomes.

### Demographic

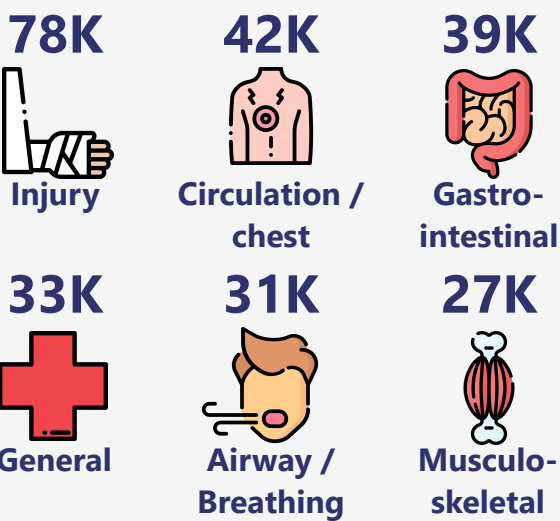
The dataset includes:

- Young adults **23%** (ages 0-24)
- Adults **45%** (ages 25-64)
- Older adults **32%** (ages 65+)

Based on the index of multiple deprivation map, **42%** of the population are from most deprived areas and **11%** of patients are from least deprived areas.



### A&E chief complaint



### Diagnoses

**32K** admissions are diagnosed with seasonal respiratory infections and **10K** admissions had seasonal chronic exacerbations.

The top 3 inpatient admission reasons are:

- community acquire pneumonia, **14K** admissions
- Low risk chest pain, **12K** admissions
- Urinary tract infection, **7K** admissions

Other chief complaints and diagnoses are available.



### A&E investigations

Over **1M** investigations recorded in A&E with the average number of investigations done being **3**. The main urgent investigation is an X-ray.



### A&E treatment

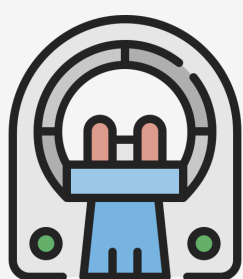
Over **614K** treatments recorded in A&E with the average number of treatments done being **1**. The main urgent treatment is Cardiac monitoring.

### Inpatient care

- **503,154 Hospitalised admissions;** containing **263,937** unique patients admitted to hospital
- **834K** days worth of hospital data with an average in-hospital length of stay of 8 days
- In-hospital mortality rate of 4% and 3% of admissions discharged to a care home
- The average number of comorbidities the patient is diagnosed with is 9 with a median of 8

### Inpatient procedures

More than **348K** in-patient procedure recorded with the average number of procedure being **1**. The main procedure recorded is a CT scan of the head.



Other inpatient procedures are available.

### Discharge

**2%** of A&E attendances are discharged to urgent care and **94%** of A&E attendances are discharged to residence. **91%** of inpatient admissions are discharged to residence.

