



PIONEER

Health Data Research Hub

Socioeconomic And Environmental Factors And Outcomes Of Acutely Unwell Patients

Data range for infographic: 01.02.2020-28.02.2022

Other extended time periods are available on request

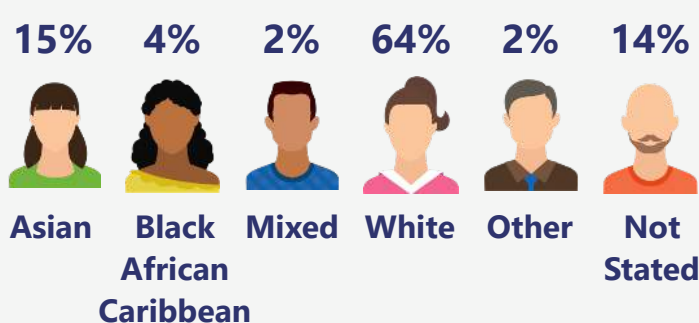
A highly granular dataset of 8,803 spells admitted to intensive care unit curated by PIONEER, including demography, comorbidity and physiology/acuity, all investigations and treatments, deprivation indices, geolocation and weather data.

Demographic

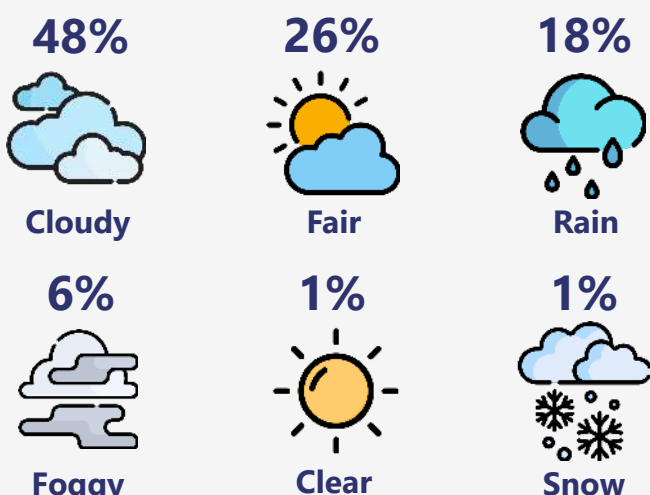
The dataset includes:

- Young adults **8%** (ages 0-24)
- Adults **57%** (ages 25-64)
- Older adults **35%** (ages 65+)

Based on the index of multiple deprivation map, **46%** of the population are from most deprived areas and **11%** of patients are from least deprived areas.



Weather 7 days prior to hospitalisation



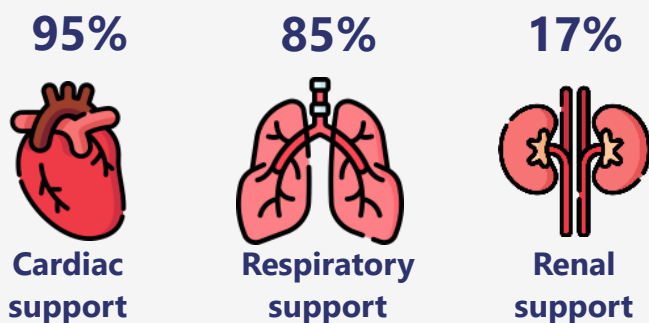
Weather

Weather data from 58 different weather stations across the UK, including weather data such as:

- Humidity
- Wind speed and direction
- Total precipitation and sunshine
- Dew point
- Air pressure

And more.

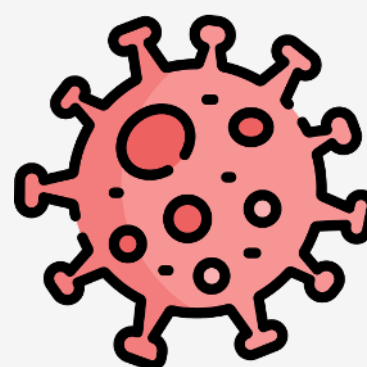
Spells with ICU support



Intensive care unit

61K days worth of critical care data and an average of length of stay of **6** days in ICU. An average APACHE II score of **14.7**.

Other ICU details are available.



COVID19

Over **1K** admissions with COVID19 confirmed. The average length of stay of COVID admissions is **27** days.

Inpatient care

- **8,803 Hospitalised spells;** containing **8,500** patients admitted to intensive care unit
- **187K** days worth of hospital data with an average in-hospital length of stay of 21 days
- In-hospital mortality rate of 18% and 78% of patients surviving 12 months after discharge
- The median National Early Warning Score in ICU is 4 and the median Clinical Frailty Scale is 2

Ventilation

Over **8M** ventilation parameters recorded with **58%** of patients on oxygen and **37%** of patients intubated.



Other ventilation details are available.

Measurements

Over **18M** patient observational data recorded including vital signs, NEWS2, GCS, ICNARC score and more.

13M Laboratory tests recorded including full blood count, liver function tests and more.

