



# PIONEER

Health Data Research Hub

**NIHR** | Birmingham Biomedical Research Centre

## NIHR Birmingham BRC Dataset: Outcomes For Older Adults On Critical Care

Data range for infographic: 01.01.2017-01.03.2023  
Other extended time periods are available on request

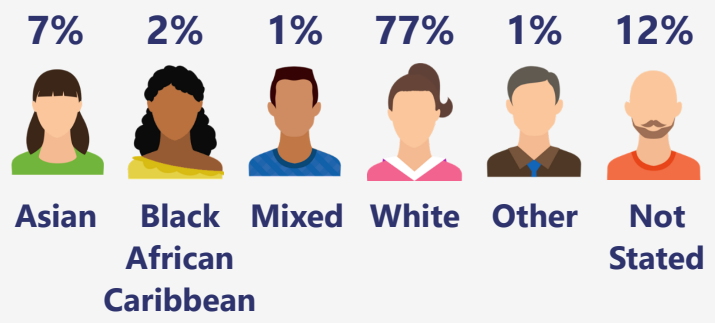
An NIHR Birmingham BRC Dataset of 8,656 intensive care admissions for patients aged 65+. Includes severity scores (APACHE, SAPS, SOFA), investigations, serial physiology, treatments, and outcomes up to one-year post-admission.

### Demographic

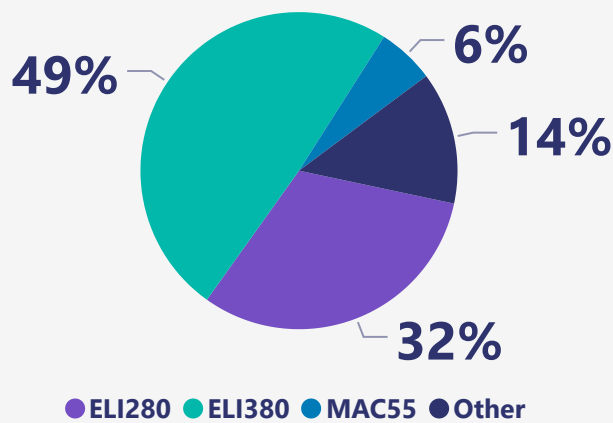
The dataset includes patients aged 65+:

- Male **60%**
- Female **40%**

Based on the index of multiple deprivation map, **29%** of the population are from most deprived areas and **13%** of patients are from least deprived areas.



### ECG device model



### Electrocardiogram

Types of Electrocardiograms:

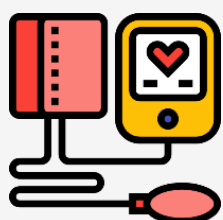
- **9K** Resting ECG
- **181** Cardiac implant ECG

Electrocardiogram file types:

- **6K** HDCXML files
- **4K** PDF files

Other ECG types and file types are available.

**16M**



Observations

**6M**



Laboratory tests

### Measurements

**5M** blood samples, **758K** serum samples and **3K** blood plasma samples recorded.

Other sample types are available.

**315K**



GCS

**22K**



SOFA

### Severity scoring systems

The median presenting score for:

- Glasgow Coma Scale (GCS) is 12
- Sequential Organ Failure Assessment (SOFA) is 6

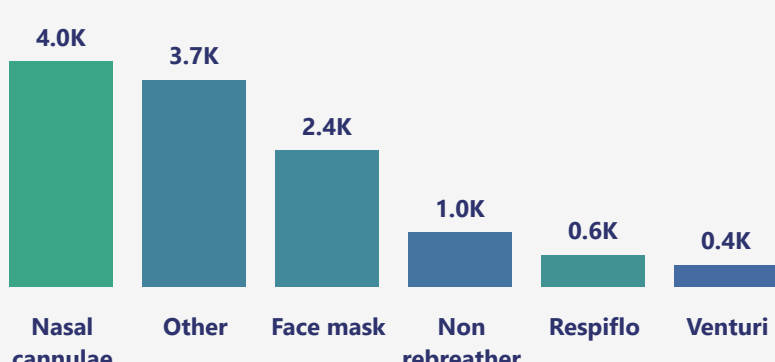
### Inpatient care

- **8,656 Hospitalised spells;** containing **8,221** unique patients admitted to critical care
- **165K** days worth of hospital data with an average in-hospital length of stay of 19 days
- In-hospital mortality rate of 15% and 86% of patients surviving 12 months after discharge
- The median National Early Warning Score is 2 and the median Clinical Frailty Scale is 3

### Ventilation

- **6M** Ventilation parameters
- **9K** Endotracheal tube spells
- **5K** Spells with tracheostomy

#### Ventilation Mask Types



### Medical procedures

Top 5 medical procedures are:

- **7K** Right sided operations
- **5K** Left sided operations
- **5K** ultrasonic organ approach
- **5K** Radiology of one body area
- **4K** Central venous catheter

