



PIONEER

Health Data Research Hub

NIHR | Birmingham Biomedical Research Centre

An NIHR BRC Dataset Of Severity Scores And Outcomes In Critical Care

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

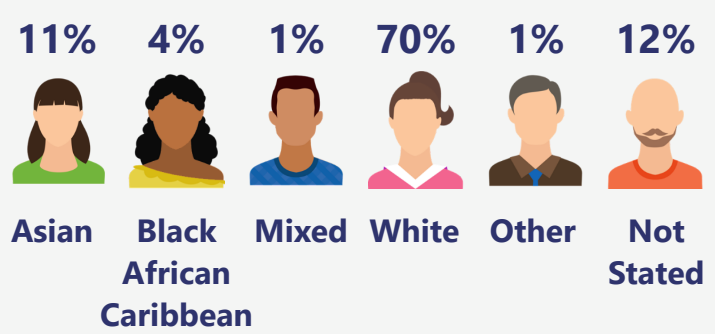
An NIHR Birmingham Biomedical Research Centre dataset of 21,581 intensive care admissions including demographic data, severity scores (APACHE, SAPS, SOFA) with investigations, serial physiology, treatments, and outcomes up to one year post admission.

Demographic

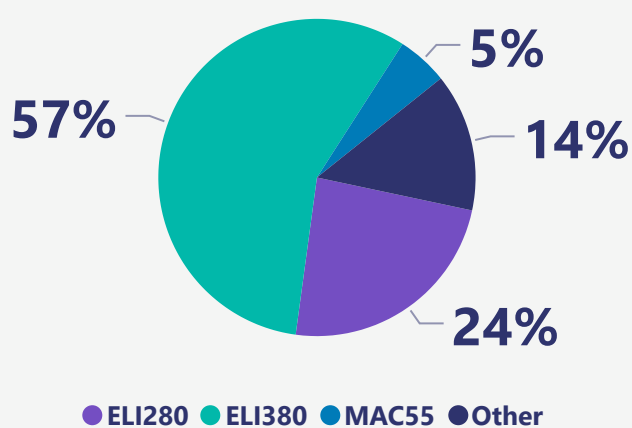
The dataset includes:

- Young adults **6%** (ages 18-25)
- Adults **56%** (ages 26-64)
- Elderly **38%** (ages 65+)

Based on the index of multiple deprivation map, **36%** of the population are from most deprived areas and **10%** of patients are from least deprived areas.



ECG device model



Electrocardiogram

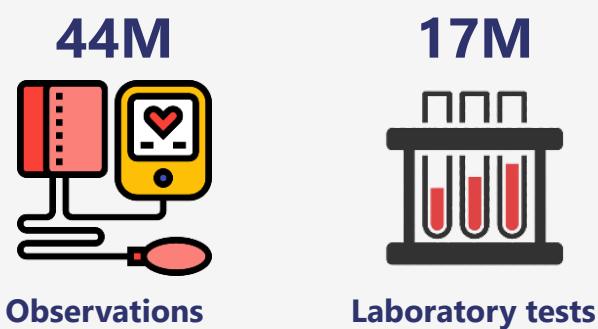
Types of Electrocardiograms:

- **26K** Resting ECG
- **1K** Cardiac implant ECG

Electrocardiogram file types:

- **16K** HDCXML files
- **11K** PDF files

Other ECG types and file types are available.



Measurements

15M blood samples, **2M** serum samples and **15K** blood plasma samples recorded.

Other sample types are available.



Severity scoring systems

The median presenting score for:

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

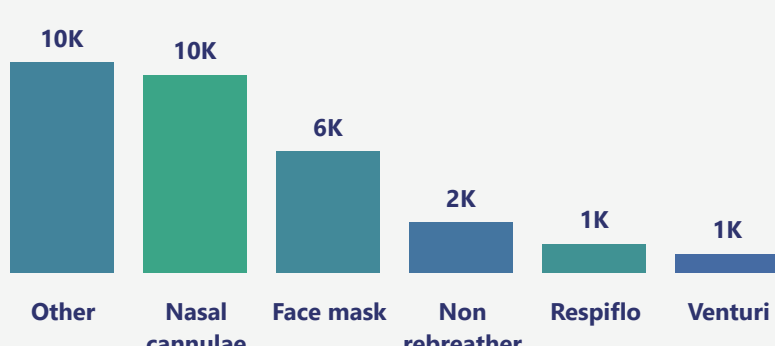
Inpatient care

- **23,098 Hospitalised spells;** containing **21,581** unique patients admitted to critical care
- **442K** days worth of hospital data with an average in-hospital length of stay of 19 days
- In-hospital mortality rate of 10% and 81% of patients surviving 12 months after discharge
- The median National Early Warning Score is 2 and the median Clinical Frailty Scale is 3

Ventilation

- **17M** Ventilation parameters
- **9K** Endotracheal tube spells
- **4K** Spells with tracheostomy

Ventilation Mask Types



Medical procedures

Top 5 medical procedures are:

- **22K** Right sided operations
- **15K** Left sided operations
- **14K** ultrasonic organ approach
- **14K** Radiology of one body area
- **11K** Central venous catheter

