



PIONEER

Health Data Research Hub

NIHR

**Birmingham Biomedical
Research Centre**

NT-proBNP Dynamics in Critically Ill Patients with Sepsis, Polytrauma and ARDS

Data range for infographic: 14.02.2017-07.10.2022

Other extended time periods are available on request

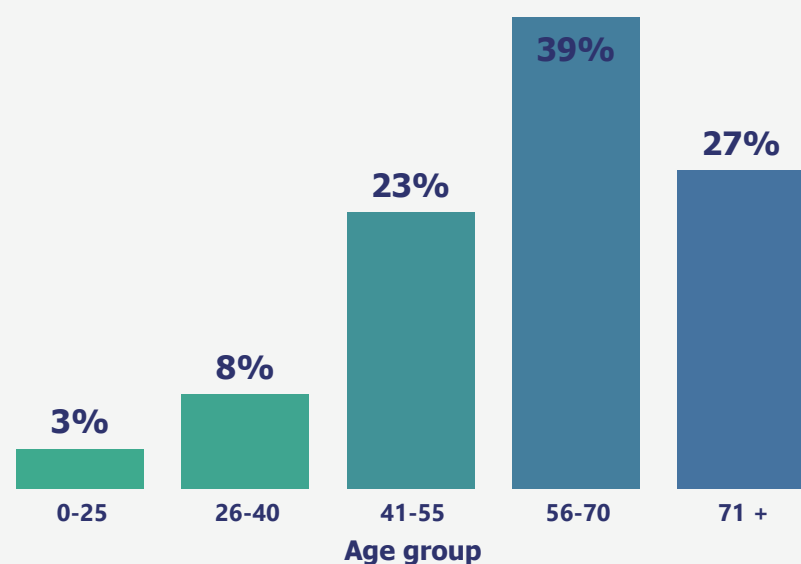
Patients without chronic heart failure or acute heart failure diagnoses and admitted to ICU with sepsis, acute respiratory failure (specifically ARDS) or polytrauma without severe head injury, and with at least one measurement of NT-proBNP at any time from 3-months pre-ICU admission to 6 months post-ICU discharge. Longitudinal & individually linked, so that the preceding & subsequent health journey can be mapped & healthcare utilisation prior to & after admission understood.

Demographic

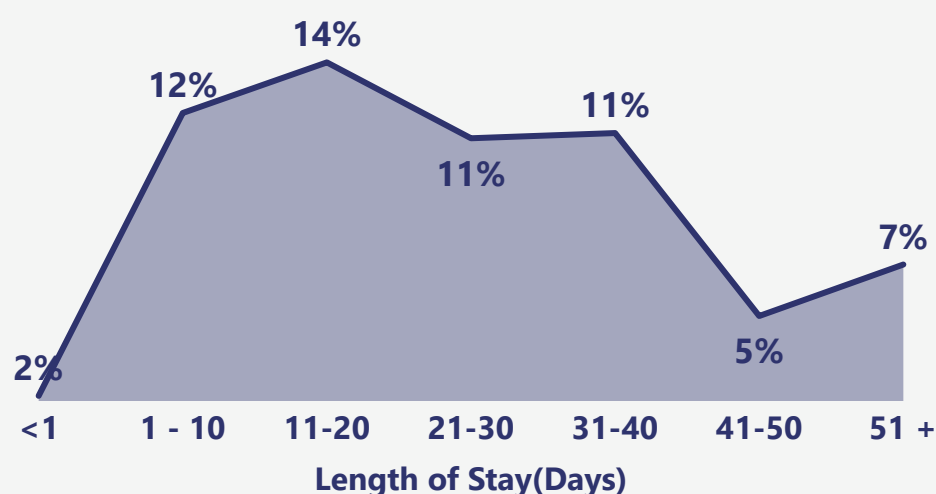
The dataset includes:

- children **<1%** (ages 0-17)
- adults **57%** (ages 18-64)
- elderly **42%** (ages 65+)

60% of patients admitted were Male and
40% of patients admitted were Female.



ICU Stay Mortality Rate



Intensive Care Unit

- **24,475** days worth of inpatient stays in ICU
- ICU mortality rate is **10%** with **2208** patients surviving 6 months after discharge
- The average number of days to death days is **125** days

318
NT-proBNP



Measurements

- **5681.68** average result of NT-proBNP
- **1610** median result of NT-proBNP

5587
Severity Scoring System



Sofa Score

The median presenting score for Sequential organ failure Assessment score is **13**.

Inpatient care

- **559** Hospitalised acute spells; containing **552** unique patients admitted to ICU
- **827** days worth of inpatient stays with an average in-hospital length of stay of **1** day
- The average baseline result of Estimated glomerular filtration rate (EGFR) is **49.45**

Sepsis

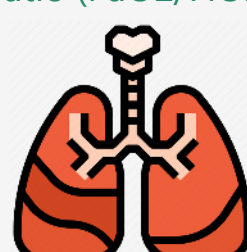
The Top 3 ICD10 Diagnosis:

- **247** Sepsis Unspecified
- **30** Sepsis due to other Gram-negative organisms
- **12** Septic Shock



Acute Respiratory Distress Syndrome

- **285** distinct number of patients diagnosed with Adult respiratory distress syndrome (ARDS) or COVID-19 with partial pressure inspired to fractional ratio (PaO2/FiO2 ratio) < 300



Other associated data available upon request

Contact us at:
www.pioneerdatahub.co.uk
pioneer@uhb.nhs.uk