



PIONEER

Health Data Research Hub

NIHR | Midlands Patient Safety
Research Collaboration

NIHR PSRC: A dataset comparing Acute COPD In-patient and Virtual Ward Admissions

Data range for infographic: 01.01.2019-31.05.2024

Other extended time periods are available on request

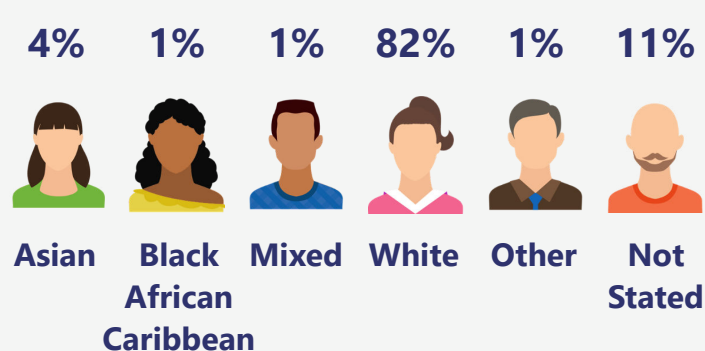
NIHR PSRC dataset of 41,419 acute COPD exacerbation admissions (2019-24) with detailed demography, comorbidities, symptoms, serial physiology, tests, lung function, DECAF, medicines, incidents, and outcomes, including patients admitted to Virtual Ward.

Demographic

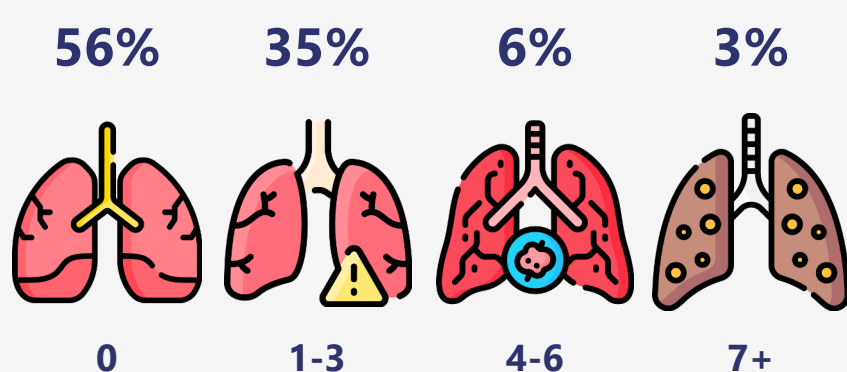
The dataset includes:

- Young adults **<1%** (ages 18-24)
- Adults **23%** (ages 25-64)
- Older adults **77%** (ages 65+)

Based on the index of multiple deprivation map, **55%** of the population are from most deprived areas and **6%** of patients are from least deprived areas.



Number of Acute Exacerbation of COPD admissions within last 12 months

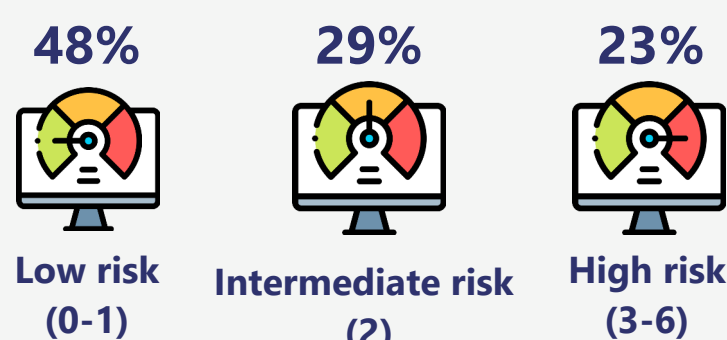


Chronic Obstructive Pulmonary Disease

Acute Exacerbation of COPD spells diagnosed with ICD10:

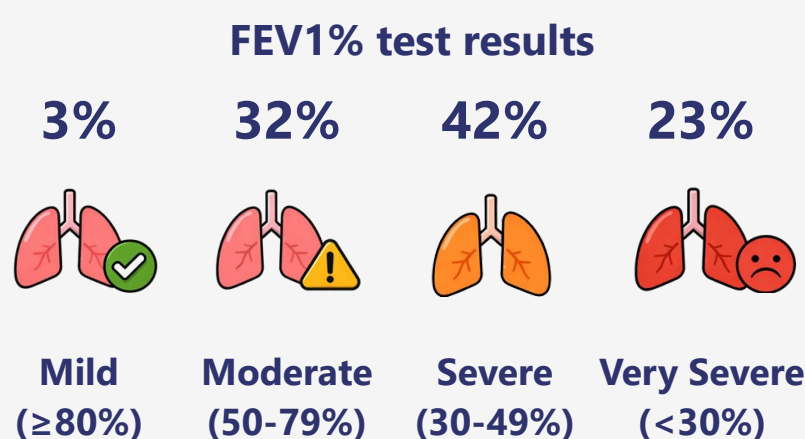
- Emphysema **11K**
- Bronchiectasis **5K**
- Asthma **3K**

Other diagnosis are available.



DECAF score

The average DECAF score is 1.65 with a median of 2.



Lung function

- **25K** Spells with capillary blood test
- **3K** Spells with spirometry test

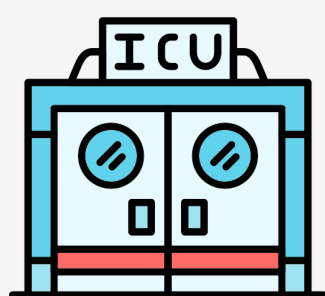
Other lung function tests are available.

Inpatient care

- **41,419 Hospitalised spells;** containing **19,420** unique patients admitted with AECOPD
- **396K** days worth of hospital data with an average in-hospital length of stay of 9 days
- In-hospital mortality rate of 10% and 81% of patients surviving 90 days after discharge
- The average initial National Early Warning Score is 4.3 with a median of 4

Intensive care

- Over **1k** spells admitted to ICU
- **75%** of ICU admissions had non-invasive mechanical ventilation
- **52%** of ICU admissions had invasive mechanical ventilation

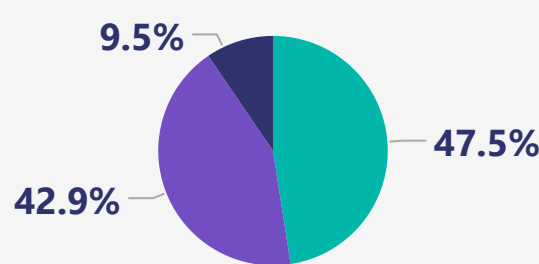


Other ICU details are available.

Hospital adverse event

- **4%** of spells had a fall incident
- **10%** of spells had a pressure sores

Pressure sores types



Other incident data are available.