



PIONEER

Health Data Research Hub

NIHR | Birmingham Biomedical Research Centre

A NIHR Birmingham BRC Dataset Of Community Acquired Pneumonia (CAP) And Frailty

Data range for infographic: 01.09.2019-31.01.2022
Other extended time periods are available on request

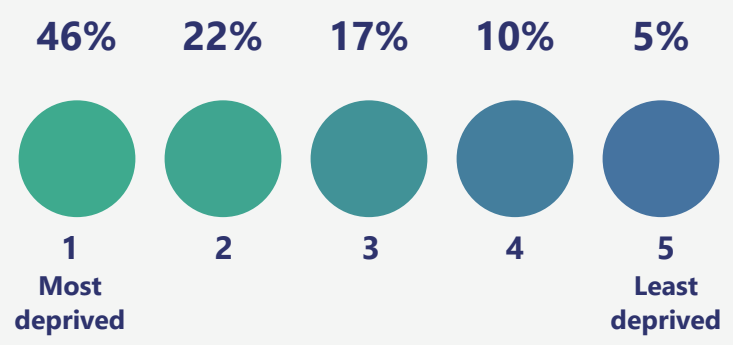
A NIHR Birmingham BRC, highly granular dataset of 2,158 community acquired pneumonia spells curated by PIONEER, including demography, comorbidities, frailty, symptoms, physiology, acuity, investigations, treatments (drug, dose, route) and outcomes.

Demographic

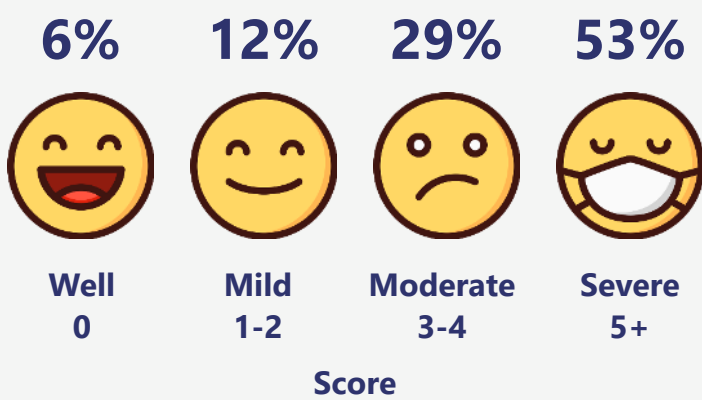
The dataset includes:

- Young adults **2%** (ages <=24)
- Adults **24%** (ages 25-64)
- Older adults **74%** (ages 65+)

80% of patients are of White ethnic background. Followed by **10%** Asian, **2%** Black, African or Caribbean, **1%** Mixed and **7%** Other/Not stated.



Charlson Comorbidity Index

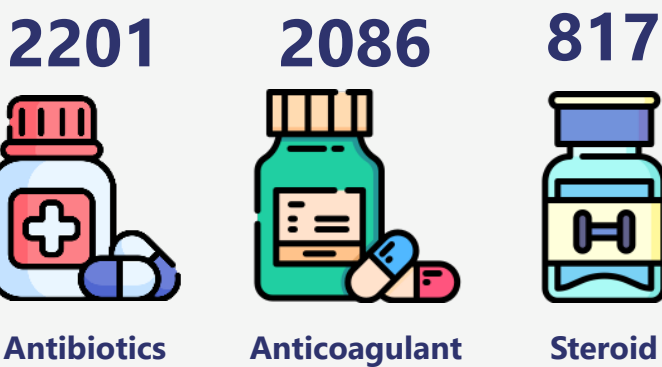


Comorbidities

Top 5 inpatient ICD10 diagnoses are:

- Lobar pneumonia **1320** spells
- Essential hypertension **1261** spells
- Pneumonia, unspecified **808** spells
- Atrial fibrillation and flutter **630** spells
- Chronic obstructive pulmonary disease **589** spells

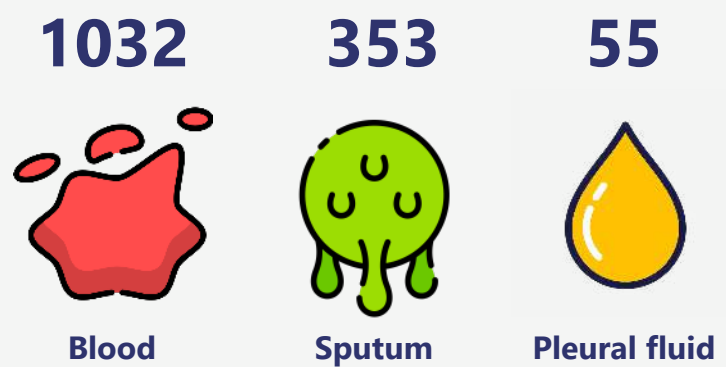
Other comorbidities are available.



Medications

- **49%** of spells used Co-amoxiclav
- **76%** of spells used Enoxaparin
- **25%** of spells used Prednisolone

Other medications are available



Culture samples

- **13%** positive blood culture
- **36%** positive sputum culture
- **7%** positive Pleural fluid culture

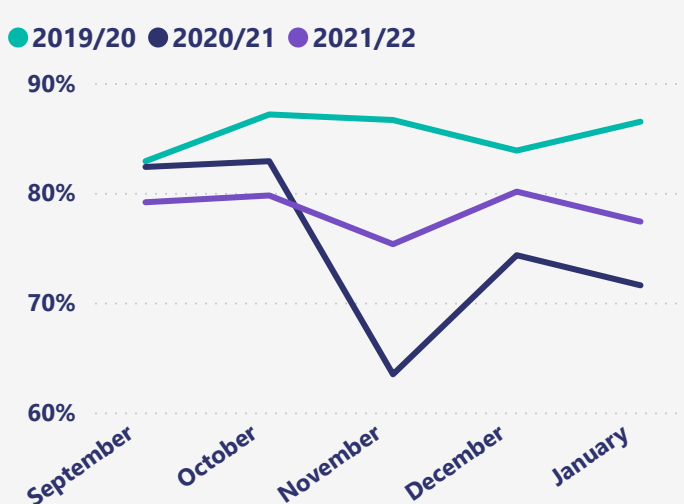
Other cultures are available

Inpatient care

- **2,293 Hospitalised spells;** containing **2,158** unique patients admitted for CAP
- **27K** days worth of hospital data with an average in-hospital length of stay of 11 days
- 30 day mortality rate of 19% with 60% of patients surviving 12 months after discharge
- The average Clinical Frailty Scale is 5 and the average National Early Warning Score is 5

Survival rate

30 days from discharge



Readmissions

Percentage of patients readmitted within 30 days:

- **13%** readmitted to University hospitals Birmingham
- **3%** readmitted to University Hospital Birmingham related to Community Acquired Pneumonia

