



# PIONEER

Health Data Research Hub

**NIHR** | Birmingham Biomedical Research Centre

## An NIHR Birmingham BRC dataset of Community-Acquired Pneumonia in Older Adults

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

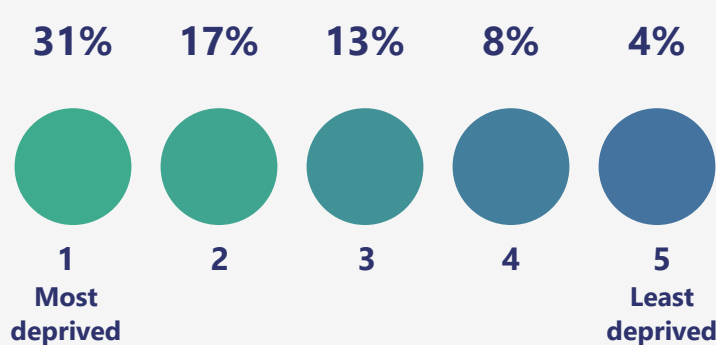
A NIHR Birmingham BRC, highly granular dataset of 1,701 community-acquired pneumonia spells for adults aged 65+, curated by PIONEER. Includes demography, comorbidities, frailty, symptoms, physiology, acuity, investigations, treatments (drug, dose, route) and outcomes.

### Demographic

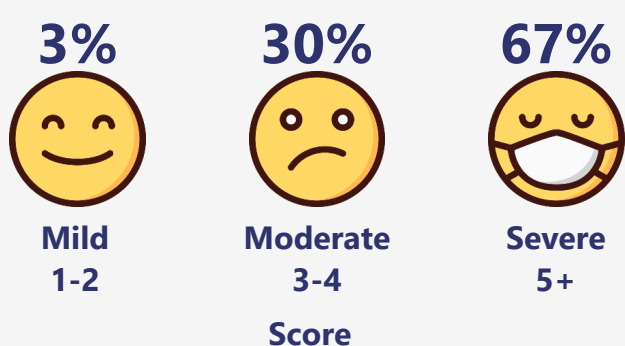
The dataset includes patients aged 65+:

- Female **52%**
- Male **48%**

**83%** of patients are of White ethnic background. Followed by **8%** Asian, **2%** Black, African or Caribbean, **1%** Mixed and **6%** Other/Not stated.



### Charlson Comorbidity Index

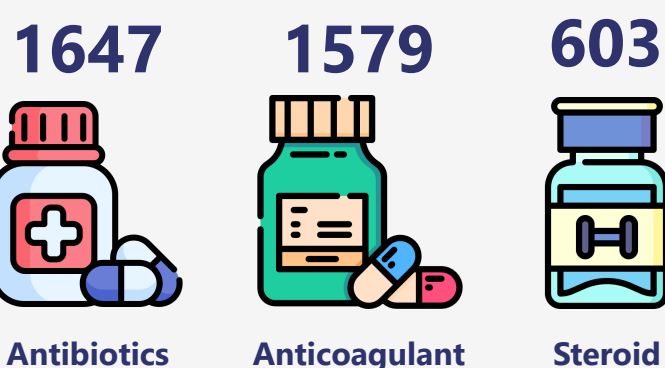


### Comorbidities

Top 5 inpatient ICD10 diagnoses are:

- Essential hypertension **1088** spells
- Lobar pneumonia **971** spells
- Pneumonia, unspecified **635** spells
- Atrial fibrillation and flutter **588** spells
- Chronic obstructive pulmonary disease **489** spells

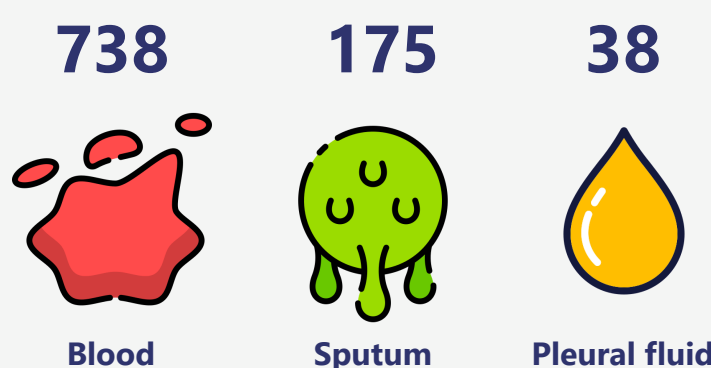
Other comorbidities are available.



### Medications

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

Other medications are available



### Culture samples

- 12%** positive blood culture
- 34%** positive sputum culture
- 8%** positive Pleural fluid culture

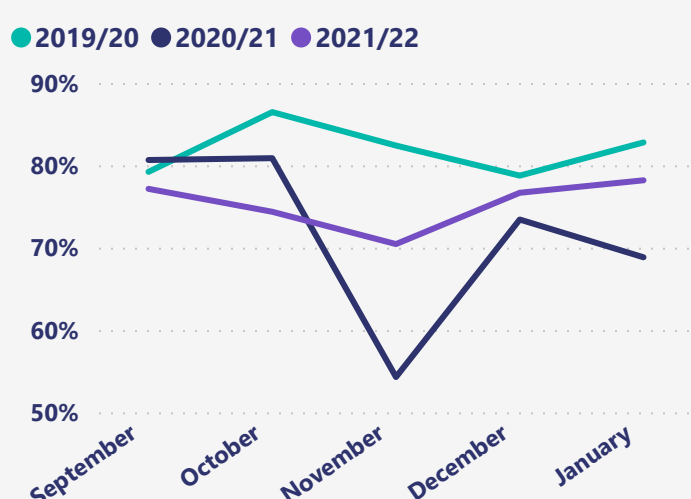
Other cultures are available

### Inpatient care

- 1,701 Hospitalised spells;** containing **1,596** unique patients admitted for CAP
- 20K** days worth of hospital data with an average in-hospital length of stay of 11 days
- 30 day mortality rate of 23% with 53% 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

