EXECUTIVE SUMMARY

Community-acquired pneumonia (CAP) is one of the most common infectious diseases seen in clinical practice. It results in many hospital admissions and has a high mortality, primarily as the patient group is often frail and older with multimorbidity. The diagnosis of CAP is not always apparent at the time of first clinical assessment, and in many hospitals, there is no specialist team that takes overall responsibility for the care of patients with CAP. Clinical teams need to be more accurate in making the diagnosis of CAP, assessing its severity and ensuring appropriate antibiotic therapy. Local leadership is key in developing an infrastructure to ensure the care of patients with pneumonia is organised appropriately and a programme of ongoing monitoring and improvement is introduced.

IN THIS STUDY

The quality of care provided to patients aged 18 years and over, who had a diagnosis of CAP during the sampling period of 1st October 2021 to 31st December 2021, was assessed by analysing data from 767 clinician questionnaires, 149 organisational questionnaires and the output from the peer review of 401 sets of case notes.

1. ACCURATE DIAGNOSIS (INVESTIGATIONS)

Consider CAP as a possible diagnosis when patients present with new onset confusion without a clear cause or typical symptoms.

Confusion was common in the patients included in this study, being documented in 136/767 (17.7%) patients.

Patients most often presented with: cough (526/767; 68.6%), dyspnoea (432/767; 56.3%), and fever (235/767; 30.6%).

88/767 (11.5%) patients had no typical features of CAP at arrival.

2. CLINICAL DECISION-MAKING

Severity scores aid clinical decision-making, treatment options and escalation planning.

A CURB65 score was documented for 204/767 (26.6%) patients and a NEWS2 score was documented for 602/767 (78.5%) patients as part of the first hospital review.

47/129 (36.4%) patients with a CURB65 score of 0 received same day emergency care while 117/119 (98.3%) patients with a CURB65 score of ≥3 were treated as inpatients.

3. ANTIBIOTIC MANAGEMENT

Antibiotics should be started within 4 hours and reviewed within 48-72 hours, adjusting as needed for the severity of CAP.

There were 100/687 (14.6%) patients where the clinician considered that antibiotic guidance in their own hospital had not been followed.

Antibiotics were started after more than 4 hours in 110/400 (27.5%) and there was room for improvement in the use of antibiotics in 123/354 (34.7%) of the cases reviewed.

4. FOLLOW-UP ARRANGEMENTS

Clear information about pneumonia should be given, and follow-up x-rays, should be arranged at discharge.

Written information about CAP was provided to 113/338 (33.4%) patients, although not documented for a further 203 patients.

A chest X-ray was requested in 261/505 (51.7%) patients at discharge, of which 49/261 (18.8%) were requested but not undertaken. Arrangements were inconsistent for those aged over 50 years and current or ex-smokers for whom chest X-rays are recommended.

5. SERVICE ORGANISATION

Many specialties are involved in caring for people with CAP. Strong clinical leadership is needed.

56/149 (37.6%) hospitals had a lead clinician for pneumonia.

96/130 (73.8%) hospitals had at least four whole time equivalent respiratory specialist nurses.

81/110 (73.6%) hospitals self-identified areas where improvement was needed in their pneumonia service.