

Pneumonia: diagnosis and management (update)

Review Questions

NICE guideline

Review Questions

February 2025

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Review Question 1.1: In babies, children and young people with suspected community-acquired pneumonia who present to primary care, what is the most accurate and cost-effective outcome prediction tool to identify under 18s whose outcome would be likely to benefit by referral to hospital?

Review Question 1.3: What is the diagnostic accuracy of lung ultrasound compared to chest x-ray for diagnosing community and hospital acquired pneumonia?

Review Question 2.2: In people with confirmed community-acquired pneumonia (presenting to an emergency care setting) what is the accuracy of NEWS2 or PEWS and the risk of mortality or severe illness or differing levels of illness to support the consideration of the most appropriate care setting for these patients?

Review Question 3.1: What is the clinical and cost effectiveness of care outside of the acute hospital setting (for example using intermediate care, hospital at home, or virtual wards) for people with community-acquired pneumonia who would otherwise be admitted to hospital?

Review Question 4.1: In people in hospital with a diagnosis of community- or hospital-acquired pneumonia, what is the clinical and cost effectiveness of monitoring C-reactive protein or procalcitonin and other biomarkers (or combinations of biomarkers) in addition to clinical observation in helping to determine when to deescalate or change treatment and when to change the place of care (for example, from ICU to non-ICU care or discharge from hospital)?

Review Question 4.2: What are the most effective and cost-effective microbiological tests or combination of tests at presentation in secondary care to inform treatment decisions in people with suspected community-acquired pneumonia or suspected hospital-acquired pneumonia?

Review Question 5.1: Are shorter durations of antibiotic treatment effective and cost-effective at treating babies, children and young people with community-acquired pneumonia compared to longer treatment courses?

Review Question 6.1a: In adults with community-acquired pneumonia, what is the clinical and cost effectiveness of corticosteroid treatment in addition to antibiotic treatment, compared with antibiotic treatment alone?

Review Question 6.1b: In adults with hospital-acquired pneumonia, what is the clinical and cost effectiveness of corticosteroid treatment in addition to antibiotic treatment, compared with antibiotic treatment alone?

Review Question 6.1c: In children and young people with hospital- or community-acquired pneumonia, what is the clinical and cost effectiveness of corticosteroid treatment in addition to antibiotic treatment, compared with antibiotic treatment alone?

Review Question 6.2: In people with community- or hospital-acquired pneumonia managed in hospital, what is the clinical and cost effectiveness of one type of non-invasive respiratory support (for example, non-invasive ventilation, continuous positive airway pressure or high flow nasal oxygen) compared with another type of non-invasive respiratory support intervention or usual care?

Review Question 7.1: What advice should be given to adults or parents/carers of babies, children and young people about what symptoms and duration of symptoms can be expected following treatment for community- or hospital-acquired pneumonia, and when should people be advised to consult or re-consult a GP?

Review Question 8.1: Is a routine chest X-ray at 6 weeks post discharge a useful intervention for identifying underlying disease in people who have been treated for community- or hospital-acquired pneumonia in hospital, and is it cost-effective?