

# Pneumonia

## NICE quality standard

### Draft for consultation

August 2015

## Introduction

This quality standard covers adults (18 years and older) with a suspected or confirmed diagnosis of community-acquired pneumonia or hospital-acquired pneumonia. For more information see the [pneumonia topic overview](#).

### ***Why this quality standard is needed***

Pneumonia is an infection of the lung tissue. When a person has pneumonia the air sacs in their lungs become filled with microorganisms, fluid and inflammatory cells and their lungs are not able to work properly. Diagnosis of pneumonia is based on symptoms and signs of an acute lower respiratory tract infection, and can be confirmed by a chest X-ray showing new shadowing that is not due to any other cause (such as pulmonary oedema or infarction). The NICE guideline on [pneumonia](#) classifies it as community-acquired pneumonia or hospital-acquired pneumonia, which need different management strategies.

Every year between 0.5% and 1% of adults in the UK will have community-acquired pneumonia. It is diagnosed in 5-12% of adults who present to GPs with symptoms of lower respiratory tract infection, and 22-42% of these are admitted to hospital, where the mortality rate is between 5% and 14%. Between 1.2% and 10% of adults admitted to hospital with community-acquired pneumonia are managed in an intensive care unit, and for these patients the risk of dying is over 30%. More than half of pneumonia-related deaths occur in people older than 84 years.

At any time, 1.5% of hospital patients in England have a hospital-acquired respiratory infection, more than half of which are hospital-acquired pneumonia and are not associated with intubation. Hospital-acquired pneumonia is estimated to

increase a hospital stay by about 8 days and has a reported mortality rate ranging from 30–70%. Variations in clinical management and outcome occur across the UK.

The quality standard is expected to contribute to improvements in the following outcomes:

- mortality
- hospital admission and re-admission
- length of hospital stay
- health-related quality of life
- hospital-related infections such as MRSA and *C. difficile*-associated diarrhoea
- relapse of pneumonia
- inappropriate antibiotic use.

### ***How this quality standard supports delivery of outcome frameworks***

NICE quality standards are a concise set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – patient safety, patient experience and clinical effectiveness – for a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following 2 outcomes frameworks published by the Department of Health:

- [NHS Outcomes Framework 2015–16](#)
- [Public Health Outcomes Framework 2013–16](#).

Tables 1–2 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

**Table 1 [NHS Outcomes Framework 2015–16](#)**

Domain	Overarching indicators and improvement areas
4 Ensuring that people have a positive experience of care	<p><b>Overarching indicator</b></p> <p>4a Patient experience of primary care i GP services</p> <p>4b Patient experience of hospital care</p> <p><b>Improvement areas</b></p> <p><b>Improving people's experience of outpatient care</b></p> <p>4.1 Patient experience of outpatient services</p> <p><b>Improving access to primary care services</b></p> <p>4.4 Access to i GP services</p>
5 Treating and caring for people in a safe environment and protecting them from avoidable harm	<p><b>Overarching indicators</b></p> <p>5a Deaths attributable to problems in healthcare</p> <p>5b Severe harm attributable to problems in healthcare</p> <p><b>Improvement areas</b></p> <p>Reducing the incidence of avoidable harm</p> <p>5.2 Incidence of healthcare associated infection (HCAI)</p> <ul style="list-style-type: none"> <li>• i MRSA</li> <li>• ii C. difficile</li> </ul> <p><b>Improving the culture of safety reporting</b></p> <p>5.6 Patient safety incidents reported</p>
<b>Alignment with Adult Social Care Outcomes Framework</b>	
** Indicator is complementary	

**Table 2 [Public health outcomes framework for England, 2013–16](#)**

Domain	Objectives and indicators
4 Healthcare public health and preventing premature mortality	<p><b>Objective</b></p> <p>Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities</p> <p><b>Indicators</b></p> <p>4.3 Mortality rate from causes considered preventable**</p> <p>4.7 Mortality from respiratory diseases</p> <p>4.13 Health-related quality of life for older people</p>
<b>Alignment across the health and social care system</b>	
** Complementary indicators in the NHS Outcomes Framework	

### ***Patient experience and safety issues***

Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to pneumonia.

NICE has developed guidance and an associated quality standard on patient experience in adult NHS services (see the NICE pathway [patient experience in adult NHS services](#)), which should be considered alongside this quality standard. They specify that people receiving care should be treated with dignity, have opportunities to discuss their preferences, and be supported to understand their options and make fully informed decisions. They also cover the provision of information to patients and service users. Quality statements on these aspects of patient experience are not usually included in topic-specific quality standards. However, recommendations in the development sources for quality standards that affect patient experience and are specific to the topic are considered during quality statement development.

### ***Coordinated services***

The quality standard for pneumonia specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole pneumonia care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to adults in both the community and hospital settings.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality.

Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality pneumonia service are listed in Related quality standards.

### **Training and competencies**

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare professionals involved in assessing, caring for and treating adults with pneumonia should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards. However, recommendations in the development

sources on specific types of training for the topic that exceed standard professional training are considered during quality statement development.

### **Role of families and carers**

Quality standards recognise the important role families and carers have in supporting adults in both community and hospital settings. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.

## **List of quality statements**

[Statement 1](#). Adults with suspected community-acquired pneumonia presenting at hospital are diagnosed, including having a chest X-ray, within 4 hours of presentation.

[Statement 2](#). Adults diagnosed with community-acquired pneumonia in primary care have a severity assessment that includes a mortality risk CRB65 score.

[Statement 3](#). Adults diagnosed with community-acquired pneumonia presenting at hospital have a severity assessment that includes a mortality risk CURB65 score.

[Statement 4](#). Adults with community-acquired pneumonia who are admitted to hospital are offered antibiotic therapy within 4 hours of admission.

[Statement 5](#). Adults with low-severity community-acquired pneumonia are offered a 5-day course of a single antibiotic.

[Statement 6](#). Adults with community-acquired pneumonia are told about how long it may take to recover from their symptoms after they start treatment.

## **Questions for consultation**

### ***Questions about the quality standard***

**Question 1** Does this draft quality standard accurately reflect the key areas for quality improvement?

**Question 2** If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

**Question 3** For each quality statement what do you think could be done to support improvement and help overcome barriers?

***Questions about the individual quality statements***

**Question 4** For draft quality statement 2: Adults diagnosed with community-acquired pneumonia presenting at hospital have a severity assessment including a mortality risk CURB65 score. To help make this statement more specific would it be appropriate to state a timeframe for when this assessment must take place? If yes, please can you state the timeframe, for example, within 24 hours? Please include details in your answer.

**Question 5** For draft quality statement 5: Adults with low-severity community-acquired pneumonia are offered a 5-day course of a single antibiotic. Please can you define low-severity community-acquired pneumonia.

**Question 6** For draft quality statement 5: Adults with low-severity community-acquired pneumonia are offered a 5-day course of a single antibiotic. Because this statement is about an offer of a 5-day single antibiotic course which is based on clinical judgement do you think this can be feasibly and accurately monitored? Please include details in your answer.

## **Quality statement 1: Diagnosis within 4 hours of hospital presentation**

### ***Quality statement***

Adults with suspected community-acquired pneumonia presenting at hospital are diagnosed, including having a chest X-ray, within 4 hours of presentation.

### ***Rationale***

Diagnosis of community-acquired pneumonia within 4 hours of presenting to hospital, including a chest X-ray, will have a high impact on improving outcomes and reducing variation in care. It will also set aspirational but achievable expectations of healthcare services.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements and processes to ensure that adults with suspected community-acquired pneumonia presenting at hospital are diagnosed, including having a chest X-ray, within 4 hours of hospital presentation.

***Data source:*** Local data collection.

#### **Process**

Proportion of adults presenting at hospital with suspected community-acquired pneumonia who are diagnosed, including having a chest X-ray, within 4 hours of presentation.

Numerator – the number in the denominator who have a diagnosis made (pneumonia confirmed or ruled out), including having a chest X-ray, within 4 hours of hospital presentation.

Denominator – the number of adults presenting at hospital with suspected community-acquired pneumonia.

***Data source:*** Local data collection.

**Outcome**

a) Mortality.

**Data source:** Local data collection.

b) Length of hospital stay.

**Data source:** Local data collection.

***What the quality statement means for healthcare professionals and commissioners***

**Service providers** (secondary care services) ensure that adults presenting at hospital with suspected community-acquired pneumonia are diagnosed, including using a chest X-ray, within 4 hours of presentation.

**Healthcare professionals** (Hospital doctors) diagnose adults presenting at hospital with suspected community-acquired pneumonia within 4 hours, including using a chest X-ray.

**Commissioners** (clinical commissioning groups) commission services in which adults presenting at hospital with suspected community-acquired pneumonia are diagnosed within 4 hours of presentation, including using chest X-rays.

***What the quality statement means for patients, service users and carers***

**Adults with suspected pneumonia who go to hospital** have a chest X-ray and are diagnosed within 4 hours of being seen at hospital.

***Source guidance***

- [Pneumonia: diagnosis and management of community- and hospital-acquired pneumonia in adults](#). (2014) NICE guideline CG191, recommendation 1.2.8 (key priority for implementation)



***Definition of terms used in this quality statement*****Community-acquired pneumonia**

Pneumonia that is acquired outside hospital. Pneumonia that develops in a person living in a nursing or residential home is included in this definition. Patients who are immunocompromised should be excluded and also those with terminal pneumonia in another evolving disease process.

## Quality statement 2: Mortality risk assessment in primary care using CRB65 score

### ***Quality statement***

Adults diagnosed with community-acquired pneumonia in primary care have a severity assessment that includes a mortality risk CRB65 score.

### ***Rationale***

Severity assessment is an integral and fundamental part of pneumonia care, determining the level of management needed. Using the CRB65 scoring tool as part of the initial assessment can provide information and help to predict mortality, but it is important that it does not replace or overrule clinical judgement in the overall assessment of severity.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements to ensure that adults diagnosed with community-acquired pneumonia in primary care have a severity assessment that includes a mortality risk CRB65 score.

**Data source:** Local data collection.

#### **Process**

Proportion of adults diagnosed with community-acquired pneumonia in primary care who receive a severity assessment that includes a mortality risk CRB65 score.

Numerator – the number in the denominator who receive a severity assessment at diagnosis that includes a mortality risk CRB65 score.

Denominator – the number of adults diagnosed with community-acquired pneumonia in primary care.

**Data source:** Local data collection.

## Outcome

Mortality.

**Data source:** Local data collection.

### ***What the quality statement means for healthcare professionals and commissioners***

**Service providers** (primary care services) ensure that adults diagnosed with community-acquired pneumonia in primary care have a severity assessment that includes a mortality risk CRB65 score.

**Healthcare professionals** (GPs) perform a severity assessment that includes documenting the mortality risk CRB65 score of adults diagnosed with community-acquired pneumonia when they present in primary care.

**Commissioners** (NHS England area teams and clinical commissioning groups) commission services in which adults diagnosed with community-acquired pneumonia in primary care have a severity assessment that includes a mortality risk CRB65 score.

### ***What the quality statement means for patients, service users and carers***

**Adults diagnosed with community-acquired pneumonia** by their GP have an initial assessment that includes a 'CRB65 score' to help find out how serious the pneumonia is. A CRB65 score uses the person's age, symptoms and blood pressure to determine whether the person is at low, medium or high risk of dying from pneumonia.

### ***Source guidance***

- [Pneumonia: diagnosis and management of community- and hospital-acquired pneumonia in adults.](#) (2014) NICE guideline CG191, recommendations 1.2.1 and 1.2.2

## ***Definitions of terms used in this quality statement***

### **Community-acquired pneumonia**

Pneumonia that is acquired outside hospital. Pneumonia that develops in a person living in a nursing or residential home is included in this definition. Pneumonia that develops in people who are immunocompromised, and terminal pneumonia associated with another disease are not included.

[[Pneumonia](#) (2014) NICE guideline CG191 and expert opinion]

### **Pneumonia severity assessment in primary care**

When a clinical diagnosis of community-acquired pneumonia is made in primary care, the healthcare professional assesses whether the person is at low, intermediate or high risk of death by calculating the CRB65 score at the initial assessment (box 1). In addition to the CRB65 score, a combination of clinical understanding and knowledge is involved.

#### **Box 1 CRB65 score for mortality risk assessment in primary care<sup>1</sup>**

CRB65 score is calculated by giving 1 point for each of the following prognostic features:

- confusion (abbreviated Mental Test score 8 or less, or new disorientation in person, place or time)<sup>2</sup>
- raised respiratory rate (30 breaths per minute or more)
- low blood pressure (diastolic 60 mmHg or less, or systolic less than 90 mmHg)
- age 65 years or more.

Patients are stratified for risk of death as follows:

- 0: low risk (less than 1% mortality risk)
- 1 or 2: intermediate risk (1-10% mortality risk)
- 3 or 4: high risk (more than 10% mortality risk).

<sup>1</sup> Lim WS, van der Eerden MM, Laing R, et al. (2003) Defining community-acquired pneumonia severity on presentation to hospital: an international derivation and validation study. *Thorax* 58: 377–82

<sup>2</sup> For guidance on delirium, see the NICE guideline on [delirium](#)

[[Pneumonia](#) (2014) NICE guideline CG191, recommendation 1.2.1]

## Quality statement 3: Mortality risk assessment in hospital using CURB65 score

### ***Quality statement***

Adults diagnosed with community-acquired pneumonia presenting at hospital have a severity assessment that includes a mortality risk CURB65 score.

### ***Rationale***

Severity assessment is an integral and fundamental part of pneumonia care determining the level of management needed. The CURB65 scoring tool can provide information and help to predict mortality, but it is important that it does not replace or overrule clinical judgement in the overall assessment of severity.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements to ensure that adults diagnosed with community-acquired pneumonia presenting at hospital have a severity assessment that includes a mortality risk CURB65 score.

***Data source:*** Local data collection.

#### **Process**

Proportion of adults diagnosed with community-acquired pneumonia presenting at hospital who have a severity assessment that includes a mortality risk CURB65 score.

Numerator – the number in the denominator who have a severity assessment that includes a mortality risk CURB65 score.

Denominator – the number of adults diagnosed with community-acquired pneumonia presenting at hospital.

***Data source:*** Local data collection.

## Outcome

Mortality.

**Data source:** Local data collection.

### ***What the quality statement means for healthcare professionals and commissioners***

**Service providers** (secondary care services) ensure that adults diagnosed with community-acquired pneumonia presenting at hospital have a severity assessment that includes a mortality risk CURB65 score.

**Healthcare professionals** (Hospital doctors) perform a severity assessment that includes documenting the mortality risk CURB65 score in adults diagnosed with community-acquired pneumonia presenting in secondary care.

**Commissioners** (clinical commissioning groups) commission services in which adults diagnosed with community-acquired pneumonia presenting at hospital have a severity assessment that includes a mortality risk CURB65 score.

### ***What the quality statement means for patients, service users and carers***

**Adults diagnosed with community-acquired pneumonia** who go to a hospital have an assessment that includes a 'CURB65 score' to find out how serious the pneumonia is. A CURB65 score uses the person's age, symptoms and blood pressure to determine whether the person is at low, medium or high risk of dying from pneumonia.

### ***Source guidance***

- [Pneumonia: diagnosis and management of community- and hospital-acquired pneumonia in adults.](#) (2014) NICE guideline CG191, recommendations 1.2.3 and 1.2.4

## ***Definitions of terms used in this quality statement***

### **Community-acquired pneumonia**

Pneumonia that is acquired outside hospital. Pneumonia that develops in a person living in a nursing or residential home is included in this definition. Pneumonia that develops in people who are immunocompromised, and terminal pneumonia associated with another disease are not included.

[[Pneumonia](#) (2014) NICE guideline CG191 and expert opinion]

### **Pneumonia severity assessment in hospital**

When a diagnosis of community-acquired pneumonia is made at presentation to hospital, the healthcare professional assesses whether the person is at low, intermediate or high risk of death by calculating the CURB65 score (box 2).

#### **Box 2 CURB65 score for mortality risk assessment in hospital<sup>1</sup>**

CURB65 score is calculated by giving 1 point for each of the following prognostic features:

- confusion (abbreviated Mental Test score 8 or less, or new disorientation in person, place or time)<sup>2</sup>
- raised blood urea nitrogen (over 7 mmol/litre)
- raised respiratory rate (30 breaths per minute or more)
- low blood pressure (diastolic 60 mmHg or less, or systolic less than 90 mmHg)
- age 65 years or more.

Patients are stratified for risk of death as follows:

- 0 or 1: low risk (less than 3% mortality risk)
- 2: intermediate risk (3-15% mortality risk)
- 3 to 5: high risk (more than 15% mortality risk).

<sup>1</sup> Lim WS, van der Eerden MM, Laing R, et al. (2003) Defining community-acquired pneumonia severity on presentation to hospital: an international derivation and validation study. *Thorax* 58: 377–82

<sup>2</sup> For guidance on delirium, see the NICE guideline on [delirium](#)



[[Pneumonia](#) (2014) NICE guideline CG191, recommendation 1.2.3]

***Question for consultation***

To help make this statement more specific would it be appropriate to state a timeframe for when this assessment must take place? If yes, please can you state the timeframe, for example, within 24 hours? Please include details in your answer.

## **Quality statement 4: Antibiotic therapy within 4 hours of hospital admission**

### ***Quality statement***

Adults with community-acquired pneumonia who are admitted to hospital are offered antibiotic therapy within 4 hours of admission.

### ***Rationale***

Starting appropriate antibiotic therapy as soon as possible (and within 4 hours of hospital admission) is important for treating adults with community-acquired pneumonia. Evidence shows that early treatment is associated with improved clinical outcomes.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements to ensure that adults with community-acquired pneumonia who are admitted to hospital receive antibiotic therapy within 4 hours of admission.

***Data source:*** Local data collection.

#### **Process**

Proportion of adults with community-acquired pneumonia admitted to hospital who receive antibiotic therapy within 4 hours of admission.

Numerator – the number in the denominator who receive antibiotic therapy within 4 hours of admission.

Denominator – the number of adults admitted to hospital with community-acquired pneumonia confirmed at admission.

***Data source:*** Local data collection.

#### **Outcome**

Mortality.

**Data source:** Local data collection.

### ***What the quality statement means for healthcare professionals and commissioners***

**Service providers** (secondary care services) ensure that adults with community-acquired pneumonia who are admitted to hospital are offered antibiotic therapy within 4 hours of admission.

**Healthcare professionals** (Hospital doctors) offer antibiotic therapy to adults with community-acquired pneumonia who are admitted to hospital within 4 hours of admission.

**Commissioners** (clinical commissioning groups) commission services in which adults with community-acquired pneumonia who are admitted to hospital are offered antibiotic therapy within 4 hours of admission.

### ***What the quality statement means for patients, service users and carers***

**Adults with community-acquired pneumonia who are admitted to hospital** are offered antibiotic treatment within 4 hours of admission.

### ***Source guidance***

- [Pneumonia: diagnosis and management of community- and hospital-acquired pneumonia in adults](#). (2014) NICE guideline CG191, recommendation 1.2.9.

### ***Definition of terms used in this quality statement***

#### **Community-acquired pneumonia**

Pneumonia that is acquired outside hospital. Pneumonia that develops in a person living in a nursing or residential home is included in this definition. Patients who are immunocompromised should be excluded and also those with terminal pneumonia in another evolving disease process.

## **Quality statement 5: 5-day single antibiotic course for low-severity community-acquired pneumonia**

### ***Quality statement***

Adults with low-severity community-acquired pneumonia are offered a 5-day course of a single antibiotic.

### ***Rationale***

Pneumonia is usually caused by bacteria and should be treated with antibiotic therapy. A 5-day course of a single antibiotic is an effective treatment for low-severity community-acquired pneumonia and will contribute to antibiotic stewardship and have long-term economic benefits.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements to ensure that adults with low-severity community-acquired pneumonia are offered a 5-day course of a single antibiotic.

**Data source:** Local data collection.

#### **Process**

Proportion of adults with low-severity community-acquired pneumonia who receive a 5-day course of a single antibiotic.

Numerator – the number in the denominator who receive a 5-day course of a single antibiotic.

Denominator – the number of adults with low-severity community-acquired pneumonia.

**Data source:** Local data collection.

## ***What the quality statement means for healthcare professionals and commissioners***

**Service providers** (primary care services) ensure that adults with low-severity community-acquired pneumonia are offered a 5-day course of a single antibiotic.

**Healthcare professionals** (GPs) offer a 5-day course of a single antibiotic to adults with low-severity community-acquired pneumonia.

**Commissioners** (clinical commissioning groups) ensure that adults with low-severity community-acquired pneumonia are offered a 5-day course of a single antibiotic.

## ***What the quality statement means for patients, service users and carers***

**Adults with mild community-acquired pneumonia** (also called low severity) are offered a 5-day course of a single antibiotic.

## ***Source guidance***

- [Pneumonia: diagnosis and management of community- and hospital-acquired pneumonia in adults](#). (2014) NICE guideline CG191, recommendation 1.2.10 (key priority for implementation).

## ***Definitions of terms used in this quality statement***

### **Community-acquired pneumonia**

Pneumonia that is acquired outside hospital. Pneumonia that develops in a person living in a nursing or residential home is included in this definition. Patients who are immunocompromised should be excluded and also those with terminal pneumonia in another evolving disease process.

### **Questions for consultation**

Please can you define low-severity community-acquired pneumonia.

Because this statement is about an offer of a 5-day single antibiotic course which is based on clinical judgement do you think this can be feasibly and accurately monitored? Please include details in your answer.

## Quality statement 6: Recovery

### ***Quality statement***

Adults with community-acquired pneumonia are told about how long it may take to recover from their symptoms after they start treatment.

### ***Rationale***

Many adults with community-acquired pneumonia are unaware of what to expect during their recovery. Knowing about the most common symptoms and how long they may continue for may help to reduce anxiety and also reduce repeated consultations with a healthcare professional when appropriate. Effective communication between the patient and healthcare professional may also help the patient to self-manage their condition.

### ***Quality measures***

#### **Structure**

Evidence of local arrangements to ensure that adults with community-acquired pneumonia are told about how long it may take to recover from their symptoms after they start treatment.

***Data source:*** Local data collection.

#### **Process**

Proportion of adults with community-acquired pneumonia who are told about how long it may take to recover from their symptoms after they start treatment.

Numerator – the number in the denominator who are told about how long it may take to recover from their symptoms after they start treatment.

Denominator – the number of adults with community-acquired pneumonia.

***Data source:*** Local data collection.

#### **Outcome**

Re-consultation rates.

**Data source:** Local data collection.

### ***What the quality statement means for healthcare professionals and commissioners***

**Service providers** (primary and secondary care services) ensure that adults with community-acquired pneumonia are told about how long it may take to recover from their symptoms after they start treatment.

**Healthcare professionals** (GPs and hospital doctors) tell adults with community-acquired pneumonia about how long it may take to recover from their symptoms after they start treatment

**Commissioners** (clinical commissioning groups) commission services in which adults with community-acquired pneumonia are told about how long it may take to recover from their symptoms after they start treatment.

### ***What the quality statement means for patients, service users and carers***

**Adults with community-acquired pneumonia** are told about how long it may take to recover from their symptoms after they start treatment.

### ***Source guidance***

- Pneumonia: [diagnosis and management of community- and hospital-acquired pneumonia in adults](#). (2014) NICE guideline CG191, recommendation 1.2.22 (key priority for implementation).

### ***Definitions of terms used in this quality statement***

#### **Community-acquired pneumonia**

Pneumonia that is acquired outside hospital. Pneumonia that develops in a person living in a nursing or residential home is included in this definition. Patients who are immunocompromised should be excluded and also those with terminal pneumonia in another evolving disease process.

**Recovery**

Explain to adults with community-acquired pneumonia that after starting treatment their symptoms should steadily improve, although the rate of improvement will vary with the severity of the pneumonia. Most people can expect that by:

- 1 week: fever should have resolved
- 4 weeks: chest pain and sputum production should have substantially reduced
- 6 weeks: cough and breathlessness should have substantially reduced
- 3 months: most symptoms should have resolved but fatigue may still be present
- 6 months: most people will feel back to normal.

[[Pneumonia](#) (2014) NICE guideline CG191, recommendation 1.2.22]

***Equality and diversity considerations***

Adults with pneumonia or their carers who have difficulty speaking or understanding English should have access to an interpreter or advocate if needed. Adults should also be provided with information that reflects their cultural needs.



## Status of this quality standard

This is the draft quality standard released for consultation from 7 August to 7 September 2015. It is not NICE's final quality standard on pneumonia. The statements and measures presented in this document are provisional and may change after consultation with stakeholders.

Comments on the content of the draft standard must be submitted by 5 pm on 7 September 2015. All eligible comments received during consultation will be reviewed by the Quality Standards Advisory Committee and the quality statements and measures will be refined in line with the Quality Standards Advisory Committee's considerations. The final quality standard will be available on the [NICE website](#) from January 2016.

## Using the quality standard

### *Quality measures*

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its [Indicators for Quality Improvement Programme](#). If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's [What makes up a NICE quality standard?](#) for further information, including advice on using quality measures.

### *Levels of achievement*

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of

100% should be aspired to (or 0% if the quality statement states that something should not be done). However, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

### ***Using other national guidance and policy documents***

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in Development sources.

## **Diversity, equality and language**

During the development of this quality standard, equality issues have been considered and [equality assessments](#) are available.

Good communication between healthcare professionals and adults with pneumonia is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. Adults with pneumonia should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

## **Development sources**

Further explanation of the methodology used can be found in the quality standards [Process guide](#).

## ***Evidence sources***

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

- [Pneumonia: diagnosis and management of community- and hospital-acquired pneumonia in adults](#) (2014) NICE guideline CG191
- [Delirium](#) (2010) NICE guideline CG103

## ***Policy context***

It is important that the quality standard is considered alongside current policy documents, including:

- Public Health England (2014) [The characteristics, diagnosis, management, surveillance and epidemiology of pneumococcal disease](#)
- NHS England (2014) [Factsheet: care bundle for community-acquired pneumonia](#)
- Welsh Government (2014) [Together for health – a respiratory health delivery plan. A delivery plan up to 2017 for the NHS and its partners](#)
- National Institute for Health and Care Excellence (2014) [Chest infections – adult](#)  
NICE clinical knowledge summaries
- Public Health England (2013) [Pneumococcal: the green book, chapter 25](#) (part of [Immunisation against infectious disease](#))
- British Thoracic Society (2013) [BTS National Respiratory Audit Programme: Annual report 2012/13](#)
- Churchill Medical Centre (2013) [Reducing antibiotic prescribing by 15% using NICE respiratory tract illness prescribing guidelines](#)
- The UK Cochrane Centre and NICE (2011) [Routine chest physiotherapy for pneumonia in adults](#) Cochrane quality and productivity topic
- National Audit Office (2009) [Reducing healthcare associated infections in hospitals in England](#)

## Related NICE quality standards

### ***Published***

- [Intravenous fluid therapy in hospital](#) (2014) NICE quality standard 66
- [Delirium](#) (2014) NICE quality standard 63
- [Infection prevention and control](#) (2014) NICE quality standard 61
- [Smoking cessation: supporting people to stop smoking](#) (2013) NICE quality standard 43
- [Patient experience in adult NHS services](#) (2012) NICE quality standard 15
- [Chronic obstructive pulmonary disease](#) (2011) NICE quality standard 10

### ***In development***

- [Drug allergy - diagnosis and management](#). Publication expected July 2015.
- [Chronic obstructive pulmonary disease \(update\)](#). Publication expected January 2016.
- [Winter deaths: preventing excess winter deaths](#). Publication expected March 2016.
- [Healthcare-associated infections: prevention and management](#) Publication expected February 2016.

## **Quality Standards Advisory Committee and NICE project team**

### ***Quality Standards Advisory Committee***

This quality standard has been developed by Quality Standards Advisory Committee 1. Membership of this committee is as follows:

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Lay member

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The following specialist members joined the committee to develop this quality standard:

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**About this quality standard**

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the [quality standards process guide](#).

This quality standard has been incorporated into the NICE pathway on [pneumonia](#).

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