Pneumonia in adults

Quality standard
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# Contents

Introduction .......................................................................................................................................................... 5  
Why this quality standard is needed ................................................................................................................. 5  
How this quality standard supports delivery of outcome frameworks .......................................................... 6  
Patient experience and safety issues .................................................................................................................. 10  
Coordinated services.......................................................................................................................................... 10  

List of quality statements ................................................................................................................................. 12  

Quality statement 1: Mortality risk assessment in primary care using CRB65 score .................................... 13  
Quality statement............................................................................................................................................... 13  
Rationale ............................................................................................................................................................ 13  
Quality measures ............................................................................................................................................... 13  
What the quality statement means for service providers, healthcare professionals and commissioners ... 14  
What the quality statement means for patients, service users and carers ................................................... 14  
Source guidance.................................................................................................................................................. 14  
Definitions of terms used in this quality statement ......................................................................................... 14  
Equality and diversity considerations ................................................................................................................ 16  

Quality statement 2: Antibiotic therapy for diagnosed low-severity community-acquired pneumonia .......... 17  
Quality statement............................................................................................................................................... 17  
Rationale ............................................................................................................................................................ 17  
Quality measures ............................................................................................................................................... 17  
What the quality statement means for service providers, healthcare professionals and commissioners ... 17  
What the quality statement means for patients, service users and carers ................................................... 18  
Source guidance.................................................................................................................................................. 18  
Definition of terms used in this quality statement ......................................................................................... 18  

Quality statement 3: Chest X-ray and diagnosis within 4 hours of hospital presentation ................................ 19  
Quality statement............................................................................................................................................... 19  
Rationale ............................................................................................................................................................ 19  

© NICE 2019. All rights reserved. Subject to Notice of rights (https://www.nice.org.uk/terms-and-conditions#notice-of-rights).
Quality measures .............................................................................................................................................................. 19
What the quality statement means for service providers, healthcare professionals and commissioners .. 20
What the quality statement means for patients, service users and carers ................................................................. 20
Source guidance ................................................................................................................................................................ 21
Definition of terms used in this quality statement ........................................................................................................... 21
Equality and diversity considerations .................................................................................................................................. 21
Quality statement 4: Mortality risk assessment in hospital using CURB65 score ....................................................... 22
Quality statement ................................................................................................................................................................... 22
Rationale .................................................................................................................................................................................... 22
Quality measures ................................................................................................................................................................... 22
What the quality statement means for service providers, healthcare professionals and commissioners .. 22
What the quality statement means for patients, service users and carers ................................................................. 23
Source guidance ................................................................................................................................................................... 23
Definitions of terms used in this quality statement ........................................................................................................... 23
Equality and diversity considerations .................................................................................................................................. 24
Quality statement 5: Antibiotic therapy within 4 hours in hospital ................................................................................. 26
Quality statement ................................................................................................................................................................... 26
Rationale .................................................................................................................................................................................... 26
Quality measures ................................................................................................................................................................... 26
What the quality statement means for service providers, healthcare professionals and commissioners .. 27
What the quality statement means for patients, service users and carers ................................................................. 27
Source guidance ................................................................................................................................................................... 27
Definition of terms used in this quality statement ........................................................................................................... 27
Using the quality standard ................................................................................................................................................... 28
Quality measures ................................................................................................................................................................... 28
Levels of achievement ........................................................................................................................................................... 28
Using other national guidance and policy documents ...................................................................................................... 28
Diversity, equality and language ........................................................................................................................................... 29
Introduction

This quality standard covers adults (18 years and older) with a suspected or confirmed diagnosis of community-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 pneumonia depending on the source of the infection as community-acquired or hospital-acquired, 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%. There are variations in clinical management and outcomes 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

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

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**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching indicators and improvement areas</th>
</tr>
</thead>
</table>
### 1 Preventing people from dying prematurely

**Overarching indicators**

1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare
   - i Adults
1b Life expectancy at 75
   - i Males
   - ii Females

**Improvement areas**

Reducing premature mortality from the major causes of death

1.2 Under 75 mortality rate from respiratory disease*

### 3 Helping people to recover from episodes of ill health or following injury

**Overarching indicators**

3a Emergency admissions for acute conditions that should not usually require hospital admission
3b Emergency readmissions within 30 days of discharge from hospital*

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*Pneumonia in adults (QS110)

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<table>
<thead>
<tr>
<th>4 Ensuring that people have a positive experience of care</th>
<th>Overarching indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4a Patient experience of primary care</td>
</tr>
<tr>
<td></td>
<td>i GP services</td>
</tr>
<tr>
<td></td>
<td>ii GP out-of-hours services</td>
</tr>
<tr>
<td></td>
<td>4b Patient experience of hospital care</td>
</tr>
<tr>
<td></td>
<td>4c <em>Friends and family test</em></td>
</tr>
<tr>
<td></td>
<td>4d <em>Patient experience characterised as poor or worse</em></td>
</tr>
<tr>
<td></td>
<td>ii Hospital care</td>
</tr>
<tr>
<td></td>
<td><strong>Improvement areas</strong></td>
</tr>
<tr>
<td></td>
<td>Improving people's experience of outpatient care</td>
</tr>
<tr>
<td></td>
<td>4.1 Patient experience of outpatient services</td>
</tr>
<tr>
<td></td>
<td><strong>Improving hospitals' responsiveness to personal needs</strong></td>
</tr>
<tr>
<td></td>
<td>4.2 Responsiveness to inpatients' personal needs</td>
</tr>
<tr>
<td></td>
<td><strong>Improving people's experience of accident and emergency services</strong></td>
</tr>
<tr>
<td></td>
<td>4.3 Patient experience of A&amp;E services</td>
</tr>
<tr>
<td></td>
<td><strong>Improving the experience of care for people at the end of their lives</strong></td>
</tr>
<tr>
<td></td>
<td>4.6 Bereaved carers' views on the quality of care in the last 3 months of life</td>
</tr>
</tbody>
</table>
5 Treating and caring for people in a safe environment and protecting them from avoidable harm

**Overarching indicators**
5a Deaths attributable to problems in healthcare
5b Severe harm attributable to problems in healthcare

**Improvement areas**
Reducing the incidence of avoidable harm
5.2 Incidence of healthcare associated infection (HCAI)
- ii C. difficile

**Improving the culture of safety reporting**
5.6 Patient safety incidents reported

### Alignment with Adult Social Care Outcomes Framework
* Indicator is shared
** Indicator is complementary
Indicators in italics in development

### Table 2 Public health outcomes framework for England, 2013–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
</tr>
</thead>
</table>
| **4 Healthcare public health and preventing premature mortality** | **Objective**
Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities

**Indicators**
4.3 Mortality rate from causes considered preventable**
4.7 Mortality from respiratory diseases
4.11 Emergency readmissions within 30 days of discharge from hospital*
4.13 Health-related quality of life for older people
4.15 Excess winter deaths |
Alignment across the health and social care system

* Indicator is shared
** Indicator is complementary

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. In particular, it will be important to ensure that adults with pneumonia have an understanding of how long it may take to recover as well as when they may need to seek further advice.

NICE has developed guidance and an associated quality standard on patient experience in adult NHS services (see the NICE Pathway on 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 with pneumonia acquired in community 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 with pneumonia acquired in community 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 have a mortality risk assessment using the CRB65 score when they are diagnosed with community-acquired pneumonia in primary care.

Statement 2 Adults with low-severity community-acquired pneumonia are prescribed a 5-day course of a single antibiotic.

Statement 3 Adults with suspected community-acquired pneumonia in hospital have a chest X-ray and receive a diagnosis within 4 hours of presentation.

Statement 4 Adults have a mortality risk assessment using the CURB65 score when they are diagnosed with community-acquired pneumonia in hospital.

Statement 5 Adults with community-acquired pneumonia who are admitted to hospital start antibiotic therapy within 4 hours of presentation.
Quality statement 1: Mortality risk assessment in primary care using CRB65 score

Quality statement

Adults have a mortality risk assessment using the CRB65 score when they are diagnosed with community-acquired pneumonia in primary care.

Rationale

Assessing mortality risk using the CRB65 score in primary care informs clinical judgement and supports decision-making about whether care can be managed in the community or if hospital assessment is needed. This ensures that treatment is based on the severity of the infection and will improve treatment outcomes.

Quality measures

Structure

Evidence of local arrangements to ensure that adults have a mortality risk assessment using the CRB65 score when they are diagnosed with community-acquired pneumonia in primary care.

Data source: Local data collection.

Process

Proportion of community-acquired pneumonia diagnoses of adults in primary care at which the adult has a mortality risk assessment using the CRB65 score.

Numerator – the number in the denominator at which the adult has a mortality risk assessment using the CRB65 score.

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

Data source: Local data collection.
Outcome

Mortality.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (primary care services) ensure that adults have a mortality risk assessment using the CRB65 score when they are diagnosed with community-acquired pneumonia in primary care.

Healthcare professionals (such as GPs and nurse practitioners) carry out a mortality risk assessment using the CRB65 score when an adult is diagnosed with community-acquired pneumonia in primary care. Details of the risk assessment should be shared if the adult is referred to hospital or outpatient care.

Commissioners (NHS England area teams and clinical commissioning groups) commission services in which adults have a mortality risk assessment using the CRB65 score when they are diagnosed with community-acquired pneumonia in primary care.

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

Adults diagnosed with community-acquired pneumonia by their GP have a first assessment to find out how serious the pneumonia is. This includes a 'CRB65 score', which uses the person's age, symptoms and blood pressure to help decide the how serious the risks are for that person and whether they need to go to hospital.

Source guidance

Pneumonia in adults: diagnosis and management (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 in adults (2014) NICE guideline CG191 and expert opinion]

Mortality risk assessment in primary care

When a clinical diagnosis of community-acquired pneumonia is made in primary care, the healthcare professional should assess whether the person is at low, intermediate or high risk of death by calculating the CRB65 score at the initial assessment (box 1).

<table>
<thead>
<tr>
<th>Box 1 CRB65 score for mortality risk assessment in primary care</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRB65 score is calculated by giving 1 point for each of the following prognostic features:</td>
</tr>
<tr>
<td>• confusion (abbreviated Mental Test score 8 or less, or new disorientation in person, place or time)</td>
</tr>
<tr>
<td>• raised respiratory rate (30 breaths per minute or more)</td>
</tr>
<tr>
<td>• low blood pressure (diastolic 60 mmHg or less, or systolic less than 90 mmHg)</td>
</tr>
<tr>
<td>• age 65 years or more.</td>
</tr>
</tbody>
</table>

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).

2 For guidance on delirium, see the NICE guideline on delirium.

[Pneumonia in adults (2014) NICE guideline CG191, recommendation 1.2.1]
Equality and diversity considerations

It is important to be aware of dementia when assessing confusion, and to adapt the assessment approach to meet individual needs.

Healthcare professionals should be aware of the needs of adults at the end of life and agree the approach for managing pneumonia in the context of the person's overall care plan.
Quality statement 2: Antibiotic therapy for diagnosed low-severity community-acquired pneumonia

Quality statement

Adults with low-severity community-acquired pneumonia are prescribed 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 usually an effective treatment for diagnosed low-severity community-acquired pneumonia unless symptoms do not improve. Prescribing a 5-day course will ensure that antibiotic therapy is not given for longer than necessary, and will contribute to effective antimicrobial stewardship. Healthcare professionals should give people advice on seeking further help if their symptoms do not show signs of improving after 3 days of antibiotic therapy.

Quality measures

Process

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

Numerator – the number in the denominator who are prescribed a 5-day maximum 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 service providers, healthcare professionals and commissioners

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

Healthcare professionals (such as GPs, hospital clinicians and nurse practitioners) prescribe a 5-day
course of a single antibiotic to adults with low-severity community-acquired pneumonia and give advice on seeking further help if symptoms do not show signs of improving.

Commissioners (NHS England and clinical commissioning groups) ensure that adults with low-severity community-acquired pneumonia are prescribed 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 prescribed a 5-day course of an antibiotic.

Source guidance

Pneumonia in adults: diagnosis and management (2014) NICE guideline CG191, recommendation 1.2.10 (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. Pneumonia that develops in people who are immunocompromised, and terminal pneumonia associated with another disease are not included.
Quality statement 3: Chest X-ray and diagnosis within 4 hours of hospital presentation

**Quality statement**

Adults with suspected community-acquired pneumonia in hospital have a chest X-ray and receive a diagnosis within 4 hours of presentation.

**Rationale**

When community-acquired pneumonia is suspected in adults, it is important that a clinical assessment sequence is carried out. If the person presents at hospital, assessment should include performing and reviewing a chest X-ray, to help make a timely diagnosis in line with the 4-hour patient processing targets in A&E departments. This will ensure that treatment is given to adults with pneumonia as quickly as possible and that those who do not have community-acquired pneumonia are not given inappropriate antibiotic treatment.

**Quality measures**

**Structure**

Evidence of local arrangements and processes to ensure that adults with suspected community-acquired pneumonia in hospital have a chest X-ray and receive a diagnosis within 4 hours of presentation at hospital.

*Data source:* Local data collection.

**Process**

a) Proportion of diagnoses of community-acquired pneumonia in adults in hospital at which the adult has a chest X-ray within 4 hours of presentation at hospital.

Numerator – the number in the denominator for which a chest X-ray was carried out within 4 hours of presentation at hospital.

Denominator – the number of diagnoses of community-acquired pneumonia in adults.

*Data source:* Local data collection.
b) Proportion of diagnoses of community-acquired pneumonia in adults in hospital which are made within 4 hours of presentation at hospital.

Numerator – the number in the denominator for which a diagnosis was made within 4 hours of presentation at hospital.

Denominator – the number of diagnoses of community-acquired pneumonia in adults in hospital.

*Data source:* Local data collection.

**Outcome**

Inappropriate antibiotic use.

*Data source:* Local data collection.

**What the quality statement means for service providers, healthcare professionals and commissioners**

*Service providers* (secondary care services) ensure that adults with suspected community-acquired pneumonia in hospital have a chest X-ray and receive a diagnosis within 4 hours of presentation at hospital.

*Healthcare professionals* (such as hospital doctors and nurse practitioners) arrange a chest X-ray for adults with suspected community-acquired pneumonia in hospital, and confirm or rule out a diagnosis of community-acquired pneumonia within 4 hours of presentation at hospital.

*Commissioners* (clinical commissioning groups) commission services in which adults with suspected community-acquired pneumonia in hospital have a chest X-ray and receive a diagnosis within 4 hours of presentation at hospital.

**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 presentation at hospital.
**Source guidance**

**Pneumonia in adults: diagnosis and management** (2014) NICE guideline CG191, recommendation 1.2.8 (key priority for implementation)

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

**Suspected community-acquired pneumonia**

Community-acquired pneumonia is acquired outside hospital. Pneumonia that develops in a person living in a nursing or residential home is included in this definition. It is suspected in adults who have symptoms and signs of lower respiratory tract infection, and diagnosed in adults who, in the opinion of the doctor and in the absence of a chest X-ray, are likely to have community-acquired pneumonia. Symptoms and signs include, but are not limited to, one or more of the following: fever, shortness of breath, cough, pleuritic chest pain, increased respiratory rate or work of breathing, and localised crepitations heard on auscultation of the person's chest.

Pneumonia that develops in people who are immunocompromised, and terminal pneumonia associated with another disease are not included.

**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 to ensure that they understand the diagnosis.
Quality statement 4: Mortality risk assessment in hospital using CURB65 score

Quality statement

Adults have a mortality risk assessment using the CURB65 score when they are diagnosed with community-acquired pneumonia in hospital.

Rationale

Assessing mortality risk using the CURB65 score in hospital informs clinical judgement and supports decision-making about how the infection is treated, whether the person should receive home- or hospital-based care, the choice of microbiological tests and the choice of antibiotic. This will ensure that treatment is based on the severity of the infection and will improve treatment outcomes.

Quality measures

Structure

Evidence of local arrangements to ensure that adults have a mortality risk assessment using the CURB65 score when they are diagnosed with community-acquired pneumonia in hospital.

Data source: Local data collection.

Process

Proportion of diagnoses of community-acquired pneumonia in adults in hospital at which the adult has a mortality risk assessment using the CURB65 score.

Numerator – the number in the denominator at which the adult has a mortality risk assessment using the CURB65 score.

Denominator – the number of diagnoses of community-acquired pneumonia in adults in hospital.

Data source: Local data collection.

What the quality statement means for service providers, healthcare
professionals and commissioners

Service providers (secondary care and ambulatory care services) ensure that adults have a mortality risk assessment using the CURB65 score when they are diagnosed with community-acquired pneumonia in hospital.

Healthcare professionals (such as hospital doctors and nurse practitioners) carry out a mortality risk assessment using the CURB65 score when adults are diagnosed with community-acquired pneumonia in hospital.

Commissioners (clinical commissioning groups) commission services in which adults have a mortality risk assessment using the CURB65 score when they are diagnosed with community-acquired pneumonia in hospital.

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

Adults diagnosed with community-acquired pneumonia in hospital have an assessment to find out how serious the pneumonia is. This includes a CURB65 score, which uses the person's age, symptoms, blood pressure and a blood test to help decide how serious the risks are for that person, whether they need to stay in hospital and what treatment they should have.

Source guidance

Pneumonia in adults: diagnosis and management (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 in adults (2014) NICE guideline CG191 and expert opinion]
Mortality risk assessment in hospital

When a diagnosis of community-acquired pneumonia is made at presentation to hospital, the healthcare professional should assess 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

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)\(^2\)
- 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).


\(^2\) For guidance on delirium, see the NICE guideline on delirium.

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

### Equality and diversity considerations

It is important to be aware of dementia when assessing confusion and to adapt the assessment approach to meet individual needs.

Healthcare professionals should be aware of the needs of people at the end of life and agree the
approach for managing pneumonia in the context of their overall care plan.
Quality statement 5: Antibiotic therapy within 4 hours in hospital

**Quality statement**

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

**Rationale**

Starting appropriate antibiotic therapy as soon as possible (and within 4 hours of presentation) is important for treating adults with community-acquired pneumonia who are admitted to hospital. 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 start antibiotic therapy within 4 hours of presentation.

*Data source:* Local data collection.

**Process**

Proportion of hospital admissions of community-acquired pneumonia in adults at which antibiotic therapy is started within 4 hours of presentation.

Numerator – the number in the denominator at which antibiotic therapy is started within 4 hours of presentation.

Denominator – the number of hospital admissions of community-acquired pneumonia in adults.

*Data source:* Local data collection.

**Outcome**

Mortality.

*Data source:* Local data collection.
What the quality statement means for service providers, healthcare professionals and commissioners

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

**Healthcare professionals** (hospital clinicians) ensure adults who are admitted to hospital and diagnosed with community-acquired pneumonia start antibiotic therapy within 4 hours of presentation.

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

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

Adults who are admitted to hospital and diagnosed with community-acquired pneumonia start antibiotic treatment within 4 hours of being seen.

**Source guidance**

[Pneumonia in adults: diagnosis and management](https://www.nice.org.uk/guidance/cg191) (2014) NICE guideline CG191, recommendations 1.2.8 (key priority for implementation) and 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. Pneumonia that develops in people who are immunocompromised, and terminal pneumonia associated with another disease are not included.

[Pneumonia in adults](https://www.nice.org.uk/guidance/cg191) (2014) NICE guideline CG191 and expert opinion]
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.

See NICE's how to use quality standards 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.

NICE's quality standard service improvement template helps providers to make an initial assessment of their service compared with a selection of quality statements. It includes assessing current practice, recording an action plan and monitoring quality improvement.

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

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 in adults: diagnosis and management (2014) NICE guideline CG191
- Delirium: prevention, diagnosis and management (2010) NICE guideline CG103

Policy context

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

- 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
Definitions and data sources for the quality measures

- Pneumonia in adults: diagnosis and management (2014) NICE guideline CG191
- British Thoracic Society (2012–13) Adult Community Acquired Pneumonia Audit
Related NICE quality standards

- Preventing excess winter deaths and illness associated with cold homes (2016) NICE quality standard 117
- Healthcare-associated infections (2016) NICE quality standard 113
- Chronic obstructive pulmonary disease in adults (2011, updated 2016) NICE quality standard 10
- Drug allergy (2015) NICE quality standard 97
- Intravenous fluid therapy in hospital (2014) NICE quality standard 66
- Delirium in adults (2014) NICE quality standard 63
- Infection prevention and control (2014) NICE quality standard 61
- Smoking: supporting people to stop (2013) NICE quality standard 43
- Patient experience in adult NHS services (2012) NICE quality standard 15
Quality Standards Advisory Committee and NICE project team

Quality Standards Advisory Committee

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

Dr Gita Bhutani
Associate Director for Psychological Professions, Lancashire Care NHS Foundation Trust

Mrs Jennifer Bostock
Lay member

Dr Helen Bromley
Consultant in Public Health, Cheshire West and Chester Council

Dr Hasan Chowhan
GP, NHS North East Essex Clinical Commissioning Group

Ms Amanda de la Motte
Service Manager/Lead Nurse Hospital Avoidance Team, Central Nottinghamshire Clinical Services

Mr Phillip Dick
Psychiatric Liaison Team Manager, West London Mental Health Trust

Ms Phyllis Dunn
Clinical Lead Nurse, University Hospital of North Staffordshire

Dr Steve Hajioff
Director of Public Health, London Borough of Hillingdon

Dr Ian Manifold
Head of Measures Development, National Peer Review Programme, NHS England

Mr Gavin Maxwell
Lay member

Ms Teresa Middleton
Deputy Director of Quality, NHS Gloucestershire Clinical Commissioning Group

Mrs Juliette Millard
UK Nursing and Health Professions Adviser, Leonard Cheshire Disability

Miss Sally Oliver
Retired NHS Acute Care Manager

Hazel Trender
Senior Vascular Nurse Specialist, Sheffield Teaching Hospital Trust

Dr Hugo van Woerden
Director of Public Health, NHS Highland

Dr Bee Wee (Chair)
Consultant and Senior Clinical Lecturer in Palliative Medicine, Oxford University Hospitals NHS Trust and Oxford University

Ms Karen Whitehead
Strategic Lead Health, Families and Partnerships, Bury Council

Ms Alyson Whitmarsh
Programme Head for Clinical Audit, Health and Social Care Information Centre

Ms Jane Worsley
Chief Operating Officer, Options Group, Alcester Heath, Warwickshire

Dr Arnold Zermansky
GP, Leeds

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

Mrs Corrine Ashton
Senior Pharmacist – Antimicrobials, University Hospitals of Leicester

Ms Caia Francis
Senior Lecturer/ Respiratory Nurse Specialist, University of the West of England
Professor Wei Shen Lim  
Consultant Respiratory Physician, Nottingham University Hospitals NHS Trust and Honorary Professor of Medicine, University of Nottingham

Dr Helen Mansfield  
Emergency Medicine Consultant, Gloucestershire Hospital NHS Foundation Trust

Mr Peter Maufe  
Lay member

Professor Michael Moore  
Professor of Primary Care Research, University of Southampton

Dr John Pounsford  
Consultant Physician, North Bristol NHS Trust

Professor Mark Woodhead  
Consultant Respiratory Physician, Central Manchester University Hospitals NHS Foundation Trust

**NICE project team**

Nick Baillie  
Associate Director

Karen Slade  
Consultant Clinical Adviser

Stephanie Birtles  
Technical Adviser

Sabina Keane  
Lead Technical Analyst

Esther Clifford  
Programme Manager

Jenny Mills  
Project Manager
Update information

Minor changes since publication

February 2018: Changes have been made to correct the outcomes in statements 1 and 3.
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.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.


Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- British Thoracic Society
- Intensive Care Society
- Royal College of Nursing
• Royal College of General Practitioners
• Society for Acute Medicine (SAM)
• MRSA Action UK