NICE National Institute for Health and Care Excellence

NICE quality standard

Sepsis

Quality standard

Published: 13 September 2017
nice.org.uk/guidance/qs161

Contents

This standard is based on NG51.

This standard should be read in conjunction with QS121, QS113, QS75, QS64 and QS61.

Quality statements

Statement 1 People with suspected sepsis are assessed using a structured set of observations to stratify risk of severe illness or death.

Statement 2 People with suspected sepsis in acute hospital settings and at least 1 of the criteria indicating high risk of severe illness or death, have the first dose of intravenous antibiotics and a review by a senior clinical decision-maker within 1 hour of risk being stratified.

Statement 3 People with suspected sepsis in acute hospital settings who need treatment to restore cardiovascular stability have an intravenous fluid bolus within 1 hour of risk being stratified.

Statement 4 People with suspected sepsis in acute hospital settings who receive intravenous antibiotics or fluid bolus are seen by a consultant if their condition fails to respond within 1 hour of initial treatment.

Statement 5 People with suspected sepsis who have been stratified as at low risk of severe illness or death are given information about symptoms to monitor and how to access medical care.

NICE has developed guidance and a 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 these quality statements.

Other quality standards that should be considered when commissioning or providing sepsis services include:

- Antimicrobial stewardship (2016) NICE quality standard 121
- Healthcare-associated infections (2016) NICE quality standard 113
- Neonatal infection (2014) NICE quality standard 75
- Fever in under 5s (2014) NICE quality standard 64
- Infection prevention and control (2014) NICE quality standard 61

A full list of NICE quality standards is available from the quality standards topic library.

Quality statement 1: Assessment

Quality statement

People with suspected sepsis are assessed using a structured set of observations to stratify risk of severe illness or death.

Rationale

People with suspected sepsis require face-to-face assessment to determine whether they need urgent intervention. Using a structured set of observations for assessing physiological symptoms should ensure that people at risk of severe illness or death from sepsis receive timely and appropriate treatment.

Quality measures

Structure

Evidence of local arrangements to ensure that a structured set of observations are used to stratify risk of severe illness or death from sepsis.

Data source: Local data collection. Services can consider using an early warning score (such as NEWS) to inform local arrangements and written clinical protocols.

Process

a) Proportion of people with sepsis in acute hospital settings who were assessed using a structured set of observations to stratify risk of severe illness or death from sepsis.

Numerator – the number in the denominator who were assessed using a structured set of observations to stratify risk of severe illness or death from sepsis.

Denominator – the number of people diagnosed with sepsis in acute hospital settings.

Data source: Local data collection, for example, using Hospital Episode Statistics.

b) Proportion of people with sepsis who were referred to an acute hospital setting from primary or ambulatory care settings who were assessed using a structured set of observations to stratify risk of severe illness or death from sepsis.

Numerator – the number in the denominator who were assessed using a structured set of observations to stratify risk of severe illness or death from sepsis.

Denominator – the number of people with sepsis referred to an acute hospital setting from primary or ambulatory care settings.

Data source: Local data collection.

Outcome

a) Rates of admission to critical care for people with sepsis.

*Data source:*Local data collection, for example, using Hospital Episode Statistics.

b) Rates of in-hospital mortality for people with sepsis.

*Data source:*Local data collection, for example, using Hospital Episode Statistics and Office for National Statistics mortality database.

What the quality statement means for different audiences

Service providers (such as primary, ambulatory and secondary care services) ensure that written protocols are in place on the use of structured sets of observations to stratify risk of severe illness or death (such as an early warning score) when people are suspected to have sepsis.

Healthcare professionals (such as GPs, paramedics and healthcare professionals working in emergency departments) consider sepsis if a person presents with signs or symptoms that indicate possible infection. They should use a structured set of observations to stratify risk of severe illness or death in people with suspected sepsis. Healthcare professionals outside acute healthcare settings should also be aware of the criteria that indicate when to refer people for emergency medical care.

Commissioners (such as clinical commissioning groups and NHS England) ensure that primary, ambulatory and secondary care services demonstrate the use of structured sets of observations for people presenting with symptoms that suggest sepsis. They should also monitor performance against the national CQUIN on the timely identification of sepsis.

People with symptoms that suggest sepsis are assessed to see whether they have a high risk of life-

threatening illness from sepsis, and if urgent treatment or more checks are needed.

Source guidance

Sepsis: recognition, diagnosis and early management (2016) NICE guideline NG51, recommendation 1.1.7

Definitions of terms used in this quality statement

Structured set of observations

Everyone with suspected sepsis should have the following assessed:

- temperature
- heart rate
- respiratory rate
- level of consciousness
- oxygen saturation.

Everyone with suspected sepsis should also be examined for:

- mottled or ashen appearance
- cyanosis of the skin, lips or tongue
- non-blanching rash of the skin
- any breach of skin integrity (for example, cuts, burns or skin infections)
- any rash indicating potential infection.

The person, parent or carer should also be asked about the frequency of urination in the past 18 hours.

[NICE's guideline on sepsis, recommendations 1.3.7 and 1.3.8]

Children under 12 years should have capillary refill assessed.

[NICE's guideline on sepsis, recommendations 1.3.1 and 1.3.2]

Blood pressure should be measured:

- in adults and young people over 12 years
- in children aged 5 to 11 years if facilities, including a cuff of correct size, are available
- in children under 5 years if heart rate or capillary refill time are abnormal and facilities to measure blood pressure, including a cuff of correct size, are available.

[NICE's guideline on sepsis, recommendations 1.3.1, 1.3.3 and 1.3.4]

Suspected sepsis

Suspected sepsis is used to indicate people who might have sepsis and require face-to-face assessment to determine whether they need urgent intervention.

Symptoms of sepsis can include, but are not limited to:

- high body temperature or low body temperature
- fast heartbeat/breathing
- feeling dizzy or faint/loss of consciousness
- a change in mental state, for example, confusion or disorientation
- diarrhoea/nausea and vomiting
- slurred speech
- severe muscle pain
- breathlessness
- reduced urine production
- cold, clammy and pale or mottled skin.

People with sepsis may have non-specific, non-localised presentations, for example, they may feel very unwell, and may not have a high temperature.

[NICE's guideline on sepsis and expert opinion]

Equality and diversity considerations

People with suspected sepsis should be assessed with extra care if they or their families or carers cannot give a good history of their signs and symptoms (for example, people with English as a second language or people with communication problems). People should have access to an interpreter or advocate if needed.

Quality statement 2: Senior review and antibiotic treatment

Quality statement

People with suspected sepsis in acute hospital settings and at least 1 of the criteria indicating high risk of severe illness or death, have the first dose of intravenous antibiotics and a review by a senior clinical decision-maker within 1 hour of risk being stratified.

Rationale

Sepsis is a medical emergency and needs urgent senior review to identify the source of infection and ensure that people receive appropriate treatment. A senior decision-maker is also more likely to recognise if there is another potential cause for the person's severe illness. For people at high risk of severe illness or death from sepsis, the clinical benefits of having the first dose of intravenous antibiotics within an hour outweigh any risks associated with possible antimicrobial resistance.

Quality measures

Structure

a) Evidence of local arrangements to ensure urgent assessment mechanisms are in place to deliver antibiotics to people with suspected sepsis in acute hospital settings within 1 hour of any high risk criteria of severe illness or death from sepsis being identified.

Data source: Local data collection.

b) Evidence of local arrangements for a senior clinical decision-maker to be available within 1 hour for people with suspected sepsis in acute hospital settings and at least 1 of the criteria indicating high risk of severe illness or death from sepsis.

Data source: Local data collection.

Process

a) Proportion of people with suspected sepsis in acute hospital settings and at least 1 of the criteria indicating high risk of severe illness or death from sepsis who receive the first dose of intravenous antibiotics within 1 hour of risk being stratified.

Numerator – the number in the denominator who receive the first dose of intravenous antibiotics within 1 hour of risk being stratified.

Denominator – the number of people with suspected sepsis in acute hospital settings and at least 1 of the criteria indicating high risk of severe illness or death from sepsis.

Data source:Local data collection, for example, using local prescribing data.

b) Proportion of people with suspected sepsis in acute hospital settings and at least 1 of the criteria indicating high risk of severe illness or death from sepsis who have a review by a senior clinical decision-maker within 1 hour of risk being stratified.

Numerator – the number in the denominator who have a review by a senior clinical decision-maker within 1 hour of risk being stratified.

Denominator – the number of people with suspected sepsis in acute hospital settings and at least 1 of the criteria indicating high risk of severe illness or death from sepsis.

Data source: Local data collection.

c) The percentage of people who were diagnosed with sepsis in emergency departments and acute inpatient services and received intravenous antibiotics within 1 hour of diagnosis.

Numerator – the number in the denominator who received intravenous antibiotics within 1 hour of diagnosis.

Denominator – the number of people who were diagnosed with sepsis in emergency departments and acute inpatient services.

Data source: This is taken directly from NHS England's National 2017/19 CQUIN.

Outcome

Rates of in-hospital mortality for people with sepsis.

Data source:Local data collection, for example, using Hospital Episode Statistics and Office for National Statistics mortality database.

What the quality statement means for different audiences

Service providers (secondary care services) ensure that a senior clinical decision-maker is available to review the care of people with suspected sepsis and at least 1 of the criteria indicating high risk of severe illness or death within 1 hour of risk being stratified. Mechanisms should also be in place to give the first dose of intravenous antibiotics within 1 hour of any high-risk criteria being identified.

Healthcare professionals (such as healthcare professionals working in emergency departments) give intravenous antibiotics and seek a review from a senior clinical decision-maker within 1 hour of identifying at least 1 of the criteria indicating high risk of severe illness or death from sepsis.

Commissioners (such as clinical commissioning groups and NHS England) ensure that acute hospital settings can demonstrate that intravenous antibiotics are given and there is review by a senior clinical decision-maker within 1 hour of at least 1 of the criteria indicating high risk of severe illness or death due to sepsis being identified.

People with symptoms that suggest life-threating illness from sepsis have antibiotics and a review by a senior healthcare professional within 1 hour to make sure that they have the best treatment as soon as possible. If it will take more than an hour to get to hospital, the antibiotics may be given by healthcare professionals in primary care or by ambulance staff.

Source guidance

Sepsis: recognition, diagnosis and early management (2016) NICE guideline NG51, recommendations 1.6.1, 1.6.16, 1.6.31 and expert consensus

Definitions of terms used in this quality statement

Antibiotic treatment for suspected sepsis

The NICE quality standard on antimicrobial stewardship includes the statement: 'People in hospital who are prescribed an antimicrobial have a microbiological sample taken and their treatment reviewed when the results are available.'

Age	Symptoms	Antibiotics	NICE recommendation(s)

All	Clear source of infection	Local antimicrobial guidance	1.7.6
All	Fever and purpuric rash suggesting meningococcal disease	Parenteral benzyl penicillin in community settings Intravenous ceftriaxone in hospital settings	1.7.5
18 years and over	No confirmed diagnosis but empirical intravenous antimicrobial needed	Local formulary	1.7.7
Up to 17 years (excluding neonates)	Suspected community acquired sepsis of any cause	80 mg/kg once a day ceftriaxone with maximum daily dose of 4 g	1.7.8
Up to 17 years	Suspected sepsis already in hospital, or known to have previous infection or colonisation with ceftriaxone-resistant bacteria	Local antimicrobial guidance	1.7.9
Under 3 months	Suspected sepsis	Additional antibiotic active against listeria (for example, ampicillin or amoxicillin)	1.7.10
Neonates	Presenting in hospital with suspected sepsis in their first 72 hours	Intravenous benzyl penicillin and gentamicin	1.7.11
Neonates over 40 weeks corrected gestational age	Community acquired sepsis	Ceftriaxone 50 mg/kg unless receiving i.v. calcium Cefotaxime 50 mg/kg every 6 to 12 hours (depending on age) if receiving i.v. calcium	1.7.12

Neonates 40 weeks corrected gestational age or under	Community acquired sepsis	Cefotaxime 50 mg/kg every 6 to 12 hours (depending on age)	1.7.12

Criteria indicating high risk of severe illness or death from sepsis

People with any of the symptoms or signs in the table below are at high risk of severe illness or death from sepsis:

Symptoms or signs	Adults, children and young people aged 12 years and over	Children aged 5 to 11 years	Children under 5 years
Behaviour	Objective evidence of new altered mental state	• Objective evidence of altered behaviour or mental state, or • Appears ill to healthcare professional, or • Does not wake (or if roused, does not stay awake)	• No response to social cues, or • Appears ill to a healthcare professional, or • Does not wake, or if roused does not stay awake, or • Weak, high-pitched or continuous cry

Respiratory rate	• 25 breaths per minute or above, or • New need for 40% oxygen or more to maintain oxygen saturation more than 92% (or more than 88% in known chronic obstructive pulmonary disease)	• Aged 5 years, 29 breaths per minute or more • Aged 6 to 7 years, 27 breaths per minute or more • Aged 8 to 11 years, 25 breaths per minute or more • Oxygen saturation of less than 90% in air or increased oxygen requirement over baseline	• Aged under 1 year, 60 breaths per minute or more • Aged 1 to 2 years, 50 breaths per minute or more • Aged 3 to 4 years, 40 breaths per minute or more • Grunting • Apnoea • Oxygen saturation of less than 90% in air or increased oxygen requirement over baseline

Heart rate	130 beats per minute or above	• Aged 5 years, 130 beats per minute or more • Aged 6 to 7 years, 120 beats per minute or more • Aged 8 to 11 years, 115 beats per minute or more • Or heart rate less than 60 beats per minute at any age	• Aged under 1 year, 160 beats per minute or more • Aged 1 to 2 years, 150 beats per minute or more • Aged 3 to 4 years, 140 beats per minute or more • Heart rate less than 60 beats per minute at any age
Blood pressure	Systolic blood pressure of 90 mmHg or less, or more than 40 mmHg below normal		
Urine	Not passed urine in previous 18 hours (for catheterised patients, passed less than 0.5 ml/kg/hour)		
Temperature			• Less than 36°C • Aged under 3 months and temperature 38°C or more

Appearance	• Mottled or ashen, or • Cyanosis of skin, lips or tongue, or • Non-blanching skin rash	• Mottled or ashen, or • Cyanosis of skin, lips or tongue, or • Non-blanching skin rash	• Mottled or ashen, or • Cyanosis of skin, lips or tongue, or • Non-blanching skin rash

[NICE's guideline on sepsis, recommendations 1.4.2, 1.4.5 and 1.4.8]

Senior clinical decision-maker

Depending on local arrangements the senior clinical decision-maker for people aged 18 years or over should be a doctor of grade CT3/ST3 or above or equivalent, or an advanced nurse practitioner with antibiotic prescribing responsibilities.

[NICE's guideline on sepsis, recommendation 1.6.1]

The senior decision-maker for people aged 5 to 17 years is a paediatric or emergency care qualified doctor of grade ST4 or above or equivalent.

[NICE's guideline on sepsis, recommendations 1.6.1 and 1.6.16]

The senior clinical decision-maker for children under 5 years is a paediatric qualified doctor of grade ST4 or above.

[NICE's guideline on sepsis, recommendation 1.6.31]

Suspected sepsis

Suspected sepsis is used to indicate people who might have sepsis and require face-to-face assessment to determine whether they need urgent intervention.

Symptoms of sepsis can include, but are not limited to:

- high body temperature or low body temperature

- fast heartbeat/breathing
- feeling dizzy or faint/loss of consciousness
- a change in mental state, for example, confusion or disorientation
- diarrhoea/nausea and vomiting
- slurred speech
- severe muscle pain
- breathlessness
- reduced urine production
- cold, clammy and pale or mottled skin.

People with sepsis may have non-specific, non-localised presentations, for example, they may feel very unwell, and may not have a high temperature.

[NICE's guideline on sepsis and expert opinion]

Quality statement 3: Intravenous fluids

Quality statement

People with suspected sepsis in acute hospital settings who need treatment to restore cardiovascular stability have an intravenous fluid bolus within 1 hour of risk being stratified.

Rationale

Early intervention with intravenous fluids is vital for managing sepsis. It can help to reverse septic shock and to restore cardiovascular stability for people who are at high risk of severe illness or death. Intravenous fluids improve oxygen delivery to organs and so reduce long-term disability associated with poor tissue perfusion.

Quality measures

Structure

a) Evidence of local arrangements and written clinical protocols to ensure that people with suspected sepsis in acute hospital settings who need treatment to restore cardiovascular stability have an intravenous fluid bolus within 1 hour of risk being stratified.

Data source: Local data collection, for example, using hospital board reports.

b) Evidence of local arrangements and written clinical protocols to ensure that people with suspected sepsis in acute hospital settings have their lactate levels recorded.

Data source: Local data collection, for example, healthcare records.

Process

a) Proportion of adults and young people age 12 years and over with suspected sepsis in acute hospital settings and systolic blood pressure less than 90 mmHg who receive an intravenous fluid bolus within 1 hour of blood pressure being measured as less than 90 mmHg.

Numerator – the number in the denominator who receive an intravenous fluid bolus within 1 hour of blood pressure being measured as less than 90 mmHg.

Denominator – the number of adults and young people age 12 years and over with suspected sepsis

in acute hospital settings and systolic blood pressure less than 90 mmHg.

Data source: Local data collection.

b) Proportion of people with suspected sepsis in acute hospital settings, at least 1 criteria indicating high risk of severe illness or death from sepsis, and with lactate over 2 mmol/litre, who receive an intravenous fluid bolus within 1 hour of risk being stratified.

Numerator – the number in the denominator who receive an intravenous fluid bolus within 1 hour of risk being stratified.

Denominator – the number of people with suspected sepsis in acute hospital settings, at least 1 criteria indicating high risk of severe illness or death from sepsis, and with lactate over 2 mmol/litre.

Data source: Local data collection.

Outcome

a) Rates of cardiovascular stability in people with suspected sepsis.

Data source:Local data collection, for example, using Hospital Episode Statistics.

b) Rates of 28-day all-cause mortality in people with sepsis.

Data source:Local data collection, for example, using Hospital Episode Statistics and Office for National Statistics mortality database.

What the quality statement means for different audiences

Service providers (secondary care services) ensure that systems are in place for people with suspected sepsis who need treatment to restore cardiovascular stability, to have an intravenous fluid bolus within 1 hour of need for treatment being identified. They should also ensure that there are systems in place for people with suspected sepsis to have lactate levels taken and recorded.

Healthcare professionals (such as healthcare professionals working in emergency departments) give an intravenous fluid bolus to people who need treatment to restore cardiovascular stability, within 1 hour of need for treatment being identified. They measure and record lactate levels of

people who have suspected sepsis.

Commissioners (such as clinical commissioning groups) ensure that they commission services in which people who need treatment to restore cardiovascular stability have an intravenous fluid bolus within 1 hour of need for treatment being identified. The services they commission should take and record lactate levels in people with suspected sepsis.

People with symptoms that suggest life-threating illness from sepsis have extra fluids in hospital through a drip or injection, no more than an hour after they have been diagnosed as being at high risk.

Source guidance

Sepsis: recognition, diagnosis and early management (2016) NICE guideline NG51, recommendations 1.6.2, 1.6.3, 1.6.17, 1.6.18, 1.6.32 and 1.6.33

Definitions of terms used in this quality statement

People with suspected sepsis who need treatment to restore cardiovascular stability

This includes the following groups:

- people with suspected sepsis and at least 1 of the criteria indicating high risk of severe illness or death, and with lactate over 2 mmol/litre
- adults and young people 12 years and over with suspected sepsis and systolic blood pressure less than 90 mmHg.

[Adapted from NICE's guideline on sepsis, recommendation 1.6.2, 1.6.3, 1.6.17, 1.6.18, 1.6.32 and 1.6.33]

Suspected sepsis

Suspected sepsis is used to indicate people who might have sepsis and require face-to-face assessment to determine whether they need urgent intervention.

Symptoms of sepsis can include, but are not limited to:

- high body temperature or low body temperature

- fast heartbeat/breathing
- feeling dizzy or faint/loss of consciousness
- a change in mental state, for example, confusion or disorientation
- diarrhoea/nausea and vomiting
- slurred speech
- severe muscle pain
- breathlessness
- reduced urine production
- cold, clammy and pale or mottled skin.

People with sepsis may have non-specific, non-localised presentations, for example, they may feel very unwell, and may not have a high temperature.

[NICE's guideline on sepsis and expert opinion]

Quality statement 4: Escalation of care

Quality statement

People with suspected sepsis in acute hospital settings who receive intravenous antibiotics or fluid bolus are seen by a consultant if their condition fails to respond within 1 hour of initial treatment.

Rationale

Septic shock is associated with a high risk of death, so specialist input is important for people who have not had significant improvement after initial treatment. Being looked after by specialist healthcare staff, including a consultant, can improve clinical outcomes for these people.

Quality measures

Structure

Evidence of acute hospital settings having arrangements in place which ensure that people with suspected sepsis are seen by a consultant if their condition fails to respond within 1 hour of initial intravenous antibiotics or fluid bolus. This includes ensuring a consultant is available to attend promptly.

Data source: Local data collection.

Process

Proportion of people with suspected sepsis in acute hospital settings who are seen by a consultant if their condition fails to respond within 1 hour of initial intravenous antibiotics or fluid bolus.

Numerator – the number in the denominator who are seen by a consultant.

Denominator – the number of people with suspected sepsis in acute hospital settings whose condition fails to respond within 1 hour of initial intravenous antibiotics or fluid bolus.

Data source: Local data collection.

Outcome

Rates of 28-day all-cause mortality in people with sepsis.

Data source:Local data collection, for example, using Hospital Episode Statistics and Office for National Statistics mortality database.

What the quality statement means for different audiences

Service providers (secondary care services) ensure that a consultant is available to see people with suspected sepsis if their condition fails to respond within 1 hour of initial intravenous antibiotics or fluid bolus.

Healthcare professionals (such as healthcare professionals working in emergency departments) ask a consultant to see people with suspected sepsis if their condition fails to respond within 1 hour of initial intravenous antibiotics or fluid bolus. Consultants attend promptly when asked to see people with suspected sepsis in these circumstances.

Commissioners (such as clinical commissioning groups) ensure that they commission services in acute hospital settings in which consultants are available to see people with suspected sepsis if their condition fails to respond within 1 hour of initial intravenous antibiotics or fluid bolus.

People with symptoms that suggest life-threating illness and that fail to improve within 1 hour of treatment see a consultant. The consultant will be able to arrange specialist treatment to prevent septic shock.

Source guidance

Sepsis: recognition, diagnosis and early management (2016) NICE guideline NG51, recommendations 1.6.7, 1.6.22 and 1.6.37

Definitions of terms used in this quality statement

Failure to respond

In adults and young people aged 12 years and over, failure to respond is indicated by any of:

- systolic blood pressure persistently below 90 mmHg
- reduced level of consciousness despite resuscitation
- respiratory rate of 25 breaths per minute or above, or a new need for mechanical ventilation

- lactate not reduced by more than 20% of initial value within 1 hour.

[NICE's guideline on sepsis, recommendation 1.6.7]

In children aged 5 to 11 years, failure to respond is indicated by any of:

- reduced level of consciousness despite resuscitation
- respiratory rate:
    - aged 5 years, 29 breaths per minute or more
    - aged 6 to 7 years, 27 breaths per minute or more
    - aged 8 to 11 years, 25 breaths per minute or more
    - oxygen saturation of less than 90% in air or increased oxygen requirement over baseline
- heart rate:
    - aged 5 years, 130 beats per minute or more
    - aged 6 to 7 years, 120 beats per minute or more
    - aged 8 to 11 years, 115 beats per minute or more
    - or heart rate less than 60 beats per minute at any age
- lactate remains over 2 mmol/litre after 1 hour.

[NICE's guideline on sepsis, recommendation 1.6.22]

In a child under 5 years, failure to respond is indicated by any of:

- reduced level of consciousness despite resuscitation
- respiratory rate:
    - aged under 1 year, 60 breaths per minute or more
    - aged 1 to 2 years, 50 breaths per minute or more
    - aged 3 to 4 years, 40 breaths per minute or more

- heart rate:
    - aged under 1 year, 160 beats per minute or more
    - aged 1 to 2 years, 150 beats per minute or more
    - aged 3 to 4 years, 140 beats per minute or more
    - heart rate less than 60 beats per minute at any age
- lactate over 2 mmol/litre after 1 hour.

[NICE's guideline on sepsis, recommendation 1.6.37]

Suspected sepsis

Suspected sepsis is used to indicate people who might have sepsis and require face-to-face assessment to determine whether they need urgent intervention.

Symptoms of sepsis can include, but are not limited to:

- high body temperature or low body temperature
- fast heartbeat/breathing
- feeling dizzy or faint/loss of consciousness
- a change in mental state, for example, confusion or disorientation
- diarrhoea/nausea and vomiting
- slurred speech
- severe muscle pain
- breathlessness
- reduced urine production
- cold, clammy and pale or mottled skin.

People with sepsis may have non-specific, non-localised presentations, for example, they may feel very unwell, and may not have a high temperature.

[NICE's guideline on sepsis and expert opinion]

Quality statement 5: Information for people at low risk of severe illness or death

Quality statement

People with suspected sepsis who have been stratified as at low risk of severe illness or death are given information about symptoms to monitor and how to access medical care.

Rationale

Sepsis cannot always be ruled out for people who have been assessed as being at low risk of severe illness or death from sepsis. They need to know which symptoms to look out for and how to access medical care urgently if these symptoms develop. This awareness will mean rapid management if symptoms become worse.

Quality measures

Structure

Evidence of local arrangements to ensure that information about symptoms to monitor and how to access medical care if needed is available to people with suspected sepsis who have been stratified as being at low risk of severe illness or death.

Data source: Local data collection, for example, using electronic hospital records and local primary care systems.

Process

Proportion of people with suspected sepsis who have been stratified as being at low risk of severe illness or death who are given information about symptoms to monitor and how to access medical care.

Numerator – the number in the denominator who are given information about symptoms to monitor and how to access medical care.

Denominator – the number of people with suspected sepsis who have been stratified as being at low risk of severe illness or death.

Data source: Local data collection, for example, using electronic hospital records and local primary care systems.

Outcome

Levels of awareness of symptoms in people with suspected sepsis.

Data source:Local data collection, for example, using local patient surveys.

What the quality statement means for different audiences

Service providers (such as primary and secondary care services) ensure that information is available about symptoms to monitor and how and when to access medical care for people with suspected sepsis who have been stratified as being at low risk of severe illness or death from sepsis.

Healthcare professionals (such as GPs and healthcare professionals working in emergency departments) give information about which symptoms to monitor and how and when to access medical care to people stratified as being at low risk of severe illness or death from sepsis; they also discuss this information with them.

Commissioners (such as clinical commissioning groups and NHS England) ensure that they commission services with protocols in place to provide information about symptoms to monitor and how to access medical care for people who have been stratified as being at low risk of severe illness or death from sepsis. They also ensure that services have healthcare professionals who can stratify and treat symptoms of sepsis when people are concerned about these.

People with symptoms that suggest they have a low risk of life-threating illness from sepsis are given information about what to do if they still feel unwell, important signs to look out for and when and where to get urgent help if they are worried about their condition.

Source guidance

Sepsis: recognition, diagnosis and early management (2016) NICE guideline NG51, recommendation 1.5.3 and 1.11.5

Definitions of terms used in this quality statement

Suspected sepsis

Suspected sepsis is used to indicate people who might have sepsis and require face-to-face assessment to determine whether they need urgent intervention.

Symptoms of sepsis can include, but are not limited to:

- high body temperature or low body temperature
- fast heartbeat/breathing
- feeling dizzy or faint/loss of consciousness
- a change in mental state, for example, confusion or disorientation
- diarrhoea/nausea and vomiting
- slurred speech
- severe muscle pain
- breathlessness
- reduced urine production
- cold, clammy and pale or mottled skin.

People with sepsis may have non-specific, non-localised presentations, for example, they may feel very unwell, and may not have a high temperature.

[NICE's guideline on sepsis and expert opinion]

Low risk of severe illness or death from sepsis

People with suspected sepsis who do not currently meet any high or moderate to high risk criteria of severe illness or death from sepsis.

[NICE's guideline on sepsis recommendations 1.4.4, 1.4.7 and 1.4.10]

Equality and diversity considerations

Information about symptoms to monitor and how to access medical care should be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people (including families and carers) who do not speak or read English. People should have access to an interpreter or advocate if needed.

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.

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, this may not always be appropriate in practice. Taking account of safety, shared decision-making, choice and professional judgement, desired levels of achievement should be defined locally.

Information about how NICE quality standards are developed is available from the NICE website.

See quality standard advisory committees on the website for details of standing committee 1 members who advised on this quality standard. Information about the topic experts invited to join the standing members is available on the quality standard's webpage.

This quality standard has been incorporated into the NICE pathway on sepsis.

NICE has produced a quality standard service improvement template to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.

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.

Improving outcomes

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

- mortality rates for people with sepsis
- length of hospital stay for people with sepsis
- length of ICU stay for people with sepsis
- long-term disability for people with sepsis
- organ failure in people with sepsis.

It is also expected to support delivery of the Department of Health's outcome frameworks:

- Adult social care outcomes framework 2015–16
- NHS outcomes framework 2016–17
- Public health outcomes framework for England, 2016–19.

Resource impact

NICE quality standards should be achievable by local services. The potential resource impact is considered by the quality standards advisory committee, drawing on resource impact work for the source guidance. Organisations are encouraged to use the resource impact template and resource impact report for the NICE guideline on sepsis to help estimate local costs.

Diversity, equality and language

During the development of this quality standard, equality issues were considered and equality assessments are available. Any specific issues identified during development of the quality statements are highlighted in each statement.

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.

ISBN: 978-1-4731-2630-5

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.

- Royal College of Emergency Medicine
- Royal College of Nursing
- Royal College of Physicians
- UK Sepsis Trust
- Royal College of Pathologists
- British Society for Antimicrobial Chemotherapy
- Meningitis Now
- Royal College of General Practitioners
- Meningitis Research Foundation
- Royal College of Paediatrics and Child Health