



Sepsis

Clinical Care Standard

June 2022

The Australian Commission on Safety and Quality in Health Care acknowledges the traditional owners of Country throughout Australia, and their continuing connection to land, sea and community. We pay our respects to them and their cultures, and to elders both past and present.

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In partnership with The George Institute for Global Health



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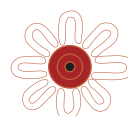


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Sepsis Clinical Care Standard

Quality statements

1

Could it be sepsis?

A diagnosis of sepsis is considered in any patient with an acute illness or clinical deterioration that may be due to infection. A clinical support tool that includes assessment of vital signs and lactate is used to help recognise sepsis early and escalate care when required.

2

Time-critical management

Sepsis is a time-critical medical emergency. Assessment and treatment of a patient with suspected sepsis is started urgently according to a locally approved clinical pathway, and their response to treatment is monitored and reviewed. The patient is reviewed by a clinician experienced in recognising and managing sepsis, and is escalated to a higher level of care when required.

3

Management of antimicrobial therapy

A patient with suspected sepsis has blood cultures taken immediately, ensuring that this does not delay the administration of appropriate antimicrobial therapy. When signs of infection-related organ dysfunction are present, appropriate antimicrobials are started within 60 minutes. Antimicrobial therapy is managed in line with the *Antimicrobial Stewardship Clinical Care Standard*, including a review within 48 hours from the first dose.

4

Multidisciplinary coordination of care in hospital

Sepsis is a complex, multisystem disease requiring a multidisciplinary approach to treatment. A patient with sepsis has their treatment in hospital coordinated by a clinician with expertise in managing patients with sepsis.

5

Patient and carer education and information

A patient, their family or carer is informed about sepsis from the time that it is suspected in a way that they can understand. Information includes the expected treatment and potential health effects of sepsis. Information is provided verbally and in writing.

6

Transitions of care and clinical communication

A patient with known or suspected sepsis has a documented clinical handover at transitions of care. This includes the provisional sepsis diagnosis, comorbidities, and the management plan for medicines and medical conditions. This information is provided to the patient, their family and carer as appropriate.

7

Care after hospital and survivorship

A patient who has survived sepsis receives individualised follow-up care to optimise functional outcomes, minimise recurrence, reduce rehospitalisation and manage the ongoing health effects of sepsis. This requires structured, holistic and coordinated post-discharge care and education that involves the patient, their family, carer, general practitioner and other clinicians. Support and information are provided to the family or carer of a patient who has died from sepsis.

Indicators for local monitoring

The following indicators will support healthcare services to monitor how well they are implementing the care recommended in this clinical care standard. The indicators are intended to support local quality improvement activities.

Note: Numbering of indicators is according to the relevant quality statement.

1

Could it be sepsis?

Indicator 1a: Proportion of patients with suspected sepsis who had blood lactate levels taken as a part of screening for sepsis.

2

Time-critical management

Indicator 2a: Evidence of a locally approved sepsis clinical pathway. The pathway should include:

- Criteria to support clinical decision-making to enable recognition of sepsis
- Triggers and time frames for escalation to a clinician experienced in recognising and managing sepsis, higher levels of care or other healthcare services
- Guidance on appropriate interventions and the timing of their use
- Time frames for clinical review, including review of investigation results, response to treatment and the antimicrobial plan
- Prompts to consider the patient's age, cultural needs, goals of care and advance care plans
- Prompts to consider alternative diagnoses.

Indicator 2b: Evidence of local arrangements that support the delivery of care described in the local sepsis clinical pathway. The local arrangements should specify the:

- Multidisciplinary clinical governance processes for the pathway
- Process to ensure access to the appropriate diagnostics, medicines and treatments required to implement the pathway
- Process to enable escalation to a clinician experienced in recognising and managing sepsis 24 hours a day, seven days a week
- Documentation requirements within the pathway and the patient's healthcare record, including documentation of their final diagnosis
- Process to ensure that clinicians using the pathway complete competency-based training on its use
- Process to assess adherence to the pathway and its performance, including assessment of patient experience.

Indicator 2c: Proportion of patients with sepsis who were treated according to the locally approved sepsis clinical pathway.

3 Management of antimicrobial therapy

Indicator 3a: Proportion of patients with sepsis who had blood cultures taken before starting antimicrobials.

Indicator 3b: Proportion of patients with signs and symptoms of infection-related organ dysfunction who started their first dose of an empirical antimicrobial within 60 minutes of recognition.

4 Multidisciplinary coordination of care in hospital

Indicator 4a: Evidence of local arrangements to support multidisciplinary care coordination and clinical communication for patients with sepsis. The local arrangements should specify the:

- Process to nominate a clinician experienced in sepsis management to coordinate the multidisciplinary care for each patient with sepsis while they are in hospital
- Roles and responsibilities of each clinician working in the multidisciplinary team, including their responsibilities at transitions of care
- Information that must be documented in the patient's comprehensive care plan and healthcare records
- Process to ensure that the patient's care plan is shared with the patient, their carer and family where appropriate, and the relevant clinical team(s) or general practitioner at each transition of care
- Services available to support effective, culturally safe communication and transitions of care
- Process to assess adherence to the local arrangements.

5 Patient and carer education and information

Indicator 5a: Proportion of patients with sepsis who reported they were kept informed as much as they wanted about their treatment and care.

6 Transitions of care and clinical communication

Indicator 6a: Proportion of patients with sepsis who had a diagnosis of sepsis recorded in their discharge summary.

See Indicator 4a.

7 Care after hospital and survivorship

Indicator 7a: Proportion of patients with sepsis who had an unplanned readmission to any hospital within 30 days of discharge.

Overall indicator

Indicator 8a: Proportion of patients with sepsis who died during their admitted patient episode of care.

The definitions required to collect and calculate indicator data are specified online: meteor.aihw.gov.au/content/index.phtml/itemId/755589. More information about indicators and other quality improvement measures is provided in [Appendix B](#).

Clinical care standards

Clinical care standards help support the delivery of evidence-based clinical care and promote shared decision making between patients, carers and clinicians. They aim to ensure that people receive best-practice care for a specific clinical condition or procedure, regardless of where they are treated in Australia.

A clinical care standard contains a small number of quality statements that describe the level of clinical care expected for a specific clinical condition or procedure. Indicators are included for some quality statements to assist healthcare services monitor how well they are implementing the care recommended in the clinical care standard.

A clinical care standard differs from a clinical practice guideline. Rather than describing all the components of care for a specific clinical condition or procedure, a clinical care standard focuses on key areas of care where the need for quality improvement is greatest.

Clinical care standards aim to improve healthcare outcomes by describing key components of appropriate care, enabling:

- Patients and the community to understand the care that is recommended and their healthcare choices
- Clinicians to provide best-practice care
- Healthcare services to monitor their performance and make improvements in the care they provide.

Clinical care standards are developed by the Australian Commission on Safety and Quality in Health Care (the Commission), an Australian Government agency that leads and coordinates national improvements in the safety and quality of health care, based on the best available evidence. By working in partnership with the Australian Government, states and territories, the private sector, clinical experts, and patients and carers, the Commission aims to ensure that the health system is better informed, supported and organised to deliver safe and high-quality care.

About the Sepsis Clinical Care Standard

Context

The *Sepsis Clinical Care Standard* has been developed by the Commission as one of eight components of the National Sepsis Program.¹ The National Sepsis Program aims to improve early recognition, treatment, outcomes and post-discharge support for people at risk of, or diagnosed with, sepsis in Australia. The George Institute for Global Health has partnered with the Commission to develop and implement this work. Establishing a nationally recognised clinical standard of care for sepsis was a key recommendation in the [*Stopping Sepsis: A national action plan*](#) report.²

This clinical care standard was developed to address the need for national clinical guidance to support improvements in the delivery of sepsis care in healthcare services. While some state and territory health departments have well-developed sepsis pathways, others do not as yet. In addition, private hospital, ambulance, pre-hospital and retrieval services, and primary and community healthcare services may not be represented in the existing state and territory sepsis clinical pathways.

Goal

To ensure that a patient presenting with signs and symptoms of sepsis is recognised early and receives coordinated, best-practice care so that the risk of death or ongoing morbidity is reduced.

Scope

The *Sepsis Clinical Care Standard* relates to neonatal, paediatric and adult patients (including older people) in the primary and community care, acute and non-acute settings. It relates to the patient journey from symptom onset to discharge from hospital and survivorship care.

While the standard does not provide specific guidance on the management of sepsis in patients receiving palliative or end-of-life care, this care should align with patients' individual healthcare directives.

Healthcare settings

This standard applies to patient care in the following settings and during transitions of care:

- Ambulance, retrieval and transfer services
- Private hospitals
- Public hospitals
- Urgent care centres.

It is also relevant to patient care provided in the following settings and during transitions of care:

- Aged care homes
- Aboriginal Community Controlled Health Services and Aboriginal medical services
- Community health services
- General practice
- Primary healthcare services.

Not all quality statements within this clinical care standard will be applicable to every healthcare service or clinical unit. Healthcare services should consider their individual circumstances in determining how to apply each statement.

Implementation should consider the context in which care is provided, and local variation and the quality improvement priorities of the individual healthcare service. In rural and remote settings, different strategies may be needed to implement the standard, such as hub-and-spoke models that integrate larger and smaller health services, and using telehealth consultations.

What is not covered

Sepsis prevention, the detailed management of sepsis and associated clinical decisions are outside the scope of this clinical care standard.

Evidence that underpins this clinical care standard

The key sources that underpin the *Sepsis Clinical Care Standard* are:

- *Surviving Sepsis Campaign: International guidelines for management of sepsis and septic shock 2021*³
- *Surviving Sepsis Campaign International Guidelines for the Management of Septic Shock and Sepsis-Associated Organ Dysfunction in Children*⁴
- National Institute for Health and Care Excellence (NICE) guideline. *Sepsis: Recognition, diagnosis and early management*⁵
- Society of Obstetric Medicine of Australia and New Zealand. *SOMANZ Guidelines for the Investigation and Management of Sepsis in Pregnancy*⁶
- Antibiotic Expert Advisory Group. *Therapeutic Guidelines: Antibiotic*⁷
- Royal Australian College of General Practitioners. *Aged Care Clinical Guide (Silver Book). Part A – infection and sepsis.*⁸

Supporting resources

Clinical care standard resources

Resources to support implementation of this clinical care standard are available from [safetyandquality.gov.au/sepsis-ccs](https://www.safetyandquality.gov.au/sepsis-ccs). These include:

- Consumer resources and guidance
- Clinician fact sheets
- Healthcare services resources.

These resources provide guidance on the use of antimicrobials, lactate measurement and tools to support discharge planning.

Other Commission resources

- The [National Sepsis Program web page](#), including the [National Sepsis Awareness Campaign](#), research reports, frequently asked questions and videos¹
- The [National Consensus Statement: Essential elements for recognising and responding to acute physiological deterioration \(third edition\)](#)⁹ and other resources related to the National Safety and Quality Health Service Recognising and Responding to Acute Deterioration Standard
- The [Antimicrobial Stewardship Clinical Care Standard](#).¹⁰

How to use this clinical care standard

Terminology

Some of the terms used in this clinical care standard are described below (also see [Background: Sepsis](#) and [Glossary](#)).

Sepsis

The *Third International Consensus Definitions for Sepsis and Septic Shock* (Sepsis-3) defines sepsis as a 'life-threatening organ dysfunction caused by a dysregulated host response to infection'.¹¹

Septic shock is defined as 'a subset of sepsis in which the underlying circulatory, cellular and metabolic abnormalities are associated with a greater risk of mortality than sepsis alone'.¹²

Sepsis is a clinical diagnosis, as there is no single diagnostic test. Both physiological and laboratory abnormalities may be present.¹¹

Sepsis-3 eliminated the term 'severe sepsis', instead defining and stratifying 'septic shock' and 'sepsis' with the goal of facilitating the earlier recognition and more timely management of patients with sepsis.¹³

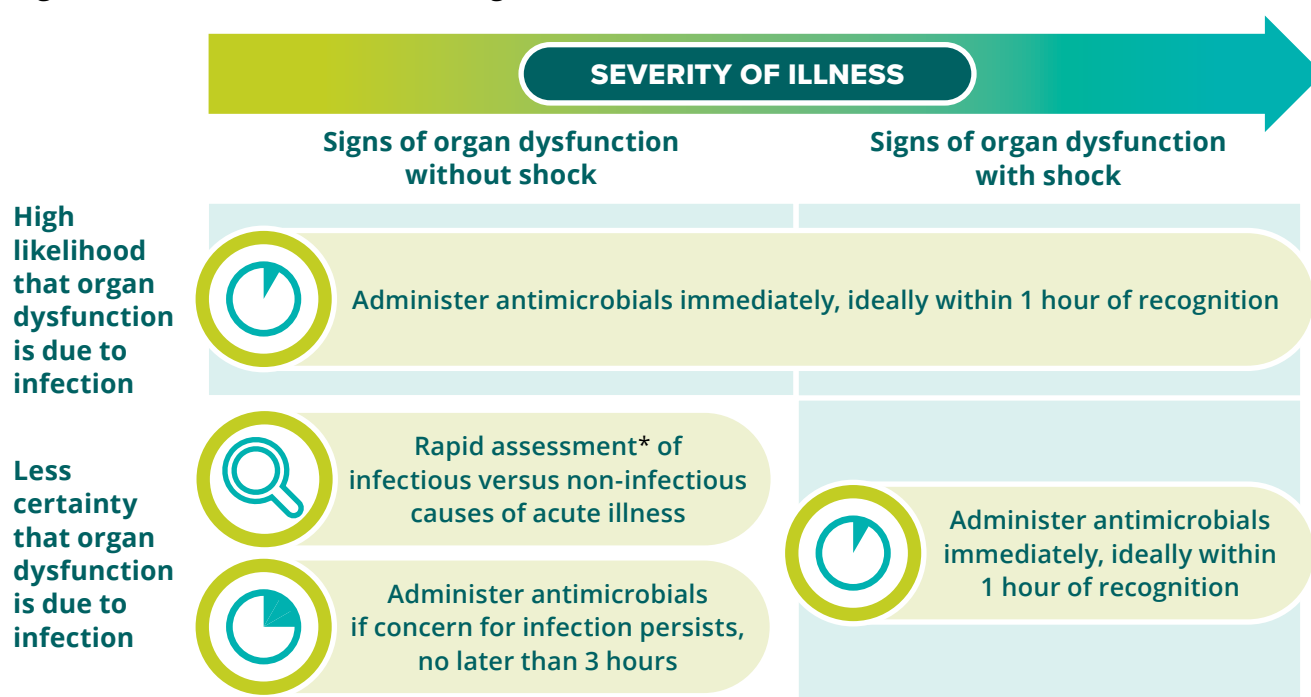
Sepsis presents as a spectrum of severity. Although there may be uncertainty about the diagnosis, the potential for rapid and serious deterioration in any patient with sepsis necessitates intervention whenever sepsis is a possibility. Sepsis pathways and other tools aid clinicians in ensuring timely care and diagnosis. See Table 1 and [Quality statement 1 – Could it be sepsis?](#)

While a variety of terms are used in the literature to indicate the certainty of diagnosis, this clinical care standard uses the following terms:

- Probable sepsis¹¹ – this may also be described as 'highly likely', 'proven', 'known' or confirmed sepsis
- Suspected sepsis – in such patients, there may be greater uncertainty about the infection or the cause of the symptoms. This may also be described as 'possible sepsis'.

In this clinical care standard, the presence of signs or symptoms of organ dysfunction with a likely or possible infection is considered the threshold for antimicrobial treatment (Figure 1).

Figure 1: Recommendations on timing of antimicrobial administration



* Rapid assessment includes history, clinical examination, tests for infectious and non-infectious causes of acute illness, and immediate treatment for acute conditions that can mimic sepsis. Surviving Sepsis Campaign Guidelines³ recommend that this assessment occurs within 3 hours of presentation, with close patient monitoring, but that antimicrobial treatment be started no later than 3 hours from presentation when concern for infection persists.

Source: Adapted from the Surviving Sepsis Campaign Guidelines.³

Quality statements

The quality statements describe the expected standard for key components of patient care. The standard explains what each quality statement means:

- **For patients**, so they know what care may be offered by their healthcare system and can make informed treatment decisions in partnership with their clinician
- **For clinicians**, to support decisions about appropriate care
- **For healthcare services**, to inform them of the policies, procedures and organisational factors that can enable the delivery of high-quality care.

To highlight factors that may help achieve equity and cultural safety in the provision of care, specific considerations are provided for some quality statements.

Patients, families and carers

The patient is the person receiving care. In this standard, when the word 'patient' is used, it may also refer to the person's carer, family member, support person or substitute decision-maker, if relevant.

Carer refers to a person who provides personal care, support and assistance to the patient, which may include a parent or family member.

Only the patient or their substitute decision-maker, such as a parent or legal guardian, can give consent for care. However, carers, families and support people who are not substitute decision-makers may also support the patient in their decision-making and actively participate in their care. They should be given information and included in discussions when the patient wishes this to occur.

Clinicians

Clinicians refers to all types of healthcare providers who deliver direct clinical care to patients, including paramedics, nurses, doctors, pharmacists, Aboriginal health workers and Aboriginal health practitioners, and allied health professionals such as physiotherapists.

Healthcare services

Healthcare services are delivered in a wide range of settings and vary in size and organisational structure from single healthcare providers to complex organisations. Where 'healthcare services' is used in this standard, it refers to those responsible for leading and governing the service.

General principles of care

This clinical care standard should be implemented as part of an overall approach to safety and quality, incorporating the following key principles that are the foundation for achieving safe and high-quality care:

- Person-centred care and shared decision making
- Informed consent
- Cultural safety for Aboriginal and Torres Strait Islander people
- Equity of care for people from diverse backgrounds.

When applying the information contained in this clinical care standard, clinicians are advised to use their clinical judgement and to consider the individual patient's circumstances, in consultation with the patient or their support people.

For more information and additional Commission resources, see [Appendix A](#).

Equity and cultural safety



This clinical care standard highlights specific issues for consideration in regard to cultural safety and equity in the care of people with sepsis.

Social and cultural factors can contribute to adverse health outcomes in a range of ways that may be complex and interrelated.¹⁴ Cultural factors can affect a patient's participation in health care, whether due to an imbalance in power, differences in language, a lack of cultural awareness or discrimination. Culturally safe and responsive health care supports equitable access and delivery of high-quality health care.¹⁴

This is particularly relevant for Aboriginal and Torres Strait Islander peoples given disparities in sepsis outcomes. As with patient safety, all healthcare providers have a role in ensuring culturally safe care. *The National Registration and Accreditation Scheme*¹⁵ recognises that clinical and cultural safety are inextricably linked elements of patient safety, and that these links must be defined by Aboriginal and Torres Strait Islander peoples¹⁵ (see [Appendix A](#)).

When using the indicators included in this standard, data should be disaggregated by Aboriginal and Torres Strait Islander status where possible. This will support identification of access and outcome issues so that improvements can be made.

Measurement for quality improvement

Measurement is a key component of quality improvement processes. The Commission has developed a set of indicators to support clinicians and healthcare services to monitor how well they are implementing the care recommended in this clinical care standard. The indicators are intended to support local quality improvement activities. No benchmarks are set for these indicators by the Commission.

The indicators are listed with the relevant quality statements. The definitions required to collect and calculate indicator data are available online: meteor.aihw.gov.au/content/index.phtml/itemId/755589.

Indicators to support overall monitoring of sepsis management

One inpatient mortality indicator is recommended to support overall monitoring of the implementation of this clinical care standard. Where routine access to linked hospitalisation and mortality datasets is available, mortality can also be measured at 30 days, 90 days and 12 months following separation from hospital.

Indicator 8a

Proportion of patients with sepsis who died during their inpatient episode of care.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755660

For more information about indicators and other quality improvement measures, see [Appendix B](#).

Information on other quality measures including patient-reported outcome measures and patient experience measures is available in [Appendix C](#).

Meeting the requirements of national standards and accreditation

Implementing this clinical care standard as part of a quality improvement activity can help healthcare services meet the requirements of the National Safety and Quality Health Service (NSQHS) Standards¹⁶, and the National Safety and Quality Primary and Community Healthcare Standards (Primary and Community Healthcare Standards).¹⁷

For more information, see [Appendix D](#).

Background: Sepsis

Sepsis is a life-threatening condition that arises when the body's response to an infection damages its own tissues and organs. Sepsis is preventable but, when it does occur, it is a medical emergency that requires rapid treatment to prevent multiple organ failure, lifelong disability or death. Early recognition and treatment are critical.

Sepsis can affect anyone, although it disproportionately affects the very young, the very old and other high-risk groups, including Aboriginal and Torres Strait Islander people, people with cancer and people who are immunocompromised. Globally, more than 50% of sepsis cases are in children and adolescents.¹⁸

The World Health Organization has recognised sepsis as a key global health issue and, in 2017, adopted a resolution to improve the prevention, diagnosis and clinical management of sepsis.¹⁹ This resolution has been a key driver of current sepsis initiatives.

Despite the importance of early medical attention, community awareness of sepsis is low. In 2020, 41% of Australian adults had never heard of sepsis.²⁰ People in the age group most likely to be parents of young children (18–34 years old) had lower awareness of sepsis than older adults (over 50-year age group).²¹

Rates of sepsis

Sepsis is considered a major cause of morbidity and mortality. In 2017, there were approximately 55,251 cases of sepsis in Australia and 8,702 sepsis-related deaths in people of all ages.¹⁸ In Australia, the direct cost of sepsis to the healthcare system is approximately \$700 million per year, with indirect costs of more than \$4 billion per year including children and adults.²²

While accurate population-level data are not readily available in Australia, national inpatient data show increasing rates of sepsis.²³ However, the diagnosis

code set and guidance for sepsis were extensively revised and implemented between 2015 and 2017. Therefore, interpreting national data from Australian healthcare services must be done with caution, as differences and changes in coding may obscure the true level of morbidity.*

Differences in sepsis risk

In Australia, sepsis hospitalisation rates are higher among²³:

- Aboriginal and Torres Strait Islander peoples
- Children less than 1 year old
- People aged over 85 years
- Those living in very remote areas
- Those living in areas with socioeconomic disadvantage.

Aboriginal and Torres Strait Islander peoples

There is a significantly higher incidence of sepsis amongst Aboriginal and Torres Strait Islander peoples compared with other Australians.²⁴ In the Top End of the Northern Territory in 2007–08, the age-adjusted incidence for sepsis was 40.8 hospital admissions per 1,000 Aboriginal and Torres Strait Islander people compared with 11.8 per 1,000 people in the non-Indigenous population.²⁵

Aboriginal and Torres Strait Islander children are also disproportionately affected. In 2002–2013, the age-standardised intensive care unit mortality rate for invasive infections in Aboriginal and Torres Strait Islander children was more than double that of non-Indigenous children (2.67 versus 1.04 deaths per 100,000 children each year, respectively).²⁶

Higher age-standardised incidence rates of *Staphylococcus aureus* bacteraemia have been found for Aboriginal and Torres Strait Islander people compared with other Australians, particularly for community-associated methicillin-resistant

* The diagnosis code set and guidance for sepsis were extensively revised in the ninth edition of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) and Australian Coding Standards (ACS) (implemented 1 July 2015 to 30 June 2017) to align with the previous Sepsis-2 definition and in response to a number of public submissions highlighting ambiguity in the classification of systemic inflammatory response syndrome (SIRS) and sepsis. Further information on the changes to ICD-10-AM and ACS 0110 – SIRS, sepsis, severe sepsis and septic shock – in the ninth edition, is available on the [Independent Hospital Pricing Authority \(IHPA\) website](#).

The twelfth edition of the ICD-10-AM and the ACS contain further refinements to the classification of sepsis. For more information, visit [IHPA's Australian Classification Exchange](#).

Staphylococcus aureus (MRSA).²⁴ This difference was not explained by socioeconomic status, and may relate to a high burden of staphylococcal skin disease in Aboriginal and Torres Strait Islander peoples.²⁴

Children

Despite elevated risk in children, compliance with paediatric sepsis recommendations is often worse than for adults. In Queensland, 47% of adults and 30% of children were treated for septic shock within one hour, while target time frames for sepsis without shock were achieved in 63.3% of adults and 40% of children.^{27,28} Similar results were seen in a study in New York state.^{29,30} However, the goals were different for each cohort, with the target time frame being one hour for children and three hours for adults.

Older people

The number of sepsis cases and incidence rate in adults increases with age.²³

Older people presenting to the emergency department with sepsis are more unwell, have higher levels of potentially reversible organ dysfunction and are more likely to die than younger people.³¹

Older sepsis survivors are also at higher risk for post sepsis syndrome, including long-term cognitive impairment and physical problems.³²

Given the higher morbidity, likelihood of increased dependence and mortality associated with sepsis in older adults, it is important to take a shared decision-making approach to ensure that ongoing management is consistent with the individual patient's goals of care.³³

Remote areas

In remote settings, poorer access to care may make timely management of sepsis challenging.

Recognising sepsis

Several tools have been used to enable early identification of sepsis, ranging from tools for sepsis screening and detection, to those predictive of adverse outcomes such as mortality tools focus on identifying clinical deterioration. The evidence regarding the diagnostic accuracy and effectiveness of tools for sepsis detection and risk stratification continues to evolve.

Despite variation in the diagnostic accuracy of individual tools, there is evidence that sepsis improvement programs that incorporate sepsis screening can improve intervention rates and patient outcomes.³ The decision on which tool to use locally should be based on the tool's evidence of utility for identifying sepsis, as well as its ease of implementation and appropriateness for the patient population.

In Australia, the NSQHS Standards require acute services to have systems in place for recognising and responding to clinical deterioration.¹⁷ Tools including standardised observation charts that enable recognition of deterioration can support identification of sepsis, but are not the same as sepsis recognition tools.

A review of tools used to assist in the early identification of sepsis found that no single tool can be applied uniformly for sepsis screening in neonatal, paediatric, maternal and adult populations, or system-wide across pre-hospital, emergency and acute care settings.³⁴ Table 1 compares the tools that were assessed in the review, and the alignment of their parameters with the National Consensus Statement.⁹ Screening and clinical assessment tools, and alerts for detecting clinical risk and deterioration in patients with an infection and/or confirmed sepsis were reviewed. Outcomes assessed included sepsis diagnosis (diagnostic accuracy) and adverse outcomes such as intensive care unit admission and mortality.

In adults, the review supported the use of the lactate-enhanced quick Sequential Organ Failure Assessment scoring system (LqSOFA) and aggregate scoring systems to recognise the deteriorating patient such as National Early Warning Score (NEWS) or Modified Early Warning Score (MEWS), in acute settings.³⁴ Blood lactate measurement increases the sensitivity of scoring systems for the early identification of sepsis.³⁴ The quick Sequential Organ Failure Assessment (qSOFA) tool was not recommended for use in any setting, and the Systemic Inflammatory Response Syndrome (SIRS) criteria rely on a definition of 'severe sepsis', which is no longer used.

It is important to recognise that both sepsis-specific tools and standardised observation charts used to monitor for acute deterioration can help with assessment and escalation. However, the possibility of sepsis and of the presence of infection must be considered for appropriate intervention to occur.^{5,11} If sepsis is suspected, the involvement of a clinician who has experience in recognising and managing sepsis is crucial.

Table 1: Trigger tools and their parameters to support the early identification of sepsis in healthcare settings

Patient group	Tool	Recommended healthcare setting and patient group	Description	Parameters used in the tool							Additional parameters
				Minimum requirements for monitoring vital signs within the National Consensus Statement							
				Resp. rate	SpO ₂	Heart rate	BP	Temp	Consciousness/mentation		
Adults	Lactate-enhanced qSOFA (LqSOFA)	<ul style="list-style-type: none">Screening in adult patients presenting with suspected infection and non-specific symptoms at emergency departmentsNot validated for sepsis identificationNot validated in children	<ul style="list-style-type: none">Improves the performance of qSOFA in identifying patients with suspected sepsis at risk of adverse outcomesSimilar sensitivity, higher specificity than SIRSSerum lactate AND two or more other criteria indicate a positive score	Yes	No	No	Yes (SBP)	No	Yes (GCS)	Serum lactate	
	Quick Sequential Organ Failure Assessment (qSOFA)	Not recommended for screening in any setting	<ul style="list-style-type: none">Less sensitive than LqSOFA or SIRSTwo or more criteria indicate a positive qSOFA score	Yes	No	No	Yes (SBP)	No	Yes (GCS)	None	
	Modified Early Warning Score (MEWS)	<ul style="list-style-type: none">Adults only, not childrenAcute care settingCan be modified for different patient populations or clinical settings	<ul style="list-style-type: none">Slightly better performance than qSOFA or SIRS, but more complex to useAggregate scoring tool (multiple scores combined into a total)	Yes	No	Yes	Yes (SBP)	No	Yes (AVPU)	Low urine output	
	National Early Warning Score (NEWS)	<ul style="list-style-type: none">Adults only, not childrenEmergency department and acute care setting	<ul style="list-style-type: none">High sensitivity for predicting sepsis, sepsis- related mortality and ICU admissionSlightly better performance than qSOFA or SIRS, but more complex to useAggregate scoring tool (multiple scores combined into a total)	Yes	Yes	Yes	Yes (SBP)	Yes	Yes (AVPU)	Oxygen supplementation	
	Systemic Inflammatory Response Syndrome (SIRS)	<ul style="list-style-type: none">No recommended setting identifiedSIRS parameters are used clinically, but rely on the SIRS definition of ‘severe sepsis’, which is no longer used	<ul style="list-style-type: none">Higher sensitivity than qSOFA, similar to LqSOFALow specificityTwo or more parameters for diagnosis	Yes	No	Yes	No	Yes	No	WBC	
Paediatrics	Standardised graphic observation charts for each state and territory	<ul style="list-style-type: none">Identification of a deteriorating child uses age-specific tools and charts to flag abnormalities in vital signs	Australian state-based paediatric sepsis pathways incorporate these observations and parameters	Yes	Yes	Yes	Yes	Yes	Yes (mental state)	Capillary refill time	
	For example: Children’s Early Warning Tool (CEWT)*	<ul style="list-style-type: none">These tools assist in identifying sepsis									

AVPU = alert, verbal, pain, unresponsive; BP= blood pressure; Consciousness/mentation = Level of consciousness and/or change in cognition or behaviour; GCS = Glasgow Coma Scale; ICU = intensive care unit; National Consensus Statement = *National Consensus Statement: Essential elements for recognising and responding to acute physiological deterioration* (3rd ed)³; resp. rate = respiratory rate; SBP = systolic blood pressure; SpO₂ = oxygen saturation; temp = temperature; WBC = white blood cell count. Sensitivity and specificity – preferably tools will have high sensitivity (low rate of false negatives) even at the cost of lower specificity (higher false positive rate).

* Examples include the Children’s Early Warning Tool (CEWT); Paediatric Early Warning Scores (PEWS); Paediatric Acute Recognition and Response Observation Tool (PARROT); Victorian children’s tool for observation and response (ViCTOR); paediatric Remote Early Warning Score (REWS). This is in the absence of evidence to support an alternative sepsis trigger tool in paediatric and neonatal patients.

Notes:

- Studies have not directly compared LqSOFA with NEWS, MEWS or SIRS
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists recommends the use of the obstetrically modified SOFA (om-SOFA) in pregnancy.⁶

Source: Based on the findings of the *Review of Trigger Tools to Support the Early Identification of Sepsis in Healthcare Settings*.³⁴

Sepsis clinical pathways

Increased adherence to sepsis clinical pathways, which include resuscitation and management bundles of care, have been associated with reduced mortality.³⁵ Some state and territory health departments in Australia have developed and maintained sepsis pathways or guidelines, outlining the time-critical management for suspected sepsis. These pathways have demonstrated substantial improvements in care^{27,28,36,37} such as:

- Safer Care Victoria's **'Think sepsis. Act fast' collaboration**, which reduced inpatient sepsis-related mortality by 50% (from 11.4% to 5.8%)³⁶
- New South Wales (NSW) Clinical Excellence Commission's **SEPSIS KILLS program**, which increased the administration of intravenous antimicrobials within 60 minutes of triage from 29.3% in 2009–2011 to 52.2% in 2013³⁷
- Clinical Excellence Queensland's **Queensland Sepsis Program – Could this be sepsis?**, which reduced the need for intensive care unit admissions, without adversely influencing antimicrobial prescribing.^{27,28}

This clinical care standard supports using pathways that have a structured approach to the assessment and recognition of sepsis. It recognises that the existence and appropriate use of a pathway with appropriate governance, education and monitoring of outcomes may be more important than which tool or pathway is used. While pathways are a tool to enable consistent decision-making and care, they do not replace clinical judgement.

The timing and choice of therapeutics, such as antimicrobials, is an important aspect of sepsis pathways. Peer review from a drug and therapeutics committee, a safety and quality committee, a recognising and responding to deteriorating patients committee or equivalent should be included in any locally adapted or developed pathways.

See **Quality statement 2 – Time-critical management** for the essential elements of a sepsis clinical pathway.

Antimicrobial stewardship and sepsis

Antimicrobials should be administered as early as possible to a patient with sepsis, including in emergency departments, inpatient wards and on presentation to non-hospital settings where there is likely to be a delay in accessing acute medical care. When managing sepsis, a delay to the first dose of antimicrobial therapy is associated with increased mortality.^{29,30,38,39}

The criteria for initiating antimicrobials in this clinical care standard align with the international **Surviving Sepsis Campaign Guidelines 2021**, and recommend administration within one hour in the presence of signs of organ dysfunction and a likely or confirmed infection.³

Quality improvement programs aiming to reduce time to first antimicrobials have shown mortality benefits.^{29,30} Nonetheless, a potential unintended consequence of sepsis clinical pathways could be an increase in inappropriate antimicrobial use. The evidence supporting time frames for the administration of antimicrobials has some recognised limitations, including variability in the severity of illness and the definitions for measuring time to antimicrobial administration.⁴⁰ Despite these limitations, the risks of delaying antimicrobials in a patient with sepsis are considered to outweigh the risks of inappropriate initial prescribing. While it is recognised that not all patients with suspected sepsis will achieve the same benefit from urgent antimicrobials (see **Figure 1**), some patients may deteriorate rapidly. Among this cohort of patients, those most likely to benefit from antimicrobials within one hour is not readily identifiable.

The principles of antimicrobial stewardship, including individualised dosing, review of duration and choice of antimicrobial therapy remain integral to both sepsis management and the appropriate use of sepsis pathways.⁴¹ The *Antimicrobial Stewardship Clinical Care Standard* states that sepsis is a condition where antimicrobial therapy can be initiated without a confirmation of infection. However, antimicrobial therapy needs to be regularly reviewed and monitored to ensure ongoing appropriateness.¹⁰

Long-term outcomes in sepsis

Current perspectives of sepsis encompass the acute, time-sensitive, life-threatening illness, as well as a range of chronic, longer-term conditions that increase the risk of mortality up to five years post-discharge.⁴²

‘Post-sepsis syndrome’ has only recently been described as a pathological identity. It is now understood that the sequelae of sepsis persist after symptoms have resolved and may lead to ongoing health challenges.⁴³ Longer-term outcomes can be poor, with adult patients developing an average of one or two new functional limitations after sepsis and 10–40% experiencing new cognitive impairment.⁴⁴ After a sepsis diagnosis, patients are at increased risk of infection compared with matched hospitalised patients.⁴⁵ Post-discharge, adult patients recovering from sepsis have a higher risk of rehospitalisation and death compared with matched controls.⁴⁶

In children, the signs and symptoms vary according to age. Child survivors can experience deterioration in health-related quality of life as a result of the effects of sepsis on their physical, psychosocial and educational functioning. Children and neonates may also experience neurodevelopmental and cognitive impacts.

The long-term effects of sepsis remain poorly understood. There are no national guidelines for the management of post-sepsis syndrome and a limited evidence base for effective treatments or best-practice care after sepsis. However, some services are working to develop novel post-sepsis care models, such as the Queensland Paediatric Sepsis Program, which includes support for families and children post-sepsis.²¹

The Australian Sepsis Network provides support and information for sepsis survivors and their families and carers.

1

Quality statement 1 – Could it be sepsis?

A diagnosis of sepsis is considered in any patient with an acute illness or clinical deterioration that may be due to infection. A clinical support tool that includes assessment of vital signs and lactate is used to help recognise sepsis early and escalate care when required.

Purpose

To improve the recognition and early detection of sepsis in all clinical presentations by using a structured and evidence-based approach to screening and decision-making.

What the quality statement means

■ For patients

Sepsis can affect anyone. However, some people are at greater risk than others, such as:

- Newborns and young children
- Older people
- Aboriginal and Torres Strait Islander peoples
- People with complex health conditions
- People with COVID-19
- People with poor immune systems
- People who are pregnant or have just given birth
- People being treated for cancer with chemotherapy
- People with burns, wounds and injuries
- People who have been previously diagnosed with sepsis.

A clinician will consider the possibility of sepsis for someone who:

- Has an infection or might have one
- Is very sick
- Is getting sicker.

A doctor or nurse will perform physical checks such as taking temperature and blood pressure, doing blood tests and asking questions. This information will help them to quickly identify whether you or your family member could have sepsis.

The signs of sepsis in adults can include:

- Fast breathing or breathlessness
- Fever and chills
- Low body temperature
- Low or no urine output
- Fast heartbeat
- Nausea and vomiting
- Diarrhoea
- Fatigue, confusion or sleepiness
- A lot of pain or 'feeling worse than ever'.

The signs of sepsis in children can include:

- Fast breathing or long pauses in breathing
- Blotchy or discoloured skin
- Skin abnormally cold to touch
- Rash that doesn't fade when pressed
- Infrequent wet nappies or low urine output
- Drowsiness, difficulty waking up or confusion
- Restlessness or floppy limbs
- Vomiting
- Fits or convulsions
- A lot of unexplained pain.

For families, let a doctor or nurse know if you are worried that your child or family member is very sick or getting worse. Your concern is important and should be considered, as you know your child or family member best. It's important for you to ask 'Could it be sepsis?'

For more information, refer to the [National Sepsis Awareness Campaign](#).

For clinicians

Recognising a patient with sepsis can be challenging. Consider sepsis in all patients with acute illness or deterioration who may have an infection.

Importantly, the presentation of sepsis in neonates and children may differ to adults. In children, hypotension is not necessary to diagnose septic shock.⁴⁷ In older people, commonly recognised sepsis signs and symptoms are often absent. Older people are more likely to have relative immunosuppression. The presentation is less likely to include a fever, raised white cell count or raised C-reactive protein. In older people, hypothermia, delirium and falls (in frail people) are more likely.

Clinical support tools are available to help detect sepsis early and enable further assessment and escalation, although these tools do not replace clinical judgement. Identify possible sepsis using a structured approach that is consistent with an appropriate decision support tool for the setting, which has been agreed at the local level. Tools will vary according to the patient age, cultural needs and healthcare setting – no single tool will apply to everyone.

For situations where a decision support tool is not available (for example, for neonatal and maternity patients), early assessment and escalation to a clinician with expertise in recognising and managing sepsis are the priority. State or territory-endorsed age-specific observation charts and monitoring tools for children allow recognition of acute deterioration in children. See [Related resources](#) which includes resources for children.

To determine whether a patient has signs or symptoms of organ dysfunction, take a full set of observations that includes vital signs and other relevant observations appropriate to the patient, including^{7,9,48}:

- Respiratory rate
- Oxygen saturation
- Heart rate
- Systolic blood pressure
- Temperature
- Altered mentation, behaviour change or delirium
- Poor peripheral perfusion, cool peripheries, delayed capillary refill time or mottled skin
- Blood lactate concentration
- In pregnant women, the vital signs of the fetus measured using cardiotocography (CTG).

Where this will not delay urgent care, test venous blood lactate levels. Capillary lactates may be useful in children. An increased lactate level may indicate a protective or a maladaptive response to shock and can play an important role in screening. Include blood lactate routinely in decision-making for an acutely deteriorating patient or for suspected sepsis. Although assessment of lactate levels is not sufficient for the purpose of diagnosis, it is a relatively simple investigation that can help recognise sepsis, while failure to recognise sepsis can lead to patient harm and potentially death.⁴⁹ Point-of-care lactate testing is especially useful in rural or remote settings, including Aboriginal medical services, where critical care cannot be readily accessed.

Maintain a high index of suspicion for patients presenting with risk factors for sepsis or groups who experience higher rates of sepsis, including Aboriginal and Torres Strait Islander peoples. Red flags include:

- Family or carer concern. It is well demonstrated that a high level of family or carer concern warrants investigation⁵⁰⁻⁵² – for example, concern for an older relative or for a child or an infant
- If a patient is presenting for acute medical care for a subsequent time, and has signs or symptoms of infection, or has an indwelling medical device
- Clinical deterioration despite treatment
- Recent history of surgery or burns
- Patients undergoing cancer treatment or who may be immunosuppressed.

In primary and community healthcare settings, be aware of the risk factors for sepsis as a time-critical emergency. If you suspect a patient has sepsis, refer the patient to an appropriate hospital as soon as possible.



EQUITY AND CULTURAL SAFETY FOR CLINICIANS

Consider personal biases, cultural and social factors and communication barriers when assessing the patient.

Explain to the patient and their family, carer or support person, in a culturally safe way, the concerns you may have about a possible diagnosis of sepsis, and the rationale for tests and interventions.

Interpret a patient's presentation and vital signs in a way that is free from racism, bias and assumption. This includes when treating patients who are presenting from a custodial setting.

Recognise that a history of trauma may affect behaviour and provide trauma-aware and healing-informed care.

■ For healthcare services

For acute facilities, ensure that the implementation of protocols to support early recognition and escalation of care for sepsis is consistent with the NSQHS Standards, including actions from:

- Preventing and Controlling Infections Standard (Actions 3.18 and 3.19)
- Recognising and Responding to Acute Deterioration Standard (Actions 8.01 and 8.06)
- Comprehensive Care Standard (Action 5.10).

For primary and community healthcare services, including general practice, ensure that the implementation of triage protocols is consistent with the Primary and Community Healthcare Standards, including the 'Recognising and responding to serious deterioration and minimising harm' criterion from the Clinical Safety Standard.

Formalise and implement locally agreed clinical support tools to assist in structured screening and assessment for sepsis. The tools should include:

- Initial assessment and monitoring of vital signs
- Lactate measurement (in acute facilities)
- Other relevant observations and the clinical criteria for further evaluation to enable prompt recognition of sepsis.

In most cases, the relevant state or territory health department will have developed these for widespread implementation.

Implement protocols for using these tools, which should include:

- Regular education for all relevant staff in using the protocols and the criteria for sepsis recognition and management
- Universal and direct access to the clinical decision support tools
- Routine review of the use of the tools and measures, and evaluation of their effectiveness for detecting sepsis.

Support clinicians with accessing regular and ongoing training in sepsis recognition and management.

Provide access to point-of-care lactate testing and guidelines for its appropriate use in settings where sepsis may occur.

Consider embedding alert systems in electronic healthcare records, if system capacity allows.



EQUITY AND CULTURAL SAFETY FOR HEALTHCARE SERVICES

Ensure that systems are in place so that patients can be assessed and cared for in a way that is free from racism, bias and assumption.

Educate and train staff in cultural awareness and cultural safety regularly.

Systemic barriers to presentation and taking a medical history may include language differences, communication issues, being from a vulnerable community (such as people with disabilities or people without housing) and a lack of cultural safety.

The incidence of sepsis is higher in Aboriginal and Torres Strait Islander peoples than in the non-Indigenous population. Address barriers to healthcare access by using Aboriginal and Torres Strait Islander health workers and liaison officers and translators who can help patients to navigate the service and their treatment options.

Related resources

Some states and territories have developed specific clinical decision support tools for use in the acute setting, including:

- [Sepsis tools \(adult and paediatric\)](#), from the NSW Clinical Excellence Commission's SEPSIS KILLS program
- [Sepsis program tools for adult sepsis including education packages](#) from Clinical Excellence Queensland
- Paediatric sepsis program including [pathways and tools](#) and [education and family support information](#) from Children's Health Queensland.

In palliative and end-of-life care, management may differ and should align with the:

- [National Consensus Statement: Essential elements for safe and high-quality end-of-life care](#)
- [National Consensus Statement: Essential elements for safe and high-quality paediatric end-of-life care.](#)

Other resources include:

- Trigger tools and observation charts for recognising and responding to acute deterioration, sepsis-specific tools (for example, LqSOFA and SIRS) and early warning tools (for example, NEWS and MEWS). For more information see Table 1 or the [Review of Trigger Tools to Support the Early Identification of Sepsis in Healthcare Settings](#)³⁴
- [Implementing an Adult Sepsis Pathway toolkit](#) from Safer Care Victoria
- [SOMANZ Guidelines for the Investigation and Management of Sepsis in Pregnancy](#)
- [NICE sepsis guidance](#) including adult and paediatric risk stratification tools⁵
- [Sepsis 6 information](#) from the UK Sepsis Trust
- [Fact sheets and videos about lactate from the NSW SEPSIS KILLS program](#)⁴⁹
- [Lactate in the deteriorating patient and sepsis – Clinician fact sheet.](#)

Indicator for local monitoring

Indicator 1a: Proportion of patients with suspected sepsis who had blood lactate levels taken as a part of screening for sepsis.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755592

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.

2

Quality statement 2 – Time-critical management

Sepsis is a time-critical medical emergency. Assessment and treatment of a patient with suspected sepsis are started urgently according to a locally approved clinical pathway, and their response to treatment is monitored and reviewed. The patient is reviewed by a clinician experienced in recognising and managing sepsis, and is escalated to a higher level of care when required.

Purpose

To ensure that appropriate clinical pathways are used effectively to ensure timely recognition and treatment of suspected sepsis, and escalation of assessment and management; and to enable consultation with, or transfer of care to, another healthcare setting from where the patient is located, if required.

What the quality statement means

■ For patients

Sepsis is a condition that needs urgent treatment. It can cause serious complications or death. If you are not in a hospital and think you or a family member could have sepsis, contact your general practitioner or call 000 for an ambulance.

If there is a chance you have sepsis, medical care should be started immediately and should follow a recognised clinical pathway, which guides doctors and nurses to ensure that you get the important care you need. Fast treatment can prevent complications from sepsis.

Your doctors and nurses will assess your symptoms, take your medical history, and perform tests and procedures to help with your diagnosis and treatment. Your doctor or nurse will make observations, such as measuring your blood pressure, pulse and the number of breaths you take per minute. They will order blood tests, and give medicines and fluids urgently.

Your doctors and nurses will continue to check how you are responding to treatment. They may consult with other doctors and nurses who are experienced in managing sepsis. If you are already in hospital, you may be transferred to a different ward or to the intensive care unit. If you are not in a hospital or are in a small hospital, you may need to be transferred somewhere that can provide the expertise and high-level care that are needed to manage sepsis.

If you or a person you care for is seriously ill and you are worried that the condition is getting worse, it is very important to tell a doctor or nurse in the facility where you are being treated.

If you are still concerned that help is not coming urgently, it is your right to seek help from someone else in the hospital. Hospitals must have systems in place so that you can immediately seek help from someone else, if you feel your concerns are not being addressed or taken seriously. Tell the staff that you think you or your family member has sepsis or ask 'Could it be sepsis?', that you want to escalate care, and ask what systems are in place for you or your carer to raise your concerns. Most hospitals will have a telephone number to call. You may have to say that you want to speak to somebody higher up (the next line of management).

Concerns for your wellbeing, or that of the person you are caring for, are valid, and all information is important. These services are available to help you to communicate your concerns so that they can be acted on. Recognising a worsening condition can prevent serious illness or death.

■ For clinicians

When sepsis is part of a differential diagnosis, expediting assessment and treatment is essential. Use a locally approved clinical pathway, appropriate to the patient's age and clinical setting, to guide assessment, diagnosis and appropriate treatments within the recommended time frame. Follow all the required steps. Key actions and further information about the requirements for locally approved sepsis clinical pathways are in [Box 1](#).

Any clinician can activate the sepsis clinical pathway at an early stage. The principles of recognise, resuscitate, refer and review should guide care. Recognise the signs of clinically significant organ dysfunction and, if sepsis is suspected, escalate immediately and activate the rapid response system. In smaller hospitals that do not always have doctors on site, follow relevant local procedures related to care of the deteriorating patient for the healthcare setting. On-call clinicians will need to be called into the hospital.

Ensure that the patient is promptly assessed by a clinician with expertise in recognising and managing sepsis or patient deterioration (for example, an emergency physician, infectious diseases physician, intensivist, paediatrician, advance practice nurse, nurse practitioner, paramedic, rural generalist or general medicine staff specialist). This assessment should occur directly (person to person). A clinician with expertise in sepsis should be involved in the care of the patient during the first 48 hours and beyond. Patients can deteriorate despite initial treatment, and the response to interventions should be monitored until the desired outcome is reached. Document the patient's diagnosis, whether it is sepsis or an alternative diagnosis in line with [Quality statement 6 – Transitions of care and clinical communication](#).

In smaller hospitals or remote healthcare services, the pathway should prioritise consultation with retrieval services when a higher level or acuity of care may be needed. The patient needs to be assessed by a clinician with expertise in managing sepsis. Seek review or advice from a more experienced clinician if required. In settings where 24-hour critical care or infectious diseases support is unavailable, this review may occur by telehealth or in consultation with clinicians in an acute facility who have expertise in managing sepsis.

Consider transfer time needed if transferring the patient within the hospital or to another hospital. Consultation may be needed to decide which care or interventions should be delivered before or during transfer. Resuscitation may need to start and antimicrobials administered before transfer, including by the ambulance service if necessary. Notify the receiving facility of the suspected sepsis diagnosis and any sepsis screening or protocols that have been initiated.

If diagnosing or managing sepsis is outside your scope of clinical practice, the most appropriate action may be the immediate referral of the patient to hospital.

Do not alter calling criteria for acutely unwell patients, unless in line with local policy (such as for patients with a chronic condition such as chronic obstructive pulmonary disease or patients who may have type 2 respiratory failure and are at risk with high oxygen levels). In a patient being treated for probable or suspected sepsis, parameters for calling criteria should reflect the need for early and timely intervention, and be determined by a clinician with expertise in managing sepsis.

Talk with the patient and their carer about their goals of care. Ensure that treatment decisions align with the person's needs and preferences, and are determined through shared decision making. Refer to advance care plans if available, including whether the patient is willing to be transferred to another facility if this is being considered.

Listen to all patient and family concerns, including those that may indicate deterioration or sepsis, and respond directly and promptly to these concerns. In paediatrics, parental concerns and observations are key to initiating an escalation of care.

Patients, families, carers and other support people should be able to escalate concerns and seek emergency assistance when they are concerned about deterioration.⁹ Cases of sepsis have been missed due to clinicians not listening to the concerns of patients, their families or carers.⁵³ It has also been demonstrated that response systems for patients and families to trigger an alert for help are not misused, with a systematic review finding that all calls included were deemed to be appropriate.⁵⁰

Be aware that the NSQHS Recognising and Responding to Acute Deterioration Standard requires healthcare services to:

- Have processes for the direct escalation of care by patients, carers or families (Action 8.07)
- Support the wish to escalate care.

Box 1: Essential elements of a sepsis clinical pathway

Clinical pathways are designed to assist clinical judgement using the best available clinical evidence. Sepsis clinical pathways should include:

- Criteria to support clinical decision-making to enable recognition of sepsis, including
 - a clinical decision support tool with parameter thresholds for vital signs and blood lactate measurement
 - guidance on recognising clinically significant organ dysfunction that warrants starting time-sensitive interventions, such as fluid resuscitation, administration of appropriate antimicrobials, and timely surgical source control when required
- Triggers and time frames for escalation of care. This includes
 - methods to communicate with a clinician who has experience in recognising and managing sepsis
 - processes to enable escalation to an appropriate clinician with experience in sepsis 24 hours a day, seven days a week
 - escalation to higher levels of care
 - the ability for emergency transfer of patients to or from other healthcare services
 - a way for the appropriate investigations and treatments to start before transfer
- Guidance on the availability of appropriate interventions and timing of their use, including diagnostics, medicines and treatments
- Guidance on the appropriate use of
 - fluids and other time-critical treatment(s)
 - blood culture(s)
 - antimicrobial therapy
 - source control for the suspected infection
- Time frames for clinical review, which includes appropriate monitoring and review of investigation results, the patient's response to treatment and the antimicrobial plan
- Ways to consider the patient's age, cultural needs, goals of care and advance care plans in decision-making
- Consideration of alternative diagnoses.



EQUITY AND CULTURAL SAFETY FOR CLINICIANS

Ask about and record the patient's Aboriginal and Torres Strait Islander identity with respect to evaluating risk (based on incidence), providing care which meets the needs of the person, and supporting transitions of care. For example, offer for an Aboriginal or Torres Strait Islander health worker or liaison officer to be involved. Ask about and document the patient's preferred language and facilitate access to interpreters when required.

For healthcare services

In any setting where sepsis may occur, ensure that there is a policy or guideline for sepsis care that reflects the time-critical nature of treatment and provides parameters for evidence-based practice.

Ensure that there is a locally approved sepsis clinical pathway appropriate to the healthcare setting that includes the essential elements in Box 1. In most cases, this will be a pathway that has been developed at the statewide or territory-wide level.

Policies, procedures and guidelines should support the delivery of care described in the locally approved sepsis clinical pathway regarding:

- Ensuring there are multidisciplinary clinical governance processes, including oversight by a governing body. These processes should include endorsement, implementation and ongoing use of the locally approved sepsis pathway, to assess adherence to the pathway and evaluate its outcomes. Outcomes may include its effectiveness and the impact on antimicrobial prescribing
- Providing timely access to the appropriate diagnostics, medicines and treatments that are required for implementation of the pathway
- Ensuring that all clinicians initiating and following the pathway complete competency-based training on how to use it
- Ensuring that processes and resource allocation allow timely escalation to an appropriate clinician with experience in recognising and managing sepsis available 24 hours a day, seven days a week. This may require
 - local action to identify the most relevant clinician(s) to contact, either through telehealth or in consultation with clinicians in an acute facility
 - clear communication on the roles and responsibilities of team members when escalating care
- Supporting multidisciplinary collaboration and teamwork between critical care, medical, surgical and paediatric teams to optimise the timely management of patients
- Supporting and evaluating appropriate documentation within the pathway, and that this documentation forms part of the healthcare record. This includes documentation of the final diagnosis (whether it is sepsis or an alternative diagnosis) and considers the patient's age and cultural needs
- Outlining the roles and responsibilities of lead clinicians
- Evaluating adherence to the pathway and its performance, including assessment of family and patient experience.

Ensure that rapid response systems are in place for deteriorating patients, including those with suspected sepsis. Ensure that patients have access to a clinician with expertise in sepsis who should be involved in their care during the first 48 hours and beyond.

Ensure that care escalation processes are accessible via both patient and clinician-led pathways, and that these are communicated to clinicians and monitored to ensure that they are adhered to. Ensure that information for consumers on how to escalate care is widely available, so that patients, carers and families can easily escalate care independently from clinicians.

Tertiary hospitals and referral centres should know which hospitals refer to their service, and be able to respond promptly when being consulted about, or accepting transfers of, patients with suspected or probable sepsis. Ensure that systems are in place so that healthcare services, including primary care services, can communicate in an organised way that reflects the patient's care needs and escalation time frames.

Ensure that policies and protocols allow for appropriate time-critical treatment to start before or during transfer if transport to an acute care hospital is expected to take more than 60 minutes (such as in remote areas).

Related resources

- [National Consensus Statement: Essential elements for recognising and responding to acute physiological deterioration⁹](#)
- [NSQHS Recognising and Responding to Acute Deterioration Standard](#)
- National Safety and Quality Primary and Community Healthcare Standards (Recognising and responding to serious deterioration and minimising harm criterion)
- NSW [Clinical Emergency Response Systems \(CERS\)](#)
- Examples of observation charts with parameters for identifying deterioration and escalating care include
 - NSW – [Standard Adult General Observation Chart](#) and Between the Flags
 - Victoria – [Victorian Children's Tool for Observation and Response](#)
 - Queensland – Queensland Adult Deterioration Detection System (QADDs) in adults and Children's Early Warning Tool (CEWT) in children
 - Australian Capital Territory (ACT) – [COMPASS](#)
- Examples of family and carer escalation pathways include
 - NSW – [REACH](#)
 - ACT – Call And Respond Early (CARE)
 - Queensland – [Ryan's Rule](#)
 - Victoria – [HEAR Me](#)
 - Western Australia – [Aishwarya's CARE Call](#)
- NICE – Risk stratification tools for adults, children and young people.⁵

Indicators for local monitoring

Indicator 2a: Evidence of a locally approved sepsis clinical pathway. The pathway should include:

- Criteria to support clinical decision-making to enable recognition of sepsis
- Triggers and time frames for escalation to a clinician experienced in recognising and managing sepsis, higher levels of care or other healthcare services
- Guidance on appropriate interventions and the timing of their use
- Time frames for clinical review, including review of investigation results, response to treatment and the antimicrobial plan
- Prompts to consider the patient's age, cultural needs, goals of care and advance care plans
- Prompts to consider alternative diagnoses.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755595

Indicator 2b: Evidence of local arrangements that support the delivery of care described in the local sepsis clinical pathway. The local arrangements should specify the:

- Multidisciplinary clinical governance processes for the pathway
- Process to ensure access to the appropriate diagnostics, medicines and treatments required to implement the pathway
- Process to enable escalation to a clinician experienced in recognising and managing sepsis 24 hours a day, seven days a week
- Documentation requirements within the pathway and the patient's healthcare record, including documentation of their final diagnosis
- Process to ensure that clinicians using the pathway complete competency-based training on its use
- Process to assess adherence to the pathway and its performance, including assessment of patient experience.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755597

Indicator 2c: Proportion of patients with sepsis who were treated according to the locally approved sepsis clinical pathway.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755642

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR links.

3

Quality statement 3 – Management of antimicrobial therapy

A patient with suspected sepsis has blood cultures taken immediately, ensuring that this does not delay the administration of appropriate antimicrobial therapy. When signs of infection-related organ dysfunction are present, appropriate antimicrobials are started within 60 minutes. Antimicrobial therapy is managed in line with the *Antimicrobial Stewardship Clinical Care Standard*, including a review within 48 hours from the first dose.

Purpose

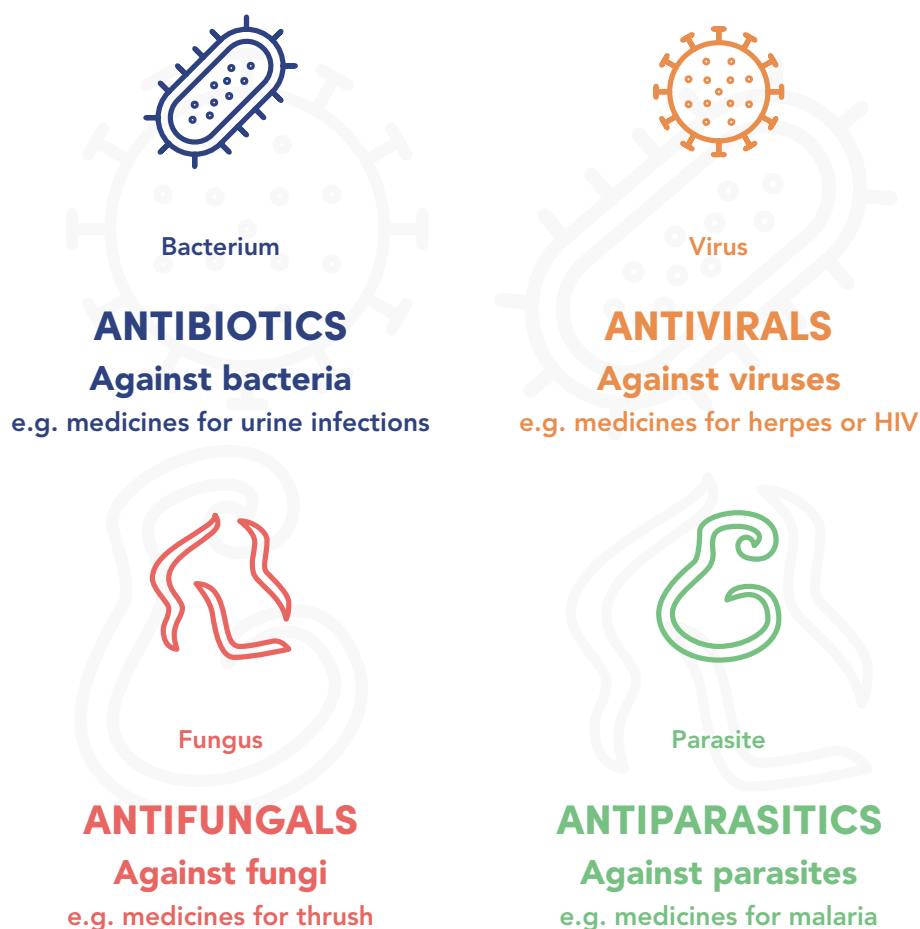
To ensure access to timely and appropriate antimicrobial treatment for patients with sepsis.

What the quality statement means

■ For patients

If you or a family member has sepsis, it is important that the infection is treated quickly. This will usually mean giving an antimicrobial medicine, usually an antibiotic (see [Figure 2](#)). When you are very sick, these medicines must be started within 60 minutes from when sepsis is identified.

Figure 2: What are antimicrobials?



Source: [Australian Commission on Safety and Quality in Health Care](#).

You will need tests (usually a blood test called a blood culture) that will help your doctors make sure they are using the best medicine for you. Usually, the tests will be done and then you will start treatment while you are waiting for the results. However, this is not always possible and the tests may be taken later.

The first antimicrobials you receive will treat a wide range of infections because sepsis is an emergency. In the first few days, more information may become available about your infection and the antimicrobials may be changed to target your infection more specifically. For example, your antimicrobial may be changed to a different antimicrobial, or from an injection to a tablet, especially within the first two days. It is important to use the best medicines for your infection, and your doctor will decide this based on your needs. You may need more tests, such as blood and urine tests, to:

- Find out if the treatment is working
- Make sure you are receiving the most effective antimicrobial.

■ For clinicians

Obtain blood cultures for microbiological testing for patients with suspected sepsis before administering antimicrobials, where this does not delay urgent treatment.⁷ For adults, this includes two sets of blood cultures, and for children one set of blood cultures. Other relevant microbiological cultures should also be collected, ideally before administering antimicrobials. In the community setting, if this is outside the scope of clinical practice, refer the patient to hospital immediately.

Do not wait for blood test results if someone is clearly unwell. Urgent antimicrobial therapy should start as soon as possible. Do not withhold antimicrobials while awaiting the results of microbiological (for example, blood, urine, pus, sputum microscopy or culture) or other tests.

Start antimicrobials within 60 minutes of recognising infection-related organ dysfunction, and as soon as possible if shock is present. In an adult patient without shock, where there is uncertainty about the likelihood of an infectious cause, rapidly investigate alternative diagnoses. Escalate care to a clinician with experience in recognising and managing sepsis, if required. If concern for infection persists after appropriate evaluation, start antimicrobial therapy as soon as possible, no later than three hours from initial clinical review (**Figure 1**). Closely monitor all patients who may have sepsis and ensure their care is escalated in the event of deterioration, such as evolving or worsening signs of organ dysfunction (refer to [Quality statement 2 – Time-critical management](#)).

Arrange consultation with an infectious diseases physician or clinical microbiologist if there is uncertainty about the appropriate antimicrobial therapy or local sepsis guidelines, ideally when initiating therapy, or else on review. As patients with sepsis often require higher doses of antimicrobials, the patient's other medicines should be reviewed by an experienced clinician, preferably a pharmacist, to avoid interactions and enable the safe and appropriate administration of antimicrobial therapy.

When prescribing antimicrobials for Aboriginal or Torres Strait Islander peoples, consider the higher prevalence of multidrug-resistant organisms. Refer to the Central Australian Rural Practitioners Association guidelines⁵⁴, or other guidelines based on local resistance data, where appropriate.⁵⁵

If the patient with sepsis is being transferred to another healthcare service or unit, take blood cultures and start the first dose of antimicrobials before transfer.¹

Prompt communication of critical test results is essential to inform timely antimicrobial treatment decisions. If microbiological tests are ordered, review the results as soon as available and at least daily while concerns about sepsis persist. Use this information to consider whether review, adjustment or cessation of antimicrobials and other therapy is needed. Investigate and manage the source of infection, which may require surgery. Multidisciplinary input may be needed to choose appropriate investigations for the suspected infection.

Laboratories or microbiologists should call positive blood culture results through to the doctor caring for the patient as soon as these results are available, and document the discussion.

■ For healthcare services

Ensure that patients with suspected sepsis will be assigned an adequate triage category when presenting to a hospital emergency department to allow timely antimicrobial administration.

Ensure that systems and resources are in place for the appropriate collection of blood cultures. Ensure prompt communication of critical test results, including positive blood cultures, from laboratories directly to the clinician to inform timely antimicrobial treatment decisions. Establish clear referral procedures to allow access to infectious diseases and microbiology consultation. Embedding alert systems and flags in local clinical information systems may be a viable option.

Ensure that systems are in place to allow prompt administration of appropriate antimicrobials for the treatment of sepsis, in any location where people with sepsis may present for acute treatment. Review antimicrobial formularies regularly to ensure they support best-practice prescribing. Ensure 24-hour access to antimicrobials that are required urgently as part of the sepsis clinical pathway.

Evaluate antimicrobial use and prescribing in line with the NSQHS Preventing and Controlling Infections Standard Actions 3.18 and 3.19. Ensure that effective antimicrobial stewardship systems are in place to ensure appropriate antimicrobial treatment and that service provision aligns with the *Antimicrobial Stewardship Clinical Care Standard* (Box 2).¹⁰

Support multidisciplinary collaboration between critical care, medical and surgical teams to optimise the timely management of patients.

Box 2: Align sepsis management with the *Antimicrobial Stewardship Clinical Care Standard*

Sepsis management should align with the *Antimicrobial Stewardship Clinical Care Standard*, including:

- Prescribing in line with the current *Therapeutic Guidelines* or evidence-based, locally endorsed guidelines and the antimicrobial formulary. Ensure that the empiric and ongoing antimicrobial treatment are appropriate for the suspected site and nature of the infection, local antimicrobial resistance patterns, and age and weight of the patient.⁵² This includes the antimicrobial agent, dose, route and frequency of administration
- Appropriate sampling for microbiology testing and review, including testing for the suspected source of the infection and prompt review to ensure that the results inform ongoing antimicrobial therapy
- Documenting the antimicrobial and the intended duration or review plan in the patient's healthcare record
- Reviewing therapy 24–48 hours after the first dose, including reviewing the need for ongoing antimicrobial use, microbial spectrum of activity, dose, frequency and route of administration, and adjusting these accordingly.

Related resources

- [*Antimicrobial Stewardship Clinical Care Standard*](#)¹⁰
- Central Australian Rural Practitioners Association's [*CARPA Standard Treatment Manual*](#).⁵⁴

Indicators for local monitoring

Indicator 3a: Proportion of patients with sepsis who had blood cultures taken before starting antimicrobials.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755644

Indicator 3b: Proportion of patients with signs and symptoms of infection-related organ dysfunction who started their first dose of an empirical antimicrobial within 60 minutes of recognition.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755646

Measurement of this indicator requires time of recognition and treatment to be collected. If these data are not currently available, consider using alternative indicators. Examples are provided in the METEOR link above.

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR links. See [Appendix B](#) for other related indicators.

4

Quality statement 4 – Multidisciplinary coordination of care in hospital

Sepsis is a complex, multisystem disease requiring a multidisciplinary approach to treatment. A patient with sepsis has their treatment in hospital coordinated by a clinician with expertise in managing patients with sepsis.

Purpose

To improve patient outcomes by ensuring planned and coordinated care for all patients with sepsis, including in the inpatient and rehabilitation setting.

What the quality statement means

■ For patients

Treatment for sepsis can involve many different clinicians, at different times and in different settings. You, and your family or carer, are a vital part of your healthcare team. While in hospital, a lead doctor or nurse with expertise in managing sepsis will organise the care that is provided. Other members of your healthcare team may include surgeons, different specialist doctors, nurses, pharmacists, physiotherapists, psychologists, social workers, occupational therapists and dietitians.

■ For clinicians

Care of the patient with sepsis in acute settings requires multidisciplinary input. A clinician who is experienced in sepsis management should coordinate care, with the patient and family at the centre of the multidisciplinary team. Team members may include a range of clinicians, including medical, nursing and allied health professionals. The coordinating clinician should ensure that the patient, carer or family participate in decision-making whenever possible, and that the patient voice is being respected, heard and responded to. The coordinating clinician should attend regular multidisciplinary meetings to discuss and optimise the care of patients with sepsis.

The coordinating clinician may be different depending on the healthcare setting, and may change at different stages of treatment. The coordinating clinician needs to access and review accurate and timely information on the patient's clinical status and care requirements. Some patients may have complex care needs and already have care coordination in place, such as those with chronic health conditions. In such cases, consult with the patient's general practitioner where appropriate to avoid duplication of care. Ensure that person-centred care remains the focus.

When planning a hospital discharge, communication and coordination between the acute service and the patient's community healthcare team is required. The patient's general practitioner will usually be the coordinator of care following discharge (see [Quality statement 6 – Transitions of care and clinical communication](#) and [Quality statement 7 – Care after hospital and survivorship](#)).

■ For healthcare services

Provide a policy and system framework that nominates and enables a central clinician to coordinate multidisciplinary care in collaboration with the patient with sepsis, or their family or carer, in line with the [NSQHS Comprehensive Care Standard Action 5.05](#). Define the roles and responsibilities of each clinician working in the team.

Optimise communication between services, and ensure that there are processes in place to enable routine, structured collaboration between all clinicians. Support multidisciplinary meetings where there is an opportunity for all stakeholders to discuss care, as this provides a basis for shared care. This may mean providing logistical support for meetings or communication systems that allow multiple clinicians to communicate in a timely and effective way.

A different coordinator may be nominated for long-term management in the community; this is usually the patient's general practitioner. Ensure that adequate communication processes are in place (see [Quality statement 6 – Transitions of care and clinical communication](#) and [Quality statement 7 – Care after hospital and survivorship](#)).



EQUITY AND CULTURAL SAFETY FOR HEALTHCARE SERVICES

Ensure that clinicians have received cultural safety training, and that Aboriginal and Torres Strait Islander health workers and liaison officers, translators, social workers and others who can assist in the social aspects of care are involved whenever cultural differences may be a barrier to the patient's experience of care.

Indicator for local monitoring

Indicator 4a: Evidence of local arrangements to support multidisciplinary care coordination and clinical communication for patients with sepsis. The local arrangements should specify the:

- Process to nominate a clinician experienced in sepsis management to coordinate the multidisciplinary care for each patient with sepsis while they are in hospital
- Roles and responsibilities of each clinician working in the multidisciplinary team, including their responsibilities at transitions of care
- Information that must be documented in the patient's comprehensive care plan and healthcare records
- Process to ensure that the patient's care plan is shared with the patient, their carer and family where appropriate, and the relevant clinical team(s) or general practitioner at each transition of care
- Services available to support effective, culturally safe communication and transitions of care
- Process to assess adherence to the local arrangements.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755652

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.

5

Quality statement 5 – Patient and carer education and information

A patient, their family or carer is informed about sepsis from the time that it is suspected in a way that they can understand. Information includes the expected treatment and potential health effects of sepsis. Information is provided verbally and in writing.

Purpose

To ensure that patients receive clear and timely information about sepsis, its treatment and potential outcomes throughout their care.

What the quality statement means

■ For patients

A member of your healthcare team will provide you with information and education about the diagnosis of sepsis and the type of treatment you or your family member is receiving. The information should be given to you in a way that you understand, especially if there are decisions to be made about your treatment.

The information you need will change over time and as you see different types of clinicians. It is important to ask questions and let the clinician know if you have any concerns about your treatment, including about any changes that have been made. Healthcare services must have systems in place so that you can immediately seek help from someone else, if you feel your concerns are not being addressed or taken seriously. Tell the staff that you want to escalate care and ask what systems are in place for you or your carer to raise your concerns.

It is important to understand the signs and symptoms of your condition getting worse. Sepsis can affect multiple systems in your body, and effects can be different for everyone. You should be given information about what to do if you are concerned about your condition worsening and who to contact.

When you leave hospital, information about how to manage your condition and what to expect should also be provided to you.

■ For clinicians

Support patients from when sepsis is first suspected, by providing verbal information early. Written information should be provided while in hospital, appropriate to the stage of care. Provide information about:

- Their suspected or probable sepsis diagnosis
- Treatment options and the benefits and risks associated with them, including the rationale behind the treatment
- The signs of deterioration and what patients should do if they deteriorate
- Systems to escalate care when the patient, their family or carer is concerned
- What they can do to best support their health after discharge, including actions they should take if they are concerned about a possible further episode of sepsis
- Prescribed medicines, including how to use them correctly and their potential adverse effects
- Any precautions they need to take to limit the spread of infection to others
- Arrangements for follow-up care
- The nature and length of sepsis recovery, and the resources and support available to assist this recovery.

Empower patients and carers to meaningfully contribute to shared decision making.

Attend sepsis education sessions provided by your healthcare service or professional organisation.



EQUITY AND CULTURAL SAFETY FOR CLINICIANS

Ensure that the information and education you provide is culturally appropriate and culturally safe.

Use an interpreter if needed, and provide written information in the patient's preferred language in a way that they can understand.

Attend cultural safety training provided by your healthcare service or professional organisation.

For Aboriginal and Torres Strait Islander peoples, apply understandings of family and involve Aboriginal and Torres Strait Islander health workers and liaison officers. Consider home environments and lived realities of patients, including services accessible to them, particularly for those who may be accessing care away from their homes.

■ For healthcare services

Ensure that there are resources and processes in place to provide patients, their families and carers with information on:

- Sepsis diagnosis, treatment and management
- Accessing services
- Health care that may be required after discharge.

Ensure that clinicians have access to interpreters and written information in multiple languages, based on patient demographics. Resources should be co-designed with consumers, including culturally and linguistically diverse communities.

Ensure that clinicians undergo sepsis education training.



EQUITY AND CULTURAL SAFETY FOR HEALTHCARE SERVICES

Ensure that clinicians undergo cultural safety training.

Related resources

- Patient escalation pathways listed in [Quality statement 2 – Time-critical management](#)
- Support services such as the [Australian Sepsis Network](#) provide information and assistance to people who have survived sepsis and their families at all stages of treatment and recovery
- **Support services are offered in Queensland** to families both during the acute phase (peer mentorship program and educational video series) and longer term.

Indicator for local monitoring

Indicator 5a: Proportion of patients with sepsis who reported they were kept informed as much as they wanted about their treatment and care.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755654

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.



6

Quality statement 6 – Transitions of care and clinical communication

A patient with known or suspected sepsis has a documented clinical handover at transitions of care. This includes the provisional sepsis diagnosis, comorbidities, and the management plan for medicines and medical conditions. This information is provided to the patient, their family and carer as appropriate.

Purpose

To ensure an accurate record of care and that the patient's individualised management plan is accessible to all clinicians, and patients and carers, so that care is coordinated.

What the quality statement means

■ For patients

If you or a family member are diagnosed with sepsis, many doctors, nurses and other clinicians might need to provide you with care for a long time. It is important that the clinicians involved in your care share information with each other about your condition and treatment. You should be involved in this process, along with any support people you choose, such as a family member or social worker.

This communication should occur when there is a change of shift of those caring for you, when you are moved within one hospital or moved to another hospital, and when you are discharged from hospital. Important information that you should receive includes:

- Your diagnosis of sepsis and any underlying conditions
- Concerns or risks that the clinicians may note about your care
- Your medical history
- The plan for antimicrobials and other medicines
- Your care requirements and recovery goals
- Who to contact if you have concerns about your condition and ongoing treatment; if there is a central person coordinating your care, this should be documented
- The healthcare team you are receiving care from; this can range from medical specialists to allied health professionals, such as a physiotherapist or dietitian
- Who the healthcare service should contact, such as a carer, family member or substitute decision-maker, if you cannot make a decision yourself.

This information should be provided in a way that you understand. It should also be easily accessible and culturally safe.

For clinicians

Patients with suspected or probable sepsis should have a clearly documented handover and care plan at all transitions of care to ensure timely and appropriate treatment.

Where the transition involves transfer to a higher level of care for further assessment and treatment of suspected sepsis (such as from primary care or a smaller hospital to a larger hospital), the initial plan may be limited to relevant history, examinations, initial management and reason for transfer. The documentation should identify the patient's carer where relevant.

If the patient is managed in an acute hospital, they should have a comprehensive care plan that clearly describes all the required components of their care, including their physical and psychosocial needs, their antimicrobial management plan, and any infection prevention and control precautions that are needed. Ensure that this information is provided at clinical handover between shifts to the patient, their carers and family (as appropriate), and the clinicians and therapists who will be involved in their care.

Ensure that all members of the multidisciplinary team who are required for the patient's care have access to, and contribute appropriately to, documentation about the patient's care, and that ongoing access to documentation is available.

When a transition involves transfer to a lower level of care or discharge from hospital, ensure that comprehensive communication and documentation are provided alongside the transfer. If transferring the patient from an acute or referring hospital, ensure that the receiving hospital will have the appropriate resources to manage the patient, including access to appropriate antimicrobials, and are aware of any infection prevention and control requirements.



EQUITY AND CULTURAL SAFETY FOR CLINICIANS

Ensure that documentation is culturally safe, factual and free from bias, assumptions or racism. Consider cultural needs and their impact on the comprehensive care plan.

For Aboriginal and Torres Strait Islander peoples, involve an Aboriginal community controlled health service, Aboriginal medical service, or an Aboriginal or Torres Strait Islander health worker or liaison officer, when this is the patient's preference. Information provided by a trusted source may be crucial to treatment adherence and patient safety.

Provide access to an interpreter if required.

People who have completed acute treatment away from their community or Country may need structured support to ensure that they safely return to their place of residence. Arrange appropriate services, support and contacts for patients who have been transferred from remote locations.

■ For healthcare services

Ensure that systems and supports are in place for clinicians to develop a comprehensive care plan with patients and that this is used during transitions of care. This documentation includes:

- The suspected or probable sepsis diagnosis
- The management plan, including infection control requirements
- Any underlying or additional diagnoses and medicines
- The contact details of the care coordinator.

Documentation needs to be accessible to all relevant clinicians and the patient, and should be captured in clinical information systems. Define the roles and responsibilities of clinicians involved in transitions of care, including a responsibility to complete and communicate discharge summaries. Where local clinical information systems allow, upload information into the patient's My Health Record.

If the patient is transferred from a larger to a smaller hospital, the referring hospital should ensure that the smaller hospital has appropriate resources to manage the patient, including access to appropriate antimicrobials.

Ensure that clinicians maintain accurate and complete healthcare records (including discharge summaries and death certificates), consistent with the NSQHS Communicating for Safety Standard Actions 6.07, 6.08 and 6.11, and Primary and Community Healthcare Standards Action 1.11. Evaluate the effectiveness of the clinical communication process, in line with the NSQHS Communicating for Safety Standard Action 6.02.

Ensure that clinicians communicate infection control precautions to patients and their carers to ensure consistency with the NSQHS Preventing and Controlling Infections Standard Actions 3.07 and 3.09, or the Primary and Community Healthcare Clinical Safety Standard 'Communicating for safety' criterion.



EQUITY AND CULTURAL SAFETY FOR HEALTHCARE SERVICES

Ensure that services are in place to enable effective communication with patients, taking into account their culture and location of care.

Aboriginal and Torres Strait Islander people who have completed acute treatment away from their community or Country may need structured support to ensure that they safely return to their place of residence. Establish appropriate networks – for example, with local Aboriginal medical services. Ensure adequate supports for patients who have been transferred from remote locations.

Indicators for local monitoring

See [Indicator 4a](#).

Indicator 6a: Proportion of patients with sepsis who had a diagnosis of sepsis recorded in their discharge summary.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755656

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.

7

Quality statement 7 – Care after hospital and survivorship

A patient who has survived sepsis receives individualised follow-up care to optimise functional outcomes, minimise recurrence, reduce rehospitalisation and manage the ongoing health effects of sepsis. This requires structured, holistic and coordinated post-discharge care and education that involves the patient, their family, carer, general practitioner and other clinicians.

Support and information are provided to the family or carer of a patient who has died from sepsis.

Purpose

To support ongoing individualised care after discharge for patients who had sepsis.
To ensure that appropriate support and care are provided to bereaved families and carers.

What the quality statement means

■ For patients

A member of your healthcare team in hospital will provide you with information and education about the diagnosis of sepsis and the type of treatment you will need after you leave hospital. Sepsis can affect many organs in your body and affects everyone differently. You or your family member may need a range of follow-up treatments, depending on your situation.

When you leave hospital, your regular doctor (general practitioner, or GP) will play an important role in managing your health. Information about your care in hospital and your ongoing care needs should be provided to your GP so they can help manage your care. For Aboriginal or Torres Strait Islander people, your GP care may be provided through your Aboriginal medical service.

Sepsis can have long-lasting effects. It is important that you are given information about these, as well as how to manage your health in the future. It takes time to recover from hospitalisation and treatment for sepsis, and you may not be able to go back to your usual activities for some time. Some people's lives change significantly because of sepsis.

Your immune system can take time to recover, and this can mean you are more likely to get infections. It is important to talk with your doctor, nurse or pharmacist about medicines you need to keep taking, and what you need to do to prevent infection, including staying up to date with vaccinations and maintaining good hygiene.

Sepsis can affect your ability to function socially, emotionally and cognitively (how well you can think and understand) while you are recovering, even after you leave hospital. It is important to discuss any issues with your doctor and seek help for symptoms such as fatigue, anxiety and trouble concentrating.

If your relative or someone close to you has died from sepsis, the healthcare service should give you information about what happened. They should also answer any questions you have about the events and treatment provided to the person leading up to their death.

■ For clinicians

After sepsis treatment in hospital, consider the patient's ongoing care needs and how these will be managed.

When discharging a patient from hospital, communicate the ongoing care plan to the patient's general practitioner (GP). Ensure that the patient is aware of any follow-up appointments required and communicate these to the patient's GP as part of their discharge documentation. Arrange access to appropriate services, support and contacts for patients who have been transferred from remote locations.

In general practice or other primary or community healthcare services, be aware of the specific needs for ongoing care of a patient who has had sepsis, and coordinate care between specialist medical, nursing, rehabilitation and allied healthcare professionals.

Discuss the diagnosis of sepsis with the patient and family member or carer, and how this may affect their health and wellbeing in the short and long term. Tailor your advice to the individual patient, and discuss treatment and rehabilitation goals together with the patient.

Discuss the potential effects on cognitive, social and emotional wellbeing that may occur after diagnosis and treatment for sepsis, including fatigue and anxiety. Provide information on the support available for people who have survived sepsis. Refer Aboriginal and Torres Strait Islander people to culturally safe services.

Ensure that the patient confirms any medicines they have been prescribed, including antimicrobials, and has access to these medicines. Ensure continuation of antimicrobial therapy when required, on discharge from hospital and at regular healthcare appointments. Communicate to the patient, in a way they understand, about:

- How to take their antimicrobials
- The duration of treatment
- Why this is important
- Where they can access antimicrobials.

In addition, the patient should be informed about, and understand the need for infection prevention and control, the impact of their medical history on their risk for future infection, and the importance of keeping their immunisations up to date.

If there has been a sepsis-related death during the episode of care, ensure that this is recorded in the incident management system. Ensure that the extended family (where appropriate) and carers have the opportunity to discuss the care that was given and what happened. Address any questions that arise using the principles of open disclosure, and direct them to patient support organisations such as the **Australian Sepsis Network** and bereavement organisations for ongoing support. Ensure that the support is accessible and appropriate for culturally and linguistically diverse communities.

If there has been a neonatal sepsis-related death, refer to the [Stillbirth Clinical Care Standard](#) for further information about bereavement care and support.



EQUITY AND CULTURAL SAFETY FOR CLINICIANS

Involve the patient's preferred Aboriginal medical service, an Aboriginal or Torres Strait Islander health worker or liaison officer when appropriate and with the patient's agreement. Information provided by a trusted source may be crucial to treatment adherence and patient safety.

Develop relationships with culturally safe service providers to support referrals for Aboriginal and Torres Strait Islander peoples.

For healthcare services

Ensure that processes are in place to support patients, families and carers after hospital discharge for acute management of sepsis. This can include rehabilitation, access to emotional and social wellbeing supports, and allied health care. Consider using a centralised computer system to coordinate the patient's post-acute care.

Before discharge, a patient should be referred to their general practitioner (GP), who can coordinate their care after hospital discharge. The GP and any other clinician to whom the patient is referred should be provided with:

- A comprehensive plan on follow-up requirements to optimise functional outcomes, minimise recurrence, reduce rehospitalisation and manage the ongoing health effects of sepsis
- Details of the hospital clinician with expertise in managing sepsis or care coordinator to support the transition of care and facilitate communication between the community and hospital care providers
- Education materials about sepsis and patient care needs.

Discharge summaries should include all the relevant information as described in [Quality statement 6 – Transitions of care and clinical communication](#) and the NSQHS Communicating for Safety Standard Action 6.11.

Healthcare services discharging patients on antimicrobial therapy should have systems in place to ensure that the patient can continue antimicrobial therapy post-discharge and address potential barriers to access, including cost. In some cases, antimicrobials may need to be supplied to the patient.

Review the death of any patient due to sepsis in the absence of a pre-existing life-limiting condition, or where death was unexpected. Offer the family an explanation, information and discussion in line with the principles of open disclosure. This may involve a follow-up appointment at a later date and referral to bereavement care and support services as required. Ensure that all sepsis deaths are documented in a risk management system, reviewed, and reported to and monitored by a governing body (such as a patient safety or deteriorating patient committee, or similar) to identify opportunities for continued improvement.



EQUITY AND CULTURAL SAFETY FOR HEALTHCARE SERVICES

Ensure that services are in place to support patients after discharge, such as access to Aboriginal medical services, Aboriginal and Torres Strait Islander health workers and liaison officers.

Ensure that information provided to patients is provided in a way that the patient understands and is culturally safe.

Related resources

- Resources from the [Australian Sepsis Network](#) provide support and information on life after a sepsis diagnosis
- Resources for families affected by paediatric sepsis are available from the [Queensland Paediatric Sepsis Project](#) in both the acute phase and long term
- Primary Health Network Health Pathways may provide relevant local information for healthcare services.

Indicator for local monitoring

Indicator 7a: Proportion of patients with sepsis who had an unplanned readmission to any hospital within 30 days of discharge.

METEOR link: meteor.aihw.gov.au/content/index.phtml/itemId/755658

More information about the indicators and the definitions needed to collect and calculate indicator data can be found at the above METEOR link.

Appendix A:

General principles of care

This clinical care standard aligns with key principles that are the foundation for achieving safe, high-quality care. When implementing this clinical care standard, health services should ensure that quality improvement activities support these principles.

Person-centred care

Person-centred care is health care that is respectful of, and responsive to, the preferences, needs and values of patients and consumers.^{16,56}

Clinical care standards support the key principles of person-centred care, namely:

- Treating patients with dignity and respect
- Encouraging patient participation in decision-making (see 'Shared decision making')
- Communicating with patients about their clinical condition and treatment options
- Providing patients with information in a format that they understand and encouraging them to participate in decision-making.

Shared decision making

Shared decision making involves discussion and collaboration between a consumer and their clinician. It is about bringing together the consumer's values, goals and preferences with the best available evidence about benefits, risks and uncertainties of treatment, to reach the most appropriate healthcare decisions for that person.

Involving support people

The [Australian Charter of Healthcare Rights](#) (second edition)⁵⁷ describes the rights that consumers, or someone they care for, can expect when receiving health care.

Patients have the right to involve the people they want in planning and making decisions about their health care and treatment. This could be a family member, carer, friend or consumer advocate such as a social worker. Many health services employ different types of liaison officers, such as Aboriginal and Torres Strait Islander health workers and liaison officers, who can provide patients with advocacy, information and support.

This clinical care standard refers to carers and family members. Statements that refer to clinicians' discussions with patients and their family or carer should be understood to include support people if this is what the patient wishes, or a substitute decision-maker if the person is unable to provide their consent.

Informed consent

Informed consent is a person's voluntary and informed decision about a healthcare treatment, procedure or intervention that is made with adequate knowledge and understanding of the benefits and risks to them, and the alternative options available. The Commission has developed an [informed consent fact sheet for clinicians](#).

Action 2.04 in the National Safety and Quality Health Service (NSQHS) Standards requires healthcare services to ensure that informed consent processes comply with legislation and best practice.¹⁶

Cultural safety for Aboriginal and Torres Strait Islander peoples

Person-centred care includes care that is respectful of cultural diversity and individual needs. Social or cultural factors that may increase the possibility of adverse experiences and outcomes, for example, barriers in accessing and engaging with healthcare services.

The [*Cultural Respect Framework 2016–2026*](#)⁵⁹ commits the Australian Government and all states and territories to embed cultural respect principles into their health systems. The Framework should be used to develop, implement and evaluate cultural awareness and cultural competency strategies.

Systemic racism is a serious concern for Aboriginal and Torres Strait Islander peoples. Cultural safety is about overcoming the cultural power imbalances of places, people and policies to contribute to improvements in the health of Aboriginal and Torres Strait Islander peoples.⁵⁸

Health consumers are safest when clinicians have considered power relations, cultural differences and patients' rights. Part of this process requires clinicians to review their own beliefs and attitudes.⁶⁰

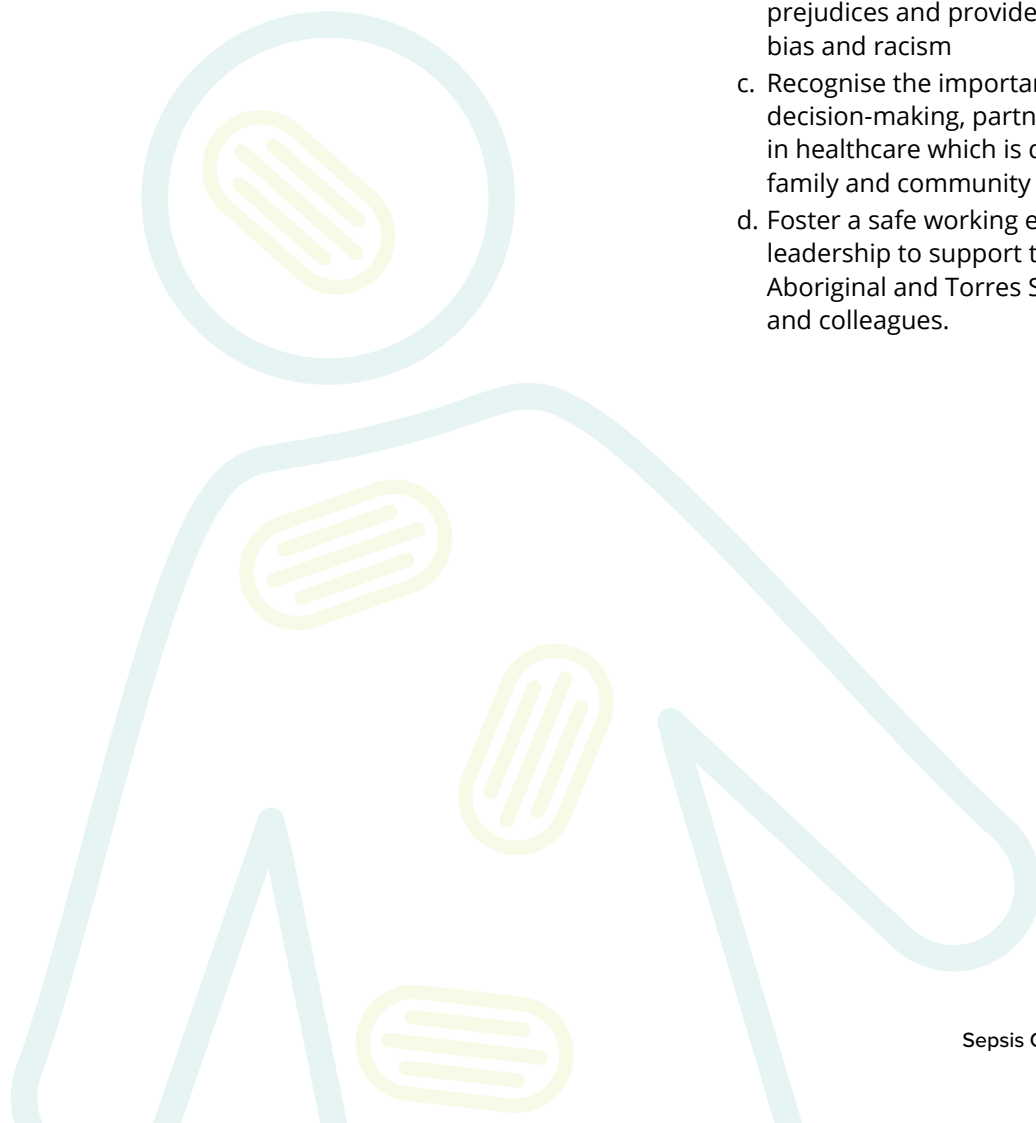
The NSQHS Standards *User Guide for Aboriginal and Torres Strait Islander Health*⁶⁰ describes six specific actions that aim to help health services improve the quality of care and health outcomes for Aboriginal and Torres Strait Islander peoples.

The Primary and Community Healthcare Standards have similar criteria and outline that the healthcare service identifies patient populations using its service at greater risk of avoidable differences in health outcomes, including Aboriginal and Torres Strait Islander peoples.¹⁷

The National Registration and Accreditation Scheme aims to ensure consistency for cultural safety in health professions codes of conduct nationally.¹⁵

It states that in order to ensure culturally safe and respectful practice, health practitioners must:

- a. Acknowledge colonisation and systemic racism, social, cultural, behavioural and economic factors which impact individual and community health
- b. Acknowledge and address individual racism, their own biases, assumptions, stereotypes and prejudices and provide care that is holistic, free of bias and racism
- c. Recognise the importance of self-determined decision-making, partnership and collaboration in healthcare which is driven by the individual, family and community
- d. Foster a safe working environment through leadership to support the rights and dignity of Aboriginal and Torres Strait Islander people and colleagues.



Appendix B:

Indicators to support local monitoring

The Commission has developed a set of indicators to support clinicians and health services in monitoring how well they implement the care described in this clinical care standard. The indicators are a tool to support local quality improvement activities. No benchmarks are set for any indicator.

The process to develop the indicators specified in this document comprised:

- A review of existing Australian and international indicators
- Prioritisation, review and refinement of the indicators with the topic working group.

Most of the data underlying these indicators are collected from local sources, through prospective data collection or retrospective chart audits, or review of policies and protocols.

Exploration of the indicator data should include disaggregation of data by relevant clinical and demographic factors. This should include disaggregation by Aboriginal and Torres Strait Islander status and separate analysis of adult and paediatric patients.

In this document, the indicator titles and hyperlinks to the specifications are included with the relevant quality statement under the heading 'Indicator(s) for local monitoring'. Full specifications for the *Sepsis Clinical Care Standard* indicators can be found in the Metadata Online Registry (METEOR) meteor.aihw.gov.au/content/index.phtml/itemId/755589.

METEOR is Australia's web-based repository for national metadata standards for the health, community services and housing assistance sectors. Hosted by the Australian Institute of Health and Welfare, METEOR provides users with online access to a wide range of nationally endorsed data and indicator definitions.

Other Commission-endorsed indicators to support local monitoring

The Commission recommends other quality improvement indicators listed below to support monitoring.

***Antimicrobial Stewardship Clinical Care Standard* indicators**

The *Antimicrobial Stewardship Clinical Care Standard* has a number of relevant indicators such as:

- Use of guidelines (indicator 2a)
 - the proportion of antimicrobial prescriptions that are in line with the current *Therapeutic Guidelines* or evidence-based, locally endorsed guidelines
- Documentation (indicators 6a and 6b)
 - the proportion of prescriptions for which the indication for prescribing the antimicrobial is documented
 - the proportion of prescriptions for which the duration, stop date or review date for the antimicrobial is documented
- Review of therapy (indicator 7a)
 - the proportion of prescriptions for which an antimicrobial review and updated treatment decision is documented within 48 hours from the first prescription.

Hospital-acquired complications

A hospital-acquired complication (HAC) refers to a complication for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring.⁶¹ The HACs list comprises 16 agreed, high-priority complications for which clinicians, managers and others can work together to address and improve patient care. Each of the HACs has a number of associated diagnoses and codes, which allow further exploration of the data. Data for HACs are derived from the admitted patient data collection.

The Commission has developed several resources for clinicians, managers and executives, governing bodies and others that can help them put in place strategies that reduce the occurrence of HACs. These are available on the Commission's website.

Appendix C:

Measuring and monitoring patient experiences

Systematic, routine monitoring of patients' experiences of, and outcomes from, health care is an important way to ensure that the patient's perspective drives service improvements and person-centred care. This is the case in all health services.

Patient-reported experience measures

While this clinical care standard does not include indicators specific to measuring patient experiences, the Commission strongly encourages health services to use the Australian Hospital Patient Experience Question Set (AHPEQS). AHPEQS is a 12-question generic patient experience survey that has been validated in both day-only and admitted hospital patients across many clinical settings in adults. The [instrument is available for download](#) to both private and public sector health services.

The Commission strongly encourages health services to measure patient experience as a part of ongoing quality improvement.

Adults

In the adult inpatient setting, the Commission recommends the use of the AHPEQS.

Children

The Commission, in collaboration with Perth Children's Hospital, has adapted and validated the AHPEQS for parents and carers of children who received inpatient care. The AHPEQS-Parent reflects the unique experience of parents and facilitates consistent monitoring and improvement of patient experience in a paediatric inpatient setting.

Further information on these surveys is available on the [Commission's website](#).

Patient-reported outcome measures

In Australia, patient-reported outcome measures (PROMs) are an emerging method of assessing the quality of health care. The Commission is leading a national work program to support the consistent and routine use of PROMs to drive quality improvement.

PROMs are standardised, validated questionnaires that patients complete, without any input from healthcare providers. They are often administered at least twice to an individual patient – at baseline and again after an intervention, or at regular intervals during a chronic illness. The information contributed by patients filling out PROMs questionnaires can be used to support and monitor the movement of health systems towards person-centred, value-based health care.

PROMs are being used to evaluate healthcare effectiveness at different levels of the health system, from the individual level to service and system levels. There is growing interest across Australia and internationally in the routine interrogation of patient-reported outcome information for evaluation and decision-making activities at levels of the health system beyond the clinical consultation.

Appendix D:

Integration with national safety and quality standards

The National Safety and Quality Health Service (NSQHS) Standards and the National Safety and Quality Primary and Community Healthcare (Primary and Community Healthcare) Standards aim to protect the public from harm and improve the quality of health service provision. They provide a quality assurance mechanism that tests whether relevant systems are in place to ensure that expected standards of safety and quality are met.

Within both sets of standards, the Clinical Governance Standard and the Partnering with Consumers Standard set the overarching requirements, or clinical governance framework, for the effective implementation of the other standards.

National Safety and Quality Health Service Standards

Implementation of the *Sepsis Clinical Care Standard* aligns with specific actions in the NSQHS Standards. In addition, some of the care described in this clinical care standard will help healthcare services to meet requirements of the NSQHS Standards.¹⁶

Relevant actions

Under the Clinical Governance Standard, healthcare services are expected to:

- Support clinicians to use the best available evidence, including clinical care standards (Action 1.27b)
- Monitor and respond to unwarranted clinical variation (Action 1.28).

Specific actions within the NSQHS Standards that are relevant to this clinical care standard include:

- Preventing and Controlling Infections Standard
 - Standard and transmission-based precautions: Actions 3.06, 3.07, 3.08 and 3.09
 - Antimicrobial stewardship: Actions 3.18 and 3.19
- Comprehensive Care Standard
 - Collaboration and teamwork: Action 5.05
 - Screening of risk: Action 5.10
- Communicating for Safety Standard
 - Applying quality improvement systems: Action 6.02
 - Clinical handover: Actions 6.07 and 6.08
 - Communicating critical information: Actions 6.09 and 6.10
 - Documentation of information: Action 6.11
- Recognising and Responding to Acute Deterioration Standard
 - Integrating clinical governance: Action 8.01
 - Escalating care: Actions 8.06, 8.07, 8.08 and 8.09
 - Responding to deterioration: Actions 8.10 and 8.11.

Healthcare services are expected to implement the NSQHS Standards in a way that is appropriate to the clinical services provided and their associated risks.

For more information about:

- Assessment to the NSQHS Standards and applicability of clinical care standards, visit the [NSQHS Standards webpage](#)
- Monitoring and responding to unwarranted clinical variation, see the [NSQHS Standards User Guide for the Review of Clinical Variation in Health Care](#)
- Other relevant actions in the [NSQHS Standards](#).

National Safety and Quality Primary and Community Healthcare Standards

The Primary and Community Healthcare Standards are aligned to the NSQHS Standards.¹⁷

Relevant actions

Under the Clinical Governance Standard, healthcare services are expected to:

- Support healthcare providers to use best-practice guidelines and available evidence, including clinical care standards (such as the *Sepsis Clinical Care Standard*), where relevant: Action 1.20b
- Monitor and respond to unwarranted clinical variation: Action 1.21.

Specific actions that are relevant to this clinical care standard include:

- Antimicrobial stewardship: Action 3.14
- Recognising serious deterioration or distress and escalating care: Action 3.31.

Application of the Primary and Community Healthcare Standards is voluntary. They should only be applied where services are involved in the direct care of patients. The way in which an individual primary and/or community healthcare service implements the Primary and Community Healthcare Standards will be dependent on the size of the healthcare service, as well as the risks and complexity associated with the services it delivers.

More information about the Primary and Community Healthcare Standards is available at the [Primary and Community Health Service Standards webpage](#).

Glossary

Term	Definition
Aboriginal community controlled health organisations	Primary healthcare services initiated and operated by the local Aboriginal community to deliver holistic comprehensive and culturally appropriate health care to the community that controls it, through a locally elected Board of Management.
Aboriginal medical services	Healthcare services funded principally to provide services to Aboriginal and Torres Strait Islander people. These may or may not be community controlled. See Aboriginal community controlled health organisations
assessment	A clinician's evaluation of a disease or condition based on the patient's subjective report of the symptoms and course of the illness or condition, and the clinician's objective findings. These findings include data obtained through laboratory tests, physical examination and medical history; and information reported by carers, family members and other members of the healthcare team. ¹⁶
calling criteria	Vital signs and other observation thresholds (criteria) that flag a deteriorating patient. If a patient falls below a certain threshold, it triggers a rapid response by the clinician.
carer	A person who provides personal care, support and assistance to another individual who needs it because they have a disability, medical condition (including a terminal or chronic illness) or mental illness, or they are frail or aged. An individual is not a carer merely because they are a spouse, de facto partner, parent, child, other relative or guardian of an individual, or live with an individual who requires care. A person is not considered a carer if they are paid, a volunteer for an organisation, or caring as part of a training or education program. ⁶² For Aboriginal and Torres Strait Islander people, there may be a collective approach to carer responsibilities. Confirming who is responsible for different aspects of care is important for ensuring that carer engagement is effective. ¹⁶ See substitute decision-maker
clinical communication	The exchange of information about a person's care that occurs between treating clinicians, patients, carers and families, and other members of a multidisciplinary team. Communication can be through several different channels, including face to face, telephone, written notes or other documentation, and electronic. ¹⁶
clinical pathway	A complex intervention that supports clinician decision-making and organisation of care processes for a well-defined group of patients during a well-defined period.
clinical practice guidelines	Statements that include recommendations intended to optimise patient care and are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options. ⁶³

Term	Definition
clinical support tool	<p>Tools that can help clinicians and consumers draw on available evidence when making clinical decisions. The tools have several formats. Some are explicitly designed to enable shared decision making (for example, decision aids). Others provide some of the information needed for some components of the shared decision-making process (for example, risk calculators, evidence summaries), or provide ways of initiating and structuring conversations about health decisions (for example, communication frameworks, question prompt lists).⁶⁴</p> <p>For sepsis, examples include lactate-enhanced quick Sequential Organ Failure Assessment (LqSOFA), National Early Warning Score (NEWS), Modified Early Warning Score (MEWS), and Systemic Inflammatory Response Syndrome (SIRS).³⁴</p> <p>See Recognising sepsis</p>
clinician	A trained health professional, including registered and non-registered practitioners, who provides direct clinical care to patients. Clinicians may provide care within a healthcare service as an employee, a contractor or a credentialed healthcare provider, or under other working arrangements. They include nurses, midwives, medical practitioners, allied health professionals, paramedics and other professions who provide health care, and students who provide health care under supervision.
comorbidities	Coexisting diseases (other than that being studied or treated) in an individual.
consumer	A person who has used, or may potentially use, health services, or is a carer for a patient using health services. A healthcare consumer may also act as a consumer representative to provide a consumer perspective, contribute consumer experiences, advocate for the interests of current and potential consumers, and take part in decision-making processes. ⁶⁵
healthcare record	Includes a record of the patient's medical history, treatment notes, observations, correspondence, investigations, test results, photographs, prescription records and medication charts for an episode of care. ¹⁶
healthcare service	A health organisation that is responsible for implementing clinical governance, administration and financial management of service unit(s) providing health care at the direction of the governing body. A service unit involves a group of clinicians and others working in a systematic way to deliver health care to patients. It can be in any location or setting, including pharmacies, clinics, outpatient facilities, hospitals, patients' homes, community settings, practices and clinicians' rooms. ¹⁶
hospital	A licensed facility providing healthcare services to patients for short periods of acute illness, injury or recovery. ¹⁶
infection	The invasion and reproduction of pathogenic (disease-causing) organisms inside the body. This may cause tissue injury and disease. ⁶⁶

Term	Definition
informed consent	A process of communication between a patient and clinician about options for treatment, care processes or potential outcomes. This communication results in the patient's authorisation or agreement to undergo a specific intervention or participate in planned care. The communication should ensure that the patient has an understanding of the care they will receive, all the available options and the expected outcomes, including success rates and side effects for each option. ⁶⁷
lactate	A test or non-specific marker of illness severity in acutely ill patients.
medical record	See healthcare record
medicine	A chemical substance given with the intention of preventing, diagnosing, curing, controlling or alleviating disease, or otherwise improving the physical or mental wellbeing of people. These include prescription, non-prescription, investigational, clinical trial and complementary medicines, regardless of how they are administered. ⁶⁸
multidisciplinary	<p>A team that includes clinicians from multiple disciplines who work together to deliver comprehensive care, and deals with as many of the patient's health and other needs as possible.</p> <p>The team may operate under one organisational umbrella or may be from several organisations brought together as a unique team. As a patient's condition changes, the composition of the team may change to reflect the changing clinical and psychosocial needs of the patient.</p> <p>Multidisciplinary care includes interdisciplinary care, where a discipline is a branch of knowledge within the health system.¹⁶</p>
observations	See set of observations
organ dysfunction	<p>Physiological imbalances in individual organs, including the lungs, heart and brain. This can be determined by conducting a set of patient observations.</p> <p>See set of observations</p>
patient	A person who is receiving care in a healthcare service. ¹⁶
point-of-care	The time and location of an interaction between a patient and a clinician for the purpose of delivering care. ¹⁶
prescribing guidelines	Guidelines that describe evidence-based best prescribing practice, and provide a standard against which prescribing behaviour can be compared. ⁵⁵
primary health care	Primary health care is generally the first point of contact for individuals, families and communities with health services, and brings health care as close as possible to where people live and work. It comprises a large and essential part of the healthcare system. Primary health care includes health promotion, prevention, early intervention, treatment of acute conditions, management of chronic conditions and end-of-life care. ¹⁷

Term	Definition
probable sepsis	<p>Patients with 'definite', 'probable' or 'likely' sepsis are defined as having a suspected infection with signs and symptoms of organ dysfunction.¹¹</p> <p>See Terminology and infection</p>
procedure	<p>The set of instructions to make policies and protocols operational, which are specific to an organisation.¹⁶</p>
quality improvement	<p>The combined efforts of the workforce and others – including consumers, patients and their families, researchers, planners and educators – to make changes that will lead to better patient outcomes (health), better system performance (care) and better professional development.⁶⁹ Quality improvement activities may be sequential, intermittent or continuous.¹⁶</p>
risk factor	<p>A characteristic, condition or behaviour that increases the possibility of disease, injury or loss of wellbeing.</p>
sepsis	<p>Life-threatening organ dysfunction caused by a dysregulated host response to infection.¹¹ There is a continuum of severity. This standard does not differentiate between patients with and without 'septic shock' to avoid delays in patients receiving time-critical management, which may be caused while awaiting the assessment of 'septic shock'.</p> <p>See organ dysfunction and Terminology</p>
set of observations	<p>Measurement and assessment of vital signs such as respiratory rate, blood pressure, heart rate, temperature, mental state, capillary refill time and oxygen saturation.</p> <p>See vital sign</p>
shared decision making	<p>A consultation process in which a clinician and a patient jointly participate in making a health decision, having discussed the options and their benefits and harms, and having considered the patient's values, preferences and circumstances.⁶⁴</p>
side effects	<p>Unintended effects from a medicine, treatment or device.</p>
substitute decision-maker	<p>A person appointed or identified by law to make health, medical, residential and other personal (but not financial or legal) decisions on behalf of a person whose decision-making capacity is impaired. A substitute decision-maker may be appointed by the person, appointed on behalf of the person or identified as the default decision-maker by legislation, which varies from state to state.⁷⁰</p> <p>See carer</p>

Term	Definition
system	<p>The resources, policies, processes and procedures that are organised, integrated, regulated and administered to accomplish a stated goal. A system:</p> <ul style="list-style-type: none"> ■ Brings together risk management, governance and operational processes and procedures, including education, training and orientation ■ Deploys an active implementation plan; feedback mechanisms include agreed protocols and guidelines, decision support tools and other resource materials ■ Uses several incentives and sanctions to influence behaviour and encourage compliance with policy, protocol, regulation and procedures. <p>The workforce is both a resource in the system and involved in all elements of systems development, implementation, monitoring, improvement and evaluation.¹⁶</p>
transitions of care	<p>Situations when all or part of a person's care is transferred between healthcare locations or settings, clinicians or levels of care within the same location, as the person's conditions and care needs change.¹⁶</p>
vital sign	<p>Any objective parameter used to assess basic life functions – for example, blood pressure, pulse, respiratory rate and body temperature.⁷¹</p>



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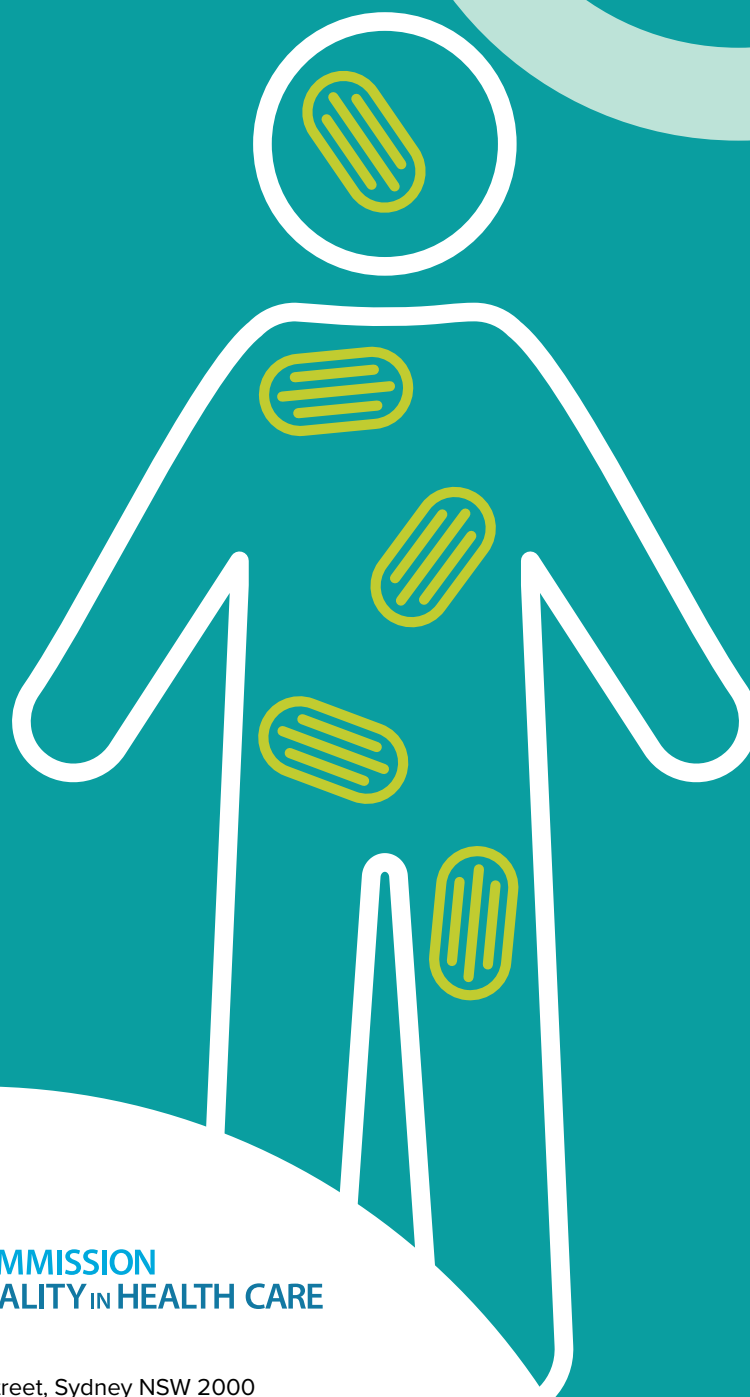
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The above artwork used throughout the document was designed by Ms Lani Balzan, a Wiradjuri artist from the south coast of New South Wales. The central symbol is the logo for the clinical care standards program which began at the Commission in 2013. The outer four circles of the artwork represent the four priority areas of patient safety; partnering with patients, consumers and communities; quality, cost and value; and supporting health professionals to provide care that is informed, supported and organised to deliver safe and high-quality health care. The outer dots represent growth, healing, change and improvement.



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