Consultation Draft:
Clinical Care Standard for Antimicrobial Stewardship

December 2013
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Clinical Care Standard for Antimicrobial Stewardship

Clinical Care Standard for Antimicrobial Stewardship

1. A patient requiring urgent treatment for a life-threatening condition due to a suspected bacterial infection receives antibiotic treatment without waiting for the results of microbiology tests.

2. A patient has samples taken for microbiology testing when clinically indicated and before starting antibiotic treatment whenever possible.

3. A patient with a suspected bacterial infection, and/or their carer, receives information on their condition and treatment options, which may or may not include antibiotic therapy.

4. When a patient is prescribed antibiotics, this is done in accordance with the current version of Therapeutic Guidelines: Antibiotic or guidelines based on local bacterial susceptibility patterns, taking into consideration a patient’s allergies and other clinical factors.

5. If antibiotics are prescribed, information about when, how and for how long to take them, as well as potential side effects and a review plan, is discussed with a patient and/or their carer.

6. When a patient is prescribed antibiotics, the clinical reason, drug name, dose, route of administration, intended duration and review plan is documented in their medical record.

7. A patient who is treated with a broad-spectrum antibiotic is reviewed and, where indicated, switched to treatment with a narrow-spectrum antibiotic as indicated by microbiology test results.

8. If microbiology tests are conducted to identify a suspected bacterial infection, the responsible clinician reviews these results in a timely manner (usually within 48–72 hours) and the patient’s antibiotic therapy is modified accordingly.

9. A patient receives surgical prophylactic antibiotics in accordance with the latest version of Therapeutic Guidelines: Antibiotic or guidelines based on local bacterial susceptibility patterns.

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The evidence base for these statements is provided in supporting documentation that can be accessed at www.safetyandquality.gov.au.
Introduction

The Australian Commission on Safety and Quality in Health Care (the Commission) is seeking feedback on two draft Clinical Care Standards.

The development of the Clinical Care Standards is a priority area in the Commission’s 2013-16 work plan as approved by Health Ministers in 2013.

The Clinical Care Standards will support:

- people who are receiving care by assisting them to know what to expect from their healthcare system
- healthcare professionals to make decisions about appropriate care
- healthcare services to examine the performance of their organisation and make improvements in the care they provide.

A Clinical Care Standard provides a small number of quality statements that describe the clinical care that a patient should be offered for a specific clinical condition.

In collaboration with consumers, clinicians, researchers and health organisations, the Commission has developed draft Clinical Care Standards for Antimicrobial Stewardship and Acute Coronary Syndrome. These comprise the first draft Clinical Care Standards, which are now available as part of a public consultation process.

The draft Clinical Care Standard for Antimicrobial Stewardship was developed by a Topic Working Group\(^b\) who used the most up-to-date clinical guidelines and standards, their professional expertise and consideration of issues that were important to consumers. In addition, existing national, state and territory work was also taken into account to ensure the draft Clinical Care Standard for Antimicrobial Stewardship complements existing efforts supporting the delivery of appropriate care, such as national initiatives in the area of Healthcare Associated Infection.

It is intended that this draft Clinical Care Standard for Antimicrobial Stewardship and the associated consultation process (refer to page 14) will provide an opportunity to elicit feedback which will allow the Commission to refine and finalise this Clinical Care Standard, and identify mechanisms that can support its practical application.

\(^b\) see Appendix 1 for the Topic Working Group membership list
Context

Antibiotics are used as the main defence against bacterial infections and have been called the miracle drugs of modern medicine. Bacteria can develop resistance to specific antibiotics, meaning that the antibiotic is no longer effective against those bacteria. Although antibiotic resistance is a natural feature of bacterial evolution, the inappropriate use of antibiotics has increased the development of antibiotic-resistant bacteria, not only in hospitals and healthcare facilities but also in the community.

Inappropriate use of antibiotics includes:

- prescribing antibiotics unnecessarily, such as for viral infections (colds) or for prolonged prophylaxis
- prescribing broad-spectrum antibiotics (e.g. third-generation cephalosporins, such as ceftriaxone, or carbapenems like meropenem) when narrow-spectrum antibiotics (e.g. benzylpenicillin) are effective
- prescribing inadequate treatment (e.g. the antibiotic is ineffective or the dose is too low, leading to treatment failure)
- prescribing too high a dose, causing adverse effects
- continuing treatment for longer than necessary by not time limiting or cancelling courses
- not prescribing according to microbiology results
- patients omitting doses or delaying administration of doses
- patients not taking antibiotics as prescribed by their clinician.

Antimicrobial stewardship is a systematic approach to optimising the use of antimicrobials. The Clinical Care Standard for Antimicrobial Stewardship aims to ensure that a patient with a bacterial infection receives optimal treatment with antibiotics.

‘Optimal treatment’ means the right antibiotic to treat their condition, the right dose, by the right route, at the right time and for the right duration based on accurate assessment and timely review.

The Standard does not override personal choice or a clinician’s judgment of a patient’s individual care or treatment needs.

Patients and carers can use information in the Standard to know what care to expect and inform treatment decisions made in partnership with their clinician.

Clinicians and health services can use the Standard to support the delivery of high-quality care.

This document contains:

- the scope, which defines the extent of care covered by the Clinical Care Standard
- the goal, which defines what the Clinical Care Standard aims to accomplish
- Nine quality statements, which describe the care a patient should receive.

Then, for each quality statement, it contains:

- the purpose, which describes the intended outcome of each quality statement
- information about what the quality statements mean for patients, clinicians and health services.
Scope

This Clinical Care Standard relates to the care adults should receive when they have, or are suspected of having, a bacterial infection. It covers patient care from the time of diagnosis to cure of an infection and has been developed for use in a variety of healthcare settings, including the community, hospital and residential aged care facilities.

Goal

To ensure the appropriate use and review of antibiotics to optimise patients outcomes, lessen the risk of adverse effects and reduce the emergence of antibiotic resistance.\(^5\)

Monitoring

Health services need to be aware of how well the treatment they provide matches the Clinical Care Standards. Monitoring of the performance of the clinical services provided by an organisation is a key part of the National Safety and Quality Health Service (NSQHS) Standards, particularly Standard 1: Governance for Safety and Quality.

Organisations are likely to already have mechanisms in place that monitor the care provided. However if additional measures are needed then a number of suggested indicators have been developed and can be found at Appendix 2.
Quality statement 1 – Life-threatening conditions

A patient requiring urgent treatment for a life-threatening condition due to a suspected bacterial infection receives antibiotic treatment without waiting for the results of microbiology tests.

Purpose

To reduce the time taken to provide antibiotic treatment for suspected life-threatening bacterial infections.

This quality statement is primarily applicable to the hospital setting, as this is where patients with a life-threatening condition most commonly present for treatment.

What this quality statement means for:

- **Patients.** When you have a life-threatening condition and a clinician suspects that this may be due to a bacterial infection, you will be given antibiotics without delay.

- **Clinicians.** Prescribe and administer appropriate empirical antibiotic therapy to patients with a suspected life-threatening bacterial infection, such as acute sepsis or bacterial meningitis, without waiting for the results of microbiology tests.

- **Health services.** Ensure systems, clinical pathways and prescribing guidelines are in place so that patients with life-threatening bacterial infections receive effective antibiotic therapy without delay.
Quality statement 2 – Microbiological testing

A patient has samples taken for microbiology testing when clinically indicated and before starting antibiotic treatment whenever possible.

Purpose

To support appropriate antibiotic selection through the use of microbiology testing.

Microbiology testing routinely occurs before the administration of antibiotic therapy in hospitals, however, this is not the case in the community and residential aged care settings. This quality statement aims to encourage all clinicians to undertake microbiology testing whenever indicated.

What the quality statement means for:

- **Patients.** Before your clinician prescribes an antibiotic, samples (e.g. of your blood) may be taken for microbiology tests. These tests are done to confirm the presence of a bacterial infection and identify which antibiotic will be most successful in treating it.

- **Clinicians.** Obtain samples for microbiology testing when clinically indicated and before starting antibiotic therapy whenever possible. This ensures that treatment is directed against the infecting organism.

- **Health services.** Ensure systems are in place to perform culture and susceptibility tests, and provide clinicians with timely results to inform diagnosis and treatment decisions.
Quality statement 3 – Information on treatment options

A patient with a suspected bacterial infection, and/or their carer, receives information on their condition and treatment options, which may or may not include antibiotic therapy.

Purpose

To inform patients about their condition so that they can participate in the decision-making process about their treatment, which may or may not require antibiotics.

What the quality statement means for:

- **Patients.** If it is suspected that you have a bacterial infection, your clinician will discuss treatment options, which may or may not include antibiotic therapy, with you and/or your carer.

- **Clinicians.** Discuss treatment options, which may or may not include antibiotics, with your patient and/or their carer. Ensure issues about their health condition, risks and benefits of treatment options, and patient preferences and needs are discussed.

- **Health services.** Ensure systems and resources are available to support clinicians to explain antibiotic treatment options to patients and/or their carers.
Quality statement 4 – Use of guidelines

When a patient is prescribed antibiotics, this is done in accordance with the current version of *Therapeutic Guidelines: Antibiotic* or guidelines based on local bacterial susceptibility patterns, taking into consideration a patient’s allergies and other clinical factors.

**Purpose**

To ensure optimal antibiotic treatment is prescribed (i.e. the right drug, dose, route and duration of therapy is chosen).

**What this quality statement means for:**

- **Patients.** When you are prescribed an antibiotic, your clinician is guided by recommendations outlined in *Therapeutic Guidelines: Antibiotic* (a nationally accepted guideline for antibiotic prescribing). Your clinician will also take into account any allergies you may have or other clinical factors (such as pregnancy, or kidney or liver disease).

- **Clinicians.** Prescribe an antibiotic according to *Therapeutic Guidelines: Antibiotic* or guidelines based on local bacterial susceptibility patterns. Consider individual patient characteristics, such as allergy status, other medicines prescribed, pregnancy, and kidney or liver disease.

- **Health services.** Ensure clinicians have access to and use the most up-to-date version of *Therapeutic Guidelines: Antibiotic* or guidelines based on local bacterial susceptibility patterns.
Quality statement 5 – Taking antibiotics as prescribed

If antibiotics are prescribed, information about when, how and for how long to take them, as well as potential side effects and a review plan, is discussed with a patient and/or their carer.

Purpose

To improve patients adherence to prescribed antibiotic therapy.

What this quality statement means for:

- **Patients.** If you are prescribed antibiotics, your clinician will provide you and/or your carer with information about when and how to take your antibiotics, how long to take them and any potential side effects. It is important that you take your antibiotics as prescribed by your clinician. If required, your clinician may need to see you again for a follow-up appointment to review your progress.

- **Clinicians.** Inform your patient and/or their carer about taking antibiotics as prescribed, how long to take them and whether their treatment will need to be reviewed.

- **Health services.** Ensure systems and resources are in place to educate patients and/or their carers on the importance of taking antibiotics as prescribed. Ensure processes are also in place to support a patient review if required.
Quality statement 6 – Documentation

When a patient is prescribed antibiotics, the clinical reason, drug name, dose, route of administration, intended duration and review plan is documented in their medical record.

Purpose

To improve documentation of antibiotic treatment and effective communication between clinicians through a variety of mechanisms including the Personally Controlled Electronic Health Record.

What this quality statement means for:

• **Patients.** Your medical record will contain the details of your antibiotic treatment. This includes information on the reason you were prescribed antibiotics, the medicine name, dose, route of administration (i.e. given orally or by injection), how long to take them and any plans to review your treatment.

• **Clinicians.** When you prescribe an antibiotic, document the clinical reason, medicine name, dose, route of administration, intended duration and any review plan in the patient’s medical record. This information is vital to ensure good communication between clinicians.

• **Health services.** Ensure a system is in place to support the documentation of the clinical reason for prescribing an antibiotic, the medicine name and dose, route of administration, intended duration and any treatment review plan.
Quality statement 7 – Use of broad-spectrum antibiotics

A patient who is treated with a broad-spectrum antibiotic is reviewed and, where indicated, switched to treatment with a narrow-spectrum antibiotic as indicated by microbiology test results.

**Purpose**

To reduce the unnecessary use of broad-spectrum antibiotics.

This quality statement addresses the issue of unnecessary continuation of treatment with a broad-spectrum antibiotic when microbiology tests indicate that a bacterial infection can be treated just as effectively with a narrow-spectrum antibiotic.

**What the quality statement means for:**

- **Patients.** You may be prescribed an antibiotic that works against a wide range of bacteria (i.e. a broad-spectrum antibiotic) when it is unclear which bacteria may be causing your infection. In this case, your clinician may order tests to review the progress of your therapy. This may result in a change to a more specific antibiotic (i.e. a narrow-spectrum antibiotic).

- **Clinicians.** If your patient is prescribed a broad-spectrum antibiotic, review their microbiology results to determine whether they can be switched to treatment with a narrow-spectrum antibiotic.

- **Health services.** Ensure processes are in place to support changes in the use of broad-spectrum antibiotics to narrow-spectrum agents when the pathogen and its susceptibilities are known.³
Quality statement 8 – Review of treatment

If microbiology tests are conducted to identify a suspected bacterial infection, the responsible clinician reviews these results in a timely manner (usually within 48–72 hours) and a patient’s antibiotic therapy is modified accordingly.

Purpose

To optimise a patient’s antibiotic treatment by using clinical assessment and review of microbiology results.

The Antimicrobial Stewardship Topic Working Group agreed, by consensus, that the responsible clinician should review microbiology results within a time frame of 48–72 hours. Although the group recognised that test results may become available sooner than this and should be reviewed accordingly on the day of receipt, this time frame allows for situations where test results are undertaken during a weekend and cannot be reviewed by the clinician until the next business day (i.e. Monday).

What the quality statement means for:

- **Patients.** When tests have been done to identify a suspected bacterial infection, your clinician will review these results as soon as they become available (usually within 48–72 hours). These results may lead to a change in your antibiotic treatment, if needed.

- **Clinicians.** If microbiology tests are ordered, review the results as soon as they are available (usually within 48–72 hours). This information will aid decisions about whether to switch from intravenous to oral antibiotics, change from a broad-spectrum to narrow-spectrum antibiotic, continue current treatment with a further review or stop antibiotic therapy.

- **Health services.** Ensure systems are in place to ensure microbiology test results are available to clinicians in a timely manner (usually within 48–72 hours) to guide antibiotic treatment decisions.
Quality statement 9 – Surgical prophylaxis

A patient receives surgical prophylactic antibiotics in accordance with the latest version of *Therapeutic Guidelines: Antibiotic* or guidelines based on local bacterial susceptibility patterns.

**Purpose**

To reduce unwarranted variations in the use of antibiotics for surgical prophylaxis.

This quality statement only relates to the hospital setting. The statement has been included due to unwarranted variations in the use of antibiotics for surgical prophylaxis. Statistics show that levels of inappropriate use range from 30% to 90%, especially with respect to timing and duration.6

**What this quality statement means for:**

- **Patients.** Antibiotics may be given to you before surgery to prevent the development of a wound infection after surgery. The prescription will be in accordance with recommendations outlined in *Therapeutic Guidelines: Antibiotic* (a nationally accepted guideline for antibiotic prescribing) or guidelines based on local circumstances.

- **Clinicians.** Prescribe and administer a surgical prophylactic antibiotic in accordance with recommendations outlined in *Therapeutic Guidelines: Antibiotic* or guidelines based on local bacterial susceptibility patterns.

- **Health services.** Ensure *Therapeutic Guidelines: Antibiotic* and guidelines for surgical prophylaxis based on local bacterial susceptibility patterns are available to all clinicians.
Consultation Process

The Commission is now initiating a phase of public consultation, seeking comments on the consultation draft of the Clinical Care Standard for Antimicrobial Stewardship and Clinical Care Standard for Acute Coronary Syndrome before they are finalised in 2014.

The consultation process aims to:

- determine if the quality statements within each Clinical Care Standard identify the key components of care a patient should be offered for a specific clinical condition, or defined part of a patient journey
- determine if the suggested indicators will assist local health services to monitor their progress in meeting the Clinical Care Standards
- identify activities that will support the use of the Clinical Care Standards (e.g. tools, resources, processes and strategies).

The following supplementary information is available on the Commission’s website:

- a summary of evidence sources used to support the development of each Clinical Care Standard
- consumer and health services fact sheets for the consultation drafts of each Clinical Care Standard
- draft indicator specifications for each Clinical Care Standard
- a section on frequently asked questions (FAQs), that have been developed for use by patients, carers, clinicians and health services.

The Commission welcomes any feedback on these documents as part of the public consultation process.

Questions of particular interest include:

1. How well does each quality statement cover the key aspects of care that it describes? Please provide any comments you may have, and evidence to support any modification to a quality statement.

2. What factors currently prevent the care described in the Clinical Care Standard from being achieved?

3. What factors will support the practical application of this Clinical Care Standard?

4. How relevant are the suggested indicators in supporting the monitoring of the quality statements at the local health service level? Please provide any comments you may have, and evidence to support any modifications.

5. How should the Clinical Care Standard be disseminated (e.g. web based resources, printed resources, etc)?

6. Do you have any general comments in relation to each Clinical Care Standard?

Submissions

Submissions can be sent by post, email or by completing an online survey.

All submissions received will be published on the Commission’s website, including the names and/or organisations making the submission. The Commission will consider requests to withhold part or all
of the contents of any submission made. Any submission that includes personal information identifying specific individuals may be withheld from publication or de-identified before submissions are published.

**Written submissions**

Submissions can be sent by post or email. All written submissions should be received by close of business on **Friday 14 March 2014** to be considered in the consultation process.

Submissions should include:

- name, organisation (if relevant) and contact details
- identify which of the Clinical Care Standards the comments relate to, or whether the comments relate to both of the Clinical Care Standards
- responses to the consultation questions
- any general comments
- additional information, for example, any technical or research-based evidence the Commission should be made aware of that supports the views or comments.

Written submissions marked ‘Consultation Paper on the Clinical Care Standards’ can be posted to:

  Consultation on the Draft Clinical Care Standards
  Australian Commission on Safety and Quality in Health Care
  GPO Box 5480
  SYDNEY NSW 2001

Submissions can also be emailed to CCS@safetyandquality.gov.au.

**Feedback via online survey**

Feedback on the Clinical Care Standards can also be submitted via an online survey which is available at [http://www.safetyandquality.gov.au](http://www.safetyandquality.gov.au)

The survey can be accessed by either clicking on the link, or by copying and pasting the address into your Internet browser. The survey questions will take approximately 20 minutes to complete. This survey will close on **Friday 14 March 2014**.

**Outcome of the consultation**

The results of this consultation process will be used to further refine and develop the Clinical Care Standards. Feedback will also contribute to the identification of existing tools, and where necessary development of additional resources, which aim to assist with the implementation of the Clinical Care Standards.

**Further Information**

Any questions relating to the submission process should be directed via email to CCS@safetyandquality.gov.au or by calling the Commission on (02) 9126 3600.
Glossary

**Antibiotic:** A substance that kills or inhibits the growth of bacteria.\(^7\)

**Antibiotic resistance:** Antibiotic resistance happens when bacteria change to protect themselves from an antibiotic. When this happens, antibiotics that previously would have killed the bacteria, or stopped them from multiplying, no longer work against those bacteria.\(^8\)

**Antimicrobial:** A chemical substance that kills or inhibits the growth of bacteria, viruses and fungi, including yeasts or moulds.\(^7\)

**Antimicrobial stewardship:** A program implemented in a health service organisation to reduce the risks associated with increasing microbial resistance and to extend the effectiveness of antimicrobial treatments. Antimicrobial stewardship may involve a range of strategies, including the monitoring and review of antimicrobial use.\(^7\)

**Bacteria:** Microscopic living organisms, usually one-celled, that can be found everywhere. Most bacteria are harmless, but they can become dangerous when they cause infections.\(^9\)

**Broad- and narrow-spectrum antibiotics:** Antibiotics that are active against a wide range of organisms are referred to as broad-spectrum antibiotics. Antibiotics that target particular organisms or groups of organisms are referred to as narrow-spectrum antibiotics.\(^10\)

**Carers:** People who provide unpaid care and support to family members and friends who have a disease, disability, mental illness, chronic condition, terminal illness or general frailty.\(^11\) Carers include guardians caring for children or older persons.

**Clinically indicated:** Having a symptom or condition that makes a particular treatment or procedure advisable.\(^12\)

**Clinician:** A healthcare provider, trained as a health professional. Clinicians include registered and nonregistered practitioners, or teams of health professionals, who spend the majority of their time providing direct clinical care.\(^13\)

**Dose:** A specified quantity of a therapeutic agent, such as a medicine, prescribed to be taken at one time or at stated intervals.\(^14\)

**Guidelines:** Clinical practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific circumstances.\(^15\)

**Health service:** A separately constituted health service is responsible for the clinical governance, administration and financial management of a service unit(s) providing health care. A service unit involves a grouping of clinicians and others working in a systematic way to deliver health care to patients and can be in any location or setting, including pharmacies, clinics, outpatient facilities, hospitals, patients’ homes, community settings, practices and clinicians’ rooms.\(^14\)

**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 or disease-causing organisms inside the body. This may cause tissue injury and disease.\(^13\) Infectious agents can include bacteria, viruses, fungi and parasites.
**Life-threatening bacterial infection**: Bacterial infections resulting in life-threatening illnesses that require immediate intervention (e.g. severe sepsis, septic shock, bacterial meningitis or meningococcal septicaemia). 6

**Medical record**: Consists of, but is not limited to, 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. 13

**Microbiology testing**: Tests performed on specimens (e.g. a blood sample) in a laboratory to determine the cause of an infection and to identify suitable treatments. 17

**Prophylactic use**: The use of antibiotics to prevent an infection in clinical situations where there is significant risk of infection occurring. 6 For example, antibiotics are sometimes given before surgery as a preventative measure against infection.

**Residential aged care facility**: A special-purpose facility that provides accommodation and other types of support, including assistance with day-to-day living, intensive forms of care, and assistance towards independent living, to frail and aged residents. 18

**Sepsis**: A serious medical condition that is characterised by a whole-body inflammatory state (called a systemic inflammatory response syndrome) and the presence of a known or suspected infection. 3

**Surgical site infection**: An infection that occurs after surgery in the part of the body where the surgery took place. Surgical site infections can sometimes be superficial infections involving the skin only. Other surgical site infections are more serious and can involve tissues under the skin, organs or implanted material. 19

**Susceptibility testing**: A microbiology test carried out to determine which antibiotic will be most successful in treating a bacterial infection. 20
# Appendix 1 – Membership of the Antimicrobial Stewardship Clinical Care Standard Topic Working Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Associate Professor Rhonda Stuart (chair)</td>
<td>Infectious Disease Physician and Medical Director, Southern Health, Vic</td>
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<tr>
<td>Dr Marissa Basil</td>
<td>General Practitioner, NSW</td>
</tr>
<tr>
<td>Ms Joanne Bird</td>
<td>Infection Control Nurse, NT</td>
</tr>
<tr>
<td>Dr Philippa Binns (adviser)</td>
<td>Clinical Advisor NPS MedicineWise, NSW</td>
</tr>
<tr>
<td>Associate Professor Kirsty Buising</td>
<td>Infectious Disease Physician and Clinical Research Physician, Vic</td>
</tr>
<tr>
<td>Ms Paula Doherty</td>
<td>Hospital Pharmacist, NSW</td>
</tr>
<tr>
<td>Dr Chris Freeman</td>
<td>Community Pharmacist, Qld</td>
</tr>
<tr>
<td>Professor Paul Glasziou</td>
<td>Professor of Evidence Based Medicine and General Practitioner, Qld</td>
</tr>
<tr>
<td>Dr John Hall</td>
<td>General Practitioner, NT</td>
</tr>
<tr>
<td>Dr Murray Thomas</td>
<td>Dental Practitioner, ACT</td>
</tr>
<tr>
<td>Dr Phil Truskett</td>
<td>General Surgeon, NSW</td>
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<tr>
<td>Ms Diane Walsh</td>
<td>Consumer, NT</td>
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**Commission staff**

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<th>Name</th>
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<tr>
<td>Dr Michael Smith</td>
<td>Clinical Director</td>
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<tr>
<td>Ms Rosio Cordova</td>
<td>Program Director, Clinical Care Standards</td>
</tr>
<tr>
<td>Dr Marilyn Cruickshank</td>
<td>Program Director, Health Care Associated Infection</td>
</tr>
<tr>
<td>Ms Margaret Duguid</td>
<td>Pharmaceutical Advisor, Medication Safety</td>
</tr>
<tr>
<td>Mr Neville Board</td>
<td>Program Director, Information Strategy and Safety in eHealth</td>
</tr>
<tr>
<td>Ms Liz Metelovski</td>
<td>Senior Project Officer, Clinical Care Standards</td>
</tr>
<tr>
<td>Ms Leslie Trainor</td>
<td>Senior Project Officer, Clinical Care Standards</td>
</tr>
<tr>
<td>Ms Claire Kay</td>
<td>Secretariat, Clinical Care Standards</td>
</tr>
<tr>
<td>Ms Kerryn Viana</td>
<td>Secretariat, Clinical Care Standards</td>
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Appendix 2 – Suggested indicators

Health services need to be aware of how well the treatment they provide matches the Clinical Care Standards. Monitoring of the performance of the clinical services provided by an organisation is a key part of the National Safety and Quality Health Service (NSQHS) Standards, particularly Standard 1: Governance for Safety and Quality.

Organisations are likely to already have mechanisms in place that monitor the care provided. However if additional measures are needed, then following indicators are suggested.

The detailed specifications for these indicators are provided in Indicator Specification: Consultation Draft Clinical Care Standard for Antimicrobial Stewardship. This supporting documentation can be accessed at http://www.safetyandquality.gov.au.

### Quality statement 1 – Life-threatening conditions
- CCS.AMS.1a: Median time from triage in emergency department to the first dose of antibiotics for patients with suspected bacterial meningitis, or for patients requiring admission to an intensive care unit (ICU) for suspected sepsis

### Quality statement 2 – Microbiological testing
- No suggested indicators for this quality statement have been identified

### Quality statement 3 – Information on treatment options
- No suggested indicators for this quality statement have been identified. However, patient experience surveys in many cases address the issue of informed consent, and may be used as measures towards this statement

### Quality statement 4 – Use of guidelines
- CCS.AMS.4a: Proportion of antibiotic prescriptions that are in accordance with guidelines
- CCS.AMS.4b: Rate of antibiotic allergy mismatch in prescribing

### Quality statement 5 – Taking antibiotics as prescribed
- No indicators were identified for this quality statement. However, patient experience surveys in many cases include questions on whether patients felt that their care was adequately explained and discussed

### Quality statement 6 – Documentation
- CCS.AMS.6a: Rate of documentation of clinical reason (or indication) for prescribing an antibiotic

### Quality statement 7 – Use of broad-spectrum antibiotics
- CCS.AMS.7/8a: Proportion of patient prescriptions of broad-spectrum antibiotics for which a medical review is documented within 48-72 hours from first prescription

### Quality statement 8 – Review of treatment
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<th>Quality statement 9 – Surgical prophylaxis</th>
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<td>• CCS.AMS.9c: Proportion of patients whose prophylactic antibiotics were discontinued within 24 hours after surgery, or 48 hours for vascular surgery</td>
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References


