AUSTRALIAN COMMISSION
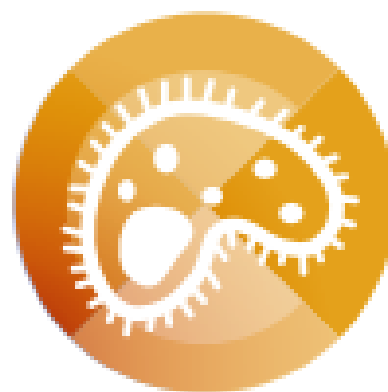ON SAFETY AND QUALITY IN HEALTH CARE

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Structure indicators for antimicrobial stewardship programs in health service organisations

Contents

Introduction

The *Structure Indicators for Antimicrobial Stewardship in Health Service Organisations* (the Indicators) have been developed by the Australian Commission on Safety and Quality in Health Care (the Commission) to support health service organisations assess the status, and measure the progress, of their antimicrobial stewardship (AMS) programs. It is acknowledged that performance indicators for AMS may already exist in health service organisations. The indicators provided in this document can be incorporated or adapted, as appropriate to the local context, taking account of existing indicators.

Structure indicators provide qualitative information regarding the operating environment (these include: hospital infrastructure, culture, systems, policies, procedures and activities) required for provision of quality health care; they typically require 'Yes / No' answers and provide a snapshot of the organisational environment at a particular point in time.[1] Process indicators assist in assessing policy, practice and monitoring and feedback mechanisms. They can be used to target and evaluate initiatives to improve practice, in this case specifically focussed on AMS.[2]

The structure indicators for AMS were derived from the core and supplemental structure and process indicators for hospital antimicrobial stewardship programs developed by the Transatlantic Task Force on Antimicrobial Resistance (TATFAR)[3] and the Pulcini[4] checklist for global hospital AMS programs. In 2019, the Commission's Antimicrobial Stewardship Advisory Committee considered these indicators, and others, and adapted them for the Australian health environment to ensure relevance to local health care systems.

The outcome of this work is a suite of indicators for use by health service organisations in their assessment of the effectiveness of local and networked AMS programs. The indicators are not mandatory, but they provide a resource that can help identify and inform areas for improvement and successful strategies. The indicators offer the potential for by health service organisations to compare their local AMS programs with other health service organisations in Australia, and internationally.

Structure indicators incorporate the essential elements and strategies for hospital AMS programs published in *Antimicrobial Stewardship in Australian Health Care 2018*.[2] The final indicator set in this document reflects the importance of having a well-supported multidisciplinary infrastructure to help ensure antimicrobial stewardship is sustainably integrated into clinical practice.[5]

Use of these indicators also assists health service organisations to monitor compliance with the AMS requirements of the National Safety and Quality Health Service (NSQHS) Standards. This document was revised in 2022 to reflect the requirements of the NSQHS Standards (second edition), specifically the Preventing and Controlling Infections Standard.

About the Structure Indicators

The suite of 26 structure indicators describes a range of characteristics for an effective AMS program and, where relevant, supplementary information is provided to assist with data collection.

The Indicators are grouped into three domains:

- Infrastructure
- Policy and practice
- Monitoring and feedback.

Health service organisations can select those indicators most relevant to their environmental and operational context. It may be that a selection across the three domains is used for review, over a period of years, to assess improvement over time.

The indicators are presented in the form of a self- assessment checklist that includes a section for recording actions required if an indicator is not met, and if met, the source of the evidence. They have been mapped to the relevant AMS criterion action items in the *National Safety and Quality Health Services (NSQHS) Standards* (second edition) – *Clinical Governance, Partnering with Consumers*, *Preventing and Controlling Infections* and *Medication Safety* where appropriate.[6] They have also been mapped to the relevant *Antimicrobial Stewardship Clinical Care Standard* (AMS CCS) indicators.[7]

The AMS CCS indicators may be used by health service organisations to support compliance with the NSQHS Standards. Clinicians and health services can use the AMS CCS indicators to monitor implementation of the quality statements and support local quality improvement activities in line with NSQHS Preventing and Controlling Healthcare-Associated Infections Standards, Actions 3.18 and 3.19.

The AMS CCS is supported by a monitoring tool[11], which is a data repository, analysis and reporting tool that has audit, and monitoring functionality through an Microsoft Excel® spreadsheet that can be downloaded from the Commission's website.

Completing the assessment

It is recommended that the assessment is completed by a multidisciplinary group, such as the AMS clinical team or representatives of the organisation's AMS committee. All questions relevant to each indicator should be considered as part of the assessment. The supplementary information provides guidance to the team and needs to be considered within the context of the nature of the service. For example, the needs and resources of a principal referral hospital compared with a small health service. The results can be used to inform the AMS plan for the health service organisation.

To be most effective, assessments should be conducted at regular intervals so that progress against previous recommendations for improvements can be considered. Where appropriate further action can then be determined; annual assessments may an appropriate frequency in the early stages of development

The Commission will continue to work with health service organisations to inform the indicators, so they remain a useful tool.

Table 1: Suite of AMS indicators for consideration by health service organisations or networks.

	AMS Indicators
1	Does your health service have a formal **antimicrobial stewardship (AMS) program** for ensuring appropriate antimicrobial use?
2	Does your health service have a designated member of the **senior executive with accountability** for antimicrobial leadership?
3	Does your health service have a **formal organisational structure** responsible for antimicrobial stewardship?
4	Is an AMS **team** available at your service?
5	Is there a clinician identified as a **leader** for antimicrobial stewardship activities at your health service?
6	Has the clinician responsible for AMS activities had **specialised training** in infectious disease management or stewardship?
7	Is there a **pharmacist** with dedicated responsibility for time to support AMS at your health service?
8	Does your health service provide **dedicated time** for antimicrobial stewardship activities?
9	Is **clinical infectious disease** (ID) consultation available either onsite or externally through a formalised arrangement?
10	Does your health service have access to a **clinical microbiology service** that provides guidance and support for optimal specimen collection and timely reporting of clinically meaningful pathogens and their susceptibilities?
11	Does your health service have the **IT capability** to support the needs of the antimicrobial stewardship activities?
12	Does your health service provide ongoing **education and training** for clinicians responsible for prescribing/using antimicrobials (such as prescribers, pharmacists, nurses and midwives)?
13	Does your health service have systems in place for clinicians to **discuss with patients** and/or their carers the need to take antimicrobials as prescribed, how and for how long to take them, any potential side effects and whether treatment will need be reviewed?
14	Does your health service provide access to and promote the use of the current version of **Therapeutic Guidelines**?
15	Does your health service have **clinical guidelines** that incorporate antimicrobial treatment recommendations?
16	Are your health service's **clinical guidelines** easily accessible to prescribers on all wards?
17	Does your health service have a written policy that incorporates the **Antimicrobial Stewardship Clinical Care Standard**?
18	Does your health service have an antimicrobial **formulary** that includes restriction rules and approval processes?
19	Is there a formal procedure for an AMS clinician, or other staff member to review the appropriateness of selected antimicrobials at a nominated time following the initial order (**post-prescription review**)?
20	Has your health service produced a cumulative antimicrobial susceptibility report (**antibiogram**) in the past year?
21	Does your health service monitor the **quality of antimicrobial use** at unit and/or organisation wide?
22	Does your health service **monitor if the indication** is captured in the medical record for antimicrobial prescriptions?
23	Does your health service audit or **review surgical antimicrobial prophylaxis** choice and duration (where surgery is performed)?
24	Are results of antimicrobial use and prescribing audits or reviews **communicated directly** with prescribers?
25	Does your health service **monitor the quantity of antimicrobial use** by grams of antimicrobial(s) by patients per day?
26	Has an **annual report,** focused on antimicrobial stewardship, been produced for your health service and are the results of these audits used to promote continuous quality improvement, including performance over time?
27	Does the AMS program report to clinicians and the governing body regarding areas of action for antimicrobial resistance (where applicable)?

Table 2: Structure indicators for hospital antimicrobial stewardship programs

Legend	Relates to NSQHS Standard		Relates to AMS Clinical Care Standard (CCS)		Independent of NSQHS and AMS Standards	

	Indicator no.	NSQHS/CCS action item	Description	☐	Met or not met
Infrastructure	1	**NSQHS Standards** Action 1.08 & 1.09 Action 3.01c Action 3.018 Action 4.01	Does your health service have a formal **antimicrobial stewardship (AMS) program** for ensuring appropriate antimicrobial use? *Supplementary information: This should be a priority objective and a key performance indicator for the health service.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	2	**NSQHS Standards** Action 1.01	Does your health service have a designated member of the **senior executive with accountability** for antimicrobial leadership?	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	3	**NSQHS Standards** Action 1.30	Does your health service have a **formal organisational structure** responsible for antimicrobial stewardship [e.g., a multidisciplinary committee focused on appropriate antimicrobial use (antimicrobial stewardship committee), drug and therapeutics committee, patient safety committee or other relevant structure]? *Supplementary information: Committee membership should include clinicians other than those who are members of the AMS team (e.g., clinicians from ICU, surgery, medicine). The organisational structure should include links between the AMS committee/team and the infection prevention and control committee/team. The AMS Committee functions may be performed by a Local Hospital Network/District or private hospital group committee.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	4		Is an antimicrobial stewardship **team** available at your health service (e.g., greater than one staff member supporting AMS program and activities)? *Supplementary information: This is the group of clinicians responsible for implementing AMS strategies "on the ground". The composition of the team will depend on the resources and needs of the health service. See table of Options for Antimicrobial Stewardship Programs in different settings (pg. 46 of Antimicrobial Stewardship in Australian Health Care, 2018).[2] Access to advice should be readily available and roles and responsibilities of team members documented.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence

	Indicator no.	NSQHS/CCS action item	Description	☐ Met or not met
Infrastructure	5	**NSQHS Standards** Action 1.01a	Is there a clinician identified as a **leader** for antimicrobial stewardship activities at your health service? *Supplementary information: the clinician leader may be a nurse, midwife, infection control practitioner, medical practitioner or pharmacist with dedicated time for AMS.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	6	**NSQHS Standards** Action 1.25b	Has the clinician responsible for AMS activities had **specialised training** in infectious disease management or stewardship? *Supplementary information: Training may involve workshops offered by professional bodies, placements AMS program of other health service organisations or online courses.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	7		Is there a **pharmacist** with dedicated responsibility to support AMS at your health service?	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	8		Does your health service provide **dedicated time** for antimicrobial stewardship activities?	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	9		Is clinical infectious disease (ID) consultation available either onsite or externally through a formalised arrangement?	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	10	**AMS CCS** QS 4	Does your health service have access to a clinical microbiology service that provides guidance and support for optimal specimen collection and timely reporting of clinically meaningful pathogens and their susceptibilities? A patient with a suspected infection has appropriate samples taken for microbiology testing as clinically indicated, preferably before starting antimicrobial therapy. Clinicians should follow guidelines for appropriate microbiological testing, such as *Therapeutic Guidelines*[®]. *Supplementary information: It is highly desirable that the clinical microbiology service uses selective reporting of susceptibility testing results. The emphasis should be on selective reporting to narrow spectrum and less restricted agents. Specific advices can be provided to patients with allergies. These services may be on site or provided externally. The timeframe for reporting should be agreed with the clinical governance unit of the facility.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence

	Indicator no.	NSQHS/CCS action item	Description	☐ Met or not met
Infrastructure	11	**NSQHS Standards** Action 4.13	Does your health service have the **IT capability** to support the needs of the antimicrobial stewardship activities? *Supplementary information: The AMS team or committee should determine the information technology systems required to support the team's AMS activities, in consultation with the IT team and Executive with consideration of the costs and benefits of the system. Integration with existing systems should be another consideration. Information technology systems used to support the AMS program may include:* • *electronic clinical decision support systems* • *electronic medication management systems (including electronic prescribing) with clinical decision support* • *online approval systems for restricted agents* • *post-prescription alert systems* • *capability to contribute to antimicrobial use surveillance systems (e.g., NAUSP)* • *capability to participate in the National Antimicrobial Prescribing Survey* • *capability to participate in passive surveillance of antimicrobial resistance (e.g., Australian Passive AMR Surveillance [APAS])* • *capability to generate an annual antibiogram* • *electronic linkage of pharmacy records, microbiology results and electronic health records.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	12	**NSQHS Standards** Action 3.02e	Does your health service provide ongoing **education and training** for prescribers, pharmacists, nurses and midwives about AMS, antimicrobial resistance and optimal antimicrobial use? *Supplementary information: This may be delivered locally or via electronic means. Education and training for the AMS team members should also be supported. This may be provided at Local Health Network (LHN) or jurisdictional level, or through professional organisations. Examples of education resources are provided in the Antimicrobial Stewardship in Australian Health Care.[2]*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
Policy and practice	13	**NSQHS Standards** Action 2.07 Action 3.04 Action 4.03 **AMS CCS** QS 3 QS 5	Does your health service have systems in place for clinicians to **discuss with patients** and/or their carers the need to take antimicrobials as prescribed, how and for how long to take them, any potential side effects and whether treatment will need be reviewed? A patient with an infection, or at risk of an infection, is provided with information about their condition and treatment options in a way that they can understand. If antimicrobials are prescribed, information on how to use them, when to stop, potential side effects and a review plan is discussed with the patient. *Supplementary information: This should also include broader discussions regarding the infection and treatment options. Consideration should also be given to the format and language of the information.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence

	Indicator no.	NSQHS/CCS action item	Description	☐ Met or not met
Policy and practice	14	**NSQHS Standards** Action 1.27a Action 3.15.b **AMS CCS** QS 2	Does your health service provide access to, and promote the use of, the current version of **Therapeutic Guidelines[8]** ? When a patient is prescribed an antimicrobial, this is done in accordance with the current Therapeutic Guidelines or evidence-based, locally endorsed guidelines and the antimicrobial formulary	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	15	**NSQHS Standards** Action 1.27.a Action 3.18b **AMS CCS** QS 2	Does your health service have **clinical guidelines** that incorporate antimicrobial treatment recommendations? Are they consistent with *Therapeutic Guidelines[8]* and take into account local microbiology and antimicrobial susceptibility patterns? *Supplementary information: clinical guidelines refer to guidelines developed locally, at local health network/local health district, or at the state and territory level that include antimicrobial treatment recommendations for the management of infections at the health service organisation. For example: management of community acquired pneumonia, urinary tract infections and sepsis. Guidelines also include standardized criteria for changing from intravenous to oral antimicrobial therapy in appropriate situations. Clinical guidelines include**, clinical pathways, care bundles and treatment algorithms**.*	☐ No ➜ go to C16 ☐ Yes ➜ list source of evidence
	16	**NSQHS Standards** Action 1.27a Action 3.18b	Are your health service's **clinical guidelines** easily accessible to prescribers on all wards (printed 'pocket guide', electronic summaries at workstations, via hospital intranet or mobile devices)? *Supplementary information: Clinical guidelines include treatment protocols, clinical pathways, care bundles and treatment algorithms.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	17	**NSQHS Standards** Action 1.27b Action 3.18a Action 3.18d **AMS CCS** QS 1-8 QS 6*	Does your health service have a written policy that incorporates the **Antimicrobial Stewardship Clinical Care Standard[7]**? *Supplementary information: The policy should include the quality statements from the Clinical Care Standard including* the requirement for the prescriber to document the reason, drug name, dose, route of administration, intended duration and review plan is in the patient's healthcare record.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	18	**NSQHS Standards** Action 3.18c	Does your health service have an antimicrobial **formulary** that includes restriction rules and approval processes? *Supplementary information: The formulary may be developed by network/ district/management group executive and implemented locally. It may be part of an electronic management system.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence

	Indicator no.	NSQHS/CCS action item	Description	☐ Met or not met
Policy and practice			*Services may choose to target their efforts on specific antimicrobials such as third generation cephalosporins or quinolones. The formulary should:* • *outline restriction rules and approval processes, and systems to manage these* • *stipulate clinical scenarios where preapproval for first line treatment is not required, (e.g. serious bacterial infection or suspected sepsis)*	
	19	**NSQHS Standards** Action 3.19a	Is there a formal procedure for a physician, pharmacist, or other staff member to review the appropriateness of selected antimicrobials at a nominated time following the initial order (**post-prescription review**)? ***Supplementary information***: *A review of a patient's antimicrobial therapy may be triggered by a referral from another clinician, prescription of a specific antimicrobial, a laboratory result, or a clinical condition. The AMS team should also review the use of highly restricted antimicrobials across the whole hospital and episodes of prolonged use of other restricted antimicrobials.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
		AMS CCS QS 7 QS 8	*Routine AMS ward rounds (at least twice per week) should be done in clinical areas with high antimicrobial use – for example, ICUs, transplant wards and haematology units. The frequency of AMS ward rounds will depend on the size and resources of the hospital and the case mix of patients[2].*	
Monitoring and Feedback	20	**NSQHS Standards** Action 3.19b Action 3.19d	Has your health service produced a cumulative antimicrobial susceptibility report (**antibiogram**) in the past year? Does your health service report to clinicians and the governing body areas of action for antimicrobial resistance? ***Supplementary information***: *The information from the antibiogram is conveyed to prescribers through channels such as revised guidelines, formulary changes.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	21	**NSQHS Standards** Action 3.19a Action 3.19c	Does your health service monitor the **quality of antimicrobial use** at unit and/or organisation wide? ***Supplementary information***: *This may be done by point prevalence studies at ward or health service level measuring compliance with guidelines/policy or appropriateness of prescribing such as the National Antimicrobial Prescribing Survey (NAPS) , drug use evaluation studies or measuring quality use of medicines indicators for antibiotic therapy[1].*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence
	22	**NSQHS Standards** Action 3.19a Action 3.19c **AMS CCS** QS 6	Does your health service **monitor if the indication** is captured in the medical record for antimicrobial prescriptions? ***Supplementary information***: *This may be collected as part of by point prevalence studies at ward or health service level such as the National Antimicrobial Prescribing Survey (NAPS). Another consideration for organisations is to monitor the intended duration or review plan.*	☐ No ➜ further action is required ☐ Yes ➜ list source of evidence

	Indicator no.	NSQHS/CCS action item	Description	☐ Met or not met
Monitoring and Feedback	**23**	**NSQHS Standards** Action 3.19c Action 3.19d **AMS CCS** QS 8	Does your health service audit or **review procedural/surgical antimicrobial prophylaxis** choice and duration (where surgery is performed at the health service)? *Supplementary information: This may be done by point prevalence studies at ward or health service level such as the National Antimicrobial Prescribing Survey (NAPS), drug use evaluation studies or measuring quality use of medicines indicators for antibiotic therapy. Another consideration for organisations is to review the timing of surgical prophylaxis regarding the procedure.*	☐ No ➔ further action is required ☐ Yes ➔ list source of evidence
	24	**NSQHS Standards** Action 1.9b Action 3.19d	Are results of antimicrobial use and prescribing audits or reviews **communicated directly** with prescribers? *Supplementary information: These results are also shared with the health service's leadership.*	☐ No ➔ further action is required ☐ Yes ➔ list source of evidence
	25	**NSQHS Standards** Action 3.19a Action 3.19c	Does your health service **monitor the quantity of antimicrobial use** by grams [Defined Daily Dose (DDD)] or counts [Days of Therapy (DOT)] of antimicrobial(s) by patients per day? *Supplementary information: Health services can access reports on their antimicrobial use as DDD per 1000 patient occupied bed days by participating in the National Antimicrobial Utilisation Surveillance Program (NAUSP). It is recognised there are limitations associated with monitoring the quantity of antimicrobials in the paediatric context. Consider the use of an alternative appropriate metric.*	☐ No ➔ further action is required ☐ Yes ➔ list source of evidence
Quality Improvement	**26**	**NSQHS Standards** Action 1.09 Action 3.18e Action 3.19c Action 3.19d	Has an **annual report**, focused on antimicrobial stewardship, been produced for your health service and are the results of audits used to **promote continuous quality improvement**, including performance over time? Does your health service have a system to act on antimicrobial use and appropriateness audits to inform ongoing quality improvement in the AMS program, and improvement over time? *Supplementary information: This information should also include any targets or goals (short and longer term) for optimising antimicrobial use.*	☐ No ➔ further action is required ☐ Yes ➔ list source of evidence
	27	**NSQHS Standards** Action 1.09 Action 3.19b Action 3.19d	Does the AMS program report to clinicians and the governing body regarding **areas of action for antimicrobial resistance** (where applicable)? Does your health service have a system to act on antibiogram results, including increasing resistance in important human pathogens? *Supplementary information: Local microbiology results, tabled on an antibiogram, highlighting resistance patterns, are shared with the health service's leadership, and results acted upon to reduce the spread of resistance in important human pathogens*	☐ No ➔ further action is required ☐ Yes ➔ list source of evidence

Glossary of terms

Term	Definition
Algorithm (as in clinical or treatment algorithm)	A flow chart that outlines a sequence of clinical decisions that can be used for guiding patient care and for teaching clinical decision making.
Antibiogram	Tables of antimicrobial susceptibilities. They are used to inform local empirical antimicrobial recommendations and formulary management.[10]
Antimicrobial formulary	A list of antimicrobial agents approved for use within an organisation or network that includes descriptions of restrictions and criteria for use.[2]
Antimicrobial stewardship program	A systematic and coordinated approach to optimising antimicrobial use with the goals of improving patient outcomes, ensuring cost-effective therapy and reducing adverse consequences of antimicrobial use, including antimicrobial resistance.[2]
Clinical care standards	Developed by the Australian Commission on Safety and Quality in Health Care, a clinical care standard is a small number of quality statements that describe the care patients should be offered by health professionals and health services for a specific clinical condition or defined clinical pathway in line with current best evidence.[11]
Clinical guidelines	Evidence based statements that include recommendations intended to optimise patient care and assist health care practitioners to make decisions about appropriate health care for specific clinical circumstances. For the purposes of this publication clinical guidelines may also include clinical pathways, care bundles and treatment algorithms.
Clinician	For the purposes of this publication, the term clinician includes nurses, midwives, infection control practitioners, medical practitioners, pharmacists.
Health service organisation	A separately constituted health service that is responsible for implementing clinical governance, administration and financial management of a service unit or service units 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.[6]
National Safety and Quality Health Service (NSQHS) Standards	Standards developed by the Australian Commission on Safety and Quality in Health Care to drive the implementation of safety and quality systems and improve the quality of health care in Australia. The NSQHS Standards provide a nationally consistent statement about the level of care consumers can expect from health service organisations.[2, 6]
Post prescription review	Review of antimicrobial prescribing, with intervention and direct and timely feedback to the prescriber to educate clinical staff on appropriate prescribing. The review may be by a single clinician or by a multidisciplinary (AMS) team.[2]

Appendix 1 – Excerpt from NSQHS Standard 1 – Clinical Governance

	NSQHS Standard 1
1.01	The governing body:
	a. Provides leadership to develop a culture of safety and quality improvement, and satisfies itself that this culture exists within the organisation
	b. Provides leadership to ensure partnering with patients, carers and consumers
	c. Sets priorities and strategic directions for safe and high-quality clinical care, and ensures that these are communicated effectively to the workforce and the community
	d. Endorses the organisation's clinical governance framework
	e. Ensures that roles and responsibilities are clearly defined for the governing body, management, clinicians, and the workforce
	f. Monitors the action taken following analyses of clinical incidents
	g. Reviews reports and monitors the organisation's progress on safety and quality performance
1.03	The health service organisation establishes and maintains a clinical governance framework, and uses the processes within the framework to drive improvements in safety and quality
1.09	The health service organisation ensures that timely reports on safety and quality systems and performance are provided to:
	a. The governing body
	b. The workforce
	c. Consumers and the local community
	d. Other relevant health service organisations
1.10	The health service organisation:
	a. Identifies and documents organisational risks
	b. Uses clinical and other data collections to support risk assessments
	c. Acts to reduce risks
	d. Regularly reviews and acts to improve the effectiveness of the risk management system
	e. Reports on risks to the workforce and consumers
	f. Plans for, and manages, internal and external emergencies and disasters
1.25a	The health service organisation has processes to support the workforce to understand and perform their roles and responsibilities for safety and quality
	The health service organisation has processes that:
1.27a	Provide clinicians with ready access to best-practice guidelines, integrated care pathways, clinical pathways, and decision support tools relevant to their clinical practice
1.27b	Support clinicians to use the best available evidence, including relevant clinical care standards developed by the Australian Commission on Safety and Quality in Health Care

Appendix 2 – Excerpt from NSQHS Standard – Partnering with Consumers Standard

NSQHS Standard 2
2.07   The health service organisation supports the workforce to form partnerships with patients and carers so that patients can be actively involved in their own care

Appendix 3 – Excerpt from NSQHS Standard – Preventing and Controlling Infections

	NSQHS Standard 3
3.01	The workforce uses the safety and quality systems from the Clinical Governance Standard when: c. Implementing policies and procedures for antimicrobial stewardship d. Identifying and managing antimicrobial stewardship risks
3.02	The health service organisation: d. Establishes multidisciplinary teams, or processes, to promote effective antimicrobial stewardship e. Identifies requirements for and provides access to training to support the workforce to conduct antimicrobial stewardship activities
	The health service organisation has an antimicrobial stewardship program that:
3.18a	Includes an antimicrobial stewardship policy
3.18b	Provides access to, and promotes the use of, current evidence-based Australian therapeutic guidelines and resources on antimicrobial prescribing
3.18c	Has an antimicrobial formulary that is informed by current evidence-based Australian therapeutic guidelines or resources, and includes restriction rules and approval processes
3.18d	Incorporates core elements, recommendations and principles from the current Antimicrobial Stewardship Clinical Care Standard
3.19e	Acts on the results of antimicrobial use and appropriateness audits to promote continuous quality improvement
	The antimicrobial stewardship program will:
3.19a	Review antimicrobial prescribing and use
3.19b	Use surveillance data on antimicrobial resistance and use to support appropriate prescribing
3.19c	Evaluate performance of the program, identify areas for improvement, and take action to improve the appropriateness of antimicrobial prescribing and use
3.19d	**Report to clinicians and the governing body regarding:** • compliance with the antimicrobial stewardship policy and guidance • areas of action for antimicrobial resistance • areas of action to improve appropriateness of prescribing and compliance with current evidence based Australian therapeutic guidelines or resources on antimicrobial prescribing • the health service organisation's performance over time for use and appropriateness of use of antimicrobials

Appendix 4 – Excerpt from NSQHS Standard – Medication Safety

NSQHS Standard 4	
4.01	Clinicians use the safety and quality systems from the Clinical Governance Standard when: a. Implementing policies and procedures for medication management b. Managing risks associated with medication management c. Identifying training requirements for medication management
4.03	Clinicians use organisational processes from the Partnering with Consumers Standard in medication management to: a. Actively involve patients in their own care b. Meet the patient's information needs c. Share decision-making
4.13	The health service organisation ensures that information and decision support tools for medicines are available to clinicians

Appendix 5 – Antimicrobial Stewardship Clinical Care Standard

Antimicrobial Stewardship Clinical Care Standard (AMS CCS)	
1	**Life-threatening conditions** A patient with a life-threatening condition due to a suspected infection receives an appropriate antimicrobial immediately, without waiting for the results of investigations
2	**Use of guidelines** When a patient is prescribed an antimicrobial, this is done in accordance with the current *Therapeutic Guidelines* or evidence-based, locally endorsed guidelines and the antimicrobial formulary
3	**Adverse reactions to antimicrobials** When an adverse reaction (including an allergy) to an antimicrobial is reported by a patient or recorded in their healthcare record, the active ingredient(s), date, nature and severity of the reaction are assessed and documented. This enables the most appropriate antimicrobial to be used when required.
4	**Microbiological testing** A patient with a suspected infection has appropriate samples taken for microbiology testing as clinically indicated, preferably before starting antimicrobial therapy.
5	**Patient information and shared decision making** A patient with an infection, or at risk of an infection, is provided with information about their condition and treatment options in a way that they can understand. If antimicrobials are prescribed, information on how to use them, when to stop, potential side effects and a review plan is discussed with the patient.
6	**Documentation** When a patient is prescribed an antimicrobial, the indication, active ingredient, dose, frequency and route of administration, and the intended duration or review plan are documented in the patient's healthcare record.
7	**Review of therapy** A patient prescribed an antimicrobial has regular clinical review of their therapy, with the frequency of review dependent on patient acuity and risk factors. The need for ongoing antimicrobial use, appropriate microbial spectrum of activity, dose, frequency and route of administration are assessed and adjusted accordingly. Investigation results are reviewed promptly when they are reported.
8	**Surgical and procedural prophylaxis** A patient having surgery, or a procedure is prescribed antimicrobial prophylaxis in accordance with the current *Therapeutic Guidelines* or evidence-based, locally endorsed guidelines. This includes recommendations about the need for prophylaxis, choice of antimicrobial, dose, route and timing of administration, and duration.

References

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