Australian Commission on **Safety and Quality** in Health Care

NATIONAL MEDICINES SYMPOSIUM 2026

Antimicrobial Stewardship (AMS)

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Overview

NMS theme:

'Medicines stewardship: safer use starts with all of us'

- Using all drugs responsibly and judiciously is a key tenet of medicine
- Antimicrobials are 'special'
- Few drug classes where misusing in one patient can affect care for another patient
  - Antimicrobial resistance

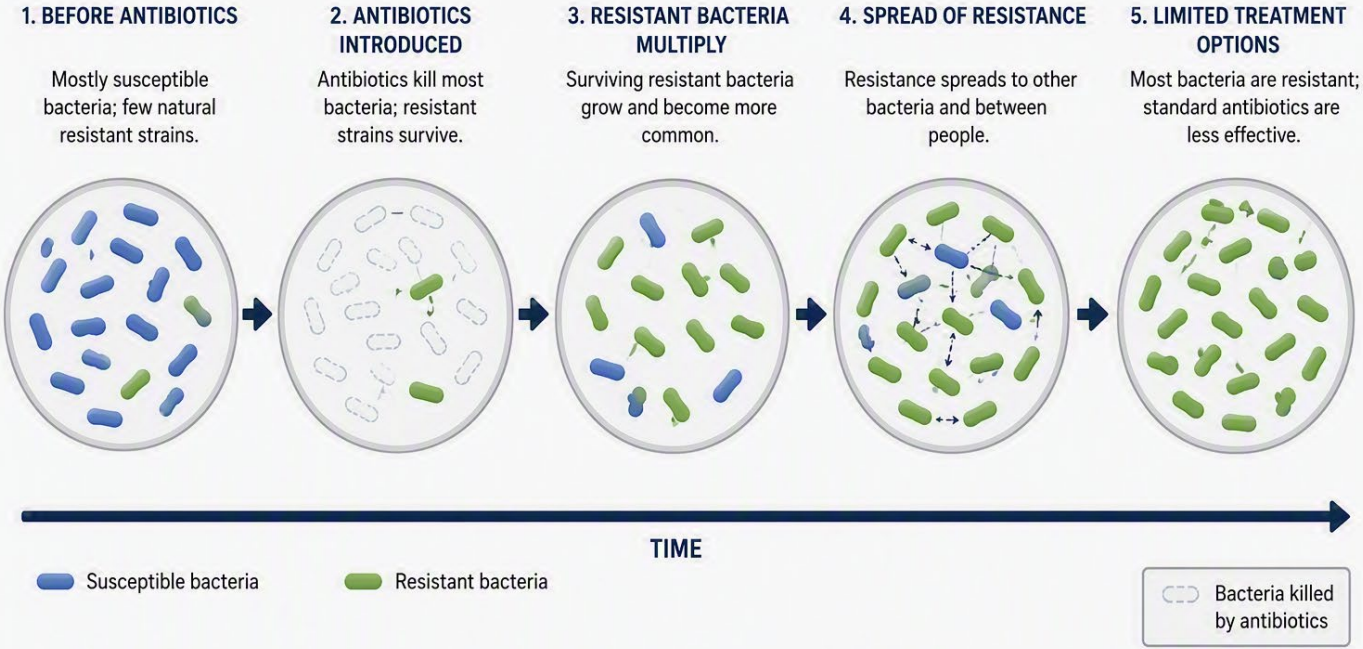
What is Antimicrobial Resistance (AMR)?

Antimicrobials is the term used to refer to all antibiotics, antivirals, antifungals, and antiparasitic agents. They are each important medicines that treat and prevent infections caused by microorganisms, including bacteria, viruses, fungi and parasites.

Antimicrobial resistance (AMR) is the failure of an antimicrobial to effectively treat or prevent an infection that it was previously able to. This means that a microorganism has developed resistance to an antimicrobial.

- AMR affects all antimicrobials, not just antibiotics.
- AMR is a growing problem in healthcare settings and in the community and poses a significant threat to public health.
- It is the microorganisms that is resistant, not the patient and not the drug

ANTIMICROBIAL RESISTANCE: EVOLVING OVER TIME



What is Antimicrobial Stewardship (AMS)?

Antimicrobial stewardship includes a range of activities and strategies that promote and support optimal antimicrobial prescribing and use.

The goals of antimicrobial stewardship are to:

- Ensure the appropriate use and review of antimicrobials to optimise patient outcomes, lessen the harm of adverse effects and decrease antimicrobial resistance.
- Ensure that a patient receives safe and appropriate antimicrobial therapy for the treatment or prevention of an infection, including assurance when an antimicrobial is not needed.

Why is AMS required?

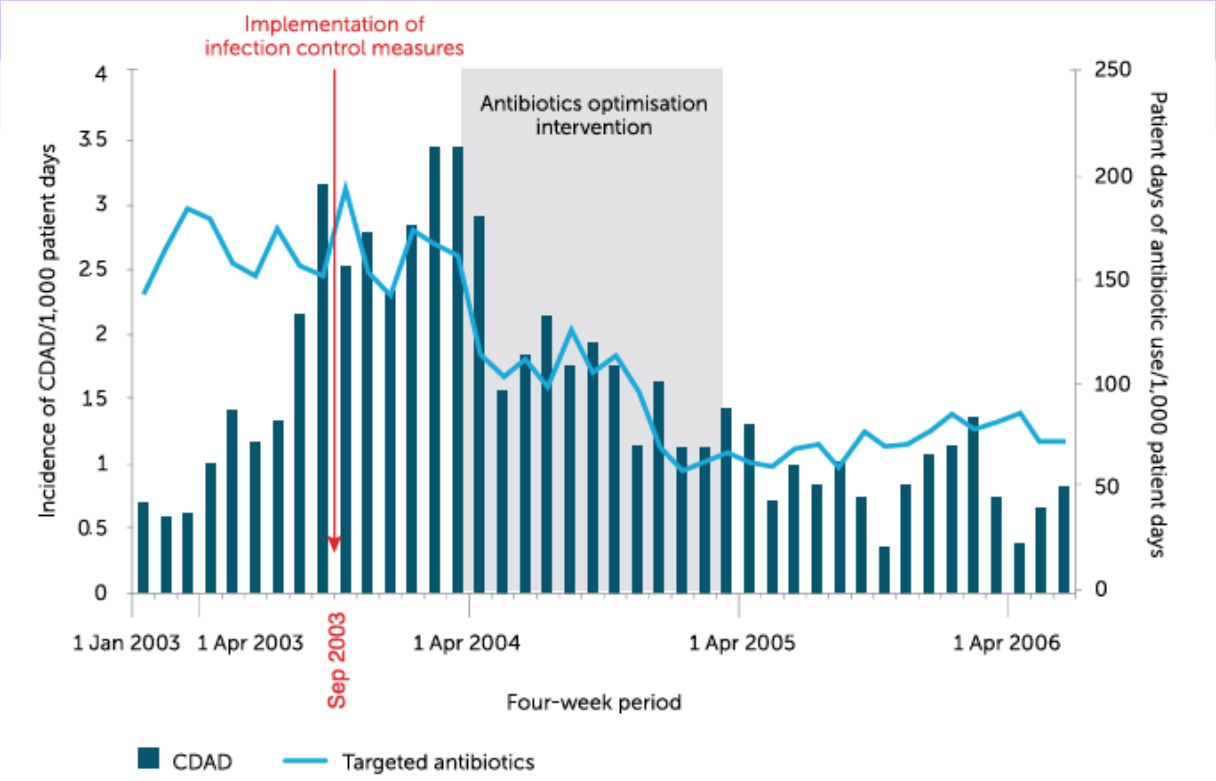
Inappropriate antimicrobial prescription is associated with:

- emergence of resistance
- Increased drug related adverse events
- Increased secondary infections
- Increased health care related costs

How is AMS performed?

- No definitive requirements, but usually a selection of options relevant to hospital that facilitate AMS
  - Approval systems
  - Prescribing review and feedback
  - AMS team rounds to review: indication, route, dose, duration etc.
  - Measurement of AMS activities

Is AMS effective for reducing AMR?

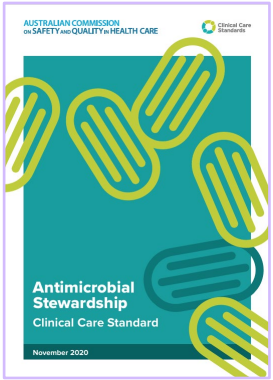


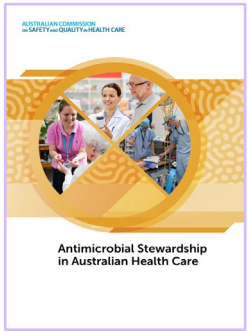
Valiquette et al. *Clin Infec Dis* 2009

Australian Commission on Safety and Quality in Health Care resources

The Commission has a range of resources available to support antimicrobial stewardship implementation including:

- Antimicrobial Stewardship Clinical Care Standard
- Antimicrobial Stewardship in Australian Health Care (the AMS Book)
- Decision support tools for specific conditions (consumers)





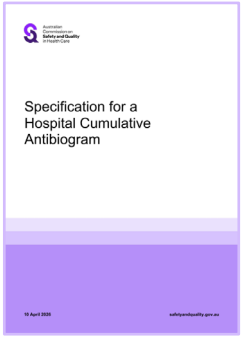
Australian Commission on Safety and Quality in Health Care resources

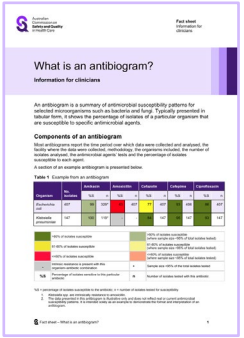
New and updated resources:

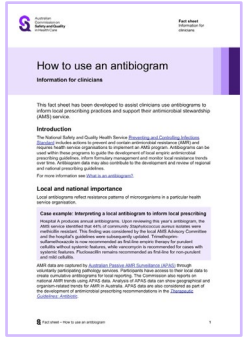
- Specification for a Hospital Cumulative Antibiogram
- What is an antibiogram?
- How to use an antibiogram

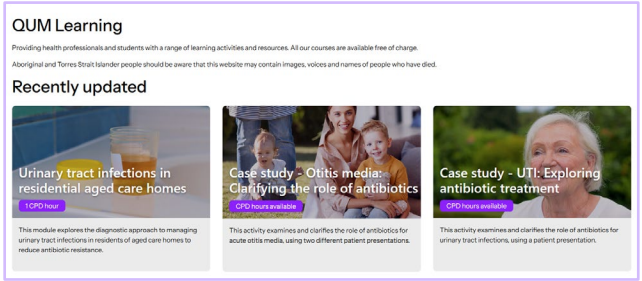
Recently updated QUM Learning modules:

- Urinary tract infections in residential aged care homes
- Case study – Otitis media: Clarifying the role of antibiotics
- Case study – UTI: Exploring antibiotic treatment









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Thank you

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