

## ANTIMICROBIAL STEWARDSHIP

**NOTE:** This ROP applies to organizations providing the following services: inpatient acute care, inpatient cancer, inpatient rehabilitation, and complex continuing care.

**The organization has a program for antimicrobial stewardship to optimize antimicrobial use.**

### GUIDELINES

Use of antimicrobial agents is an important health intervention, yet may result in unintended consequences including toxicity, the selection of pathogenic organisms, and the development of organisms resistant to antimicrobial agents. Antibiotic resistant organisms may have a substantial impact on the health and safety of clients, and the resources of health care system.

Antimicrobial stewardship is an activity that includes appropriate selection, dosing, route, and duration of antimicrobial therapy. The primary focus of an antimicrobial stewardship program is to optimize the use of antimicrobials to achieve the best patient outcomes, reduce the risk of infections, reduce or stabilize levels of antibiotic resistance, and promote patient safety.

Effective antimicrobial stewardship in combination with a comprehensive infection control program has been shown to limit the emergence and transmission of antimicrobial-resistant bacteria. Studies also indicate that antimicrobial stewardship programs are cost effective, and provide savings through reduced drug costs and avoidance of microbial resistance.

A comprehensive, evidence-based antimicrobial stewardship program may include a number of interventions based on local antimicrobial use and available resources. Possible interventions include:

- Prospective audit and feedback
- Formulary of targeted antimicrobials and approved indications
- Education
- Guidelines and clinical pathways
- Antimicrobial order forms
- Streamlining or de-escalation of therapy
- Dose optimization
- Parenteral to oral conversion

Organizations are encouraged to tailor an approach to antimicrobial stewardship consistent with their size, service environment, and patient population, and to establish processes for ongoing monitoring and improvement of the program over time.

A successful antimicrobial stewardship program requires an inter-disciplinary approach, with collaboration between the antimicrobial stewardship team, pharmacy, and hospital infection control. The involvement and support of hospital administrators, medical staff leadership, and health care providers is essential.

## TESTS FOR COMPLIANCE

Major	The organization implements an antimicrobial stewardship program.
Major	The program includes lines of accountability for implementation.
Major	The program is inter-disciplinary involving pharmacists, infectious diseases physicians, infection control specialists, physicians, microbiology staff, nursing staff, hospital administrators, and information system specialists, as available and appropriate.
Major	The program includes interventions to optimize antimicrobial use that may include audit and feedback, a formulary of targeted antimicrobials and approved indications, education, antimicrobial order forms, guidelines and clinical pathways for antimicrobial utilization, strategies for streamlining or de-escalation of therapy, dose optimization, and parenteral to oral conversion of antimicrobials (where appropriate).
Minor	The organization establishes mechanisms to evaluate the program on an ongoing basis, and shares results with stakeholders in the organization.

## REFERENCE MATERIAL

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