

# ANTIMICROBIAL STEWARDSHIP PROGRAM

## What is an Antimicrobial Stewardship Program?

An Antimicrobial Stewardship Program is a set of systematic activities aimed to promote the appropriate use of antimicrobials.



### The program goals are to:

- ❑ Improve quality of patient care and patient outcomes
- ❑ Minimize side effects from antimicrobials
- ❑ Limit the development of antimicrobial resistance
- ❑ Educate providers on when to prescribe antimicrobials, and the right drug, dose and duration to use

## Why is Antimicrobial Stewardship Program needed?



- ❑ Up to 75% of antimicrobial use is considered inappropriate
- ❑ Inappropriate use will increase antimicrobial resistance and lead to unwanted side effects (*Clostridium difficile* infection)
- ❑ An Antimicrobial Stewardship Program can improve patient outcomes and reduce inappropriate antimicrobial use

Estimated minimum number of illnesses and deaths caused by antibiotic resistance\*:

At least  **2,049,442** illnesses,  
 **23,000** deaths

\*bacteria and fungus included in this report

Estimated minimum number of illnesses and death due to *Clostridium difficile* (*C. difficile*), a unique bacterial infection that, although not significantly resistant to the drugs used to treat it, is directly related to antibiotic use and resistance:

At least  **250,000** illnesses,  
 **14,000** deaths

  
ANTIBIOTICS ARE RESPONSIBLE  
FOR ALMOST  
**1 OUT OF 5**  
EMERGENCY DEPARTMENT VISITS  
FOR ADVERSE DRUG EVENTS

## How can Antimicrobial Stewardship Program be implemented?

### Practical steps of implementation include:

1. Obtain program support from facility leadership
2. Partner with regional physicians or pharmacists with infectious diseases or antimicrobial stewardship expertise
3. Form an Antimicrobial Stewardship Committee
4. Review data on infection assessment practices, and antimicrobial use and resistance patterns
5. Determine program goals such as the types and extents of interventions (e.g., use assessment tools for all suspected infections, eliminate treatment of asymptomatic bacteriuria)
6. Educate prescribers and staff on the types, reasons and goals of the selected interventions
7. Track outcomes after implementation of interventions
8. Report and educate program activities and outcomes to prescribers, staff and residents/families



## Who should be part of the program?

### Ideally everyone who is involved in the antibiotic use process:

- ❑ Medical Directors: set standards for antibiotic prescribing practices
- ❑ Directors of Nursing: set standards for nursing practices
- ❑ Infection Preventionists: be responsible for the Infection Prevention and Control Program and support Antimicrobial Stewardship Program activities
- ❑ Consultant Pharmacists: perform drug use review, provide antibiotic use data and assist with developing treatment guidelines
- ❑ Prescribers: prescribe antimicrobials only when clearly indicated
- ❑ Nursing staff: evaluate patient using standardized assessment tools and communicate patients' symptoms to prescribers