

# Hospital Antibiotic Stewardship Program



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# Summary of Core Elements of Hospital Antibiotic Stewardship Programs

**Leadership Commitment:** Dedicating necessary human, financial and information technology resources

**Accountability:** Appointing a single leader responsible for program outcomes. Experience with successful programs show that a physician leader is effective

**Drug Expertise:** Appointing a single pharmacist leader responsible for working to improve antibiotic use.

**Action:** Implementing at least one recommended action, such as systemic evaluation of ongoing treatment need after a set period of initial treatment (i.e. “antibiotic time out” after 48 hours)

**Tracking:** Monitoring antibiotic prescribing and resistance patterns

**Reporting:** Regular reporting information on antibiotic use and resistance to doctors, nurses and relevant staff

**Education:** Educating clinicians about resistance and optimal prescribing

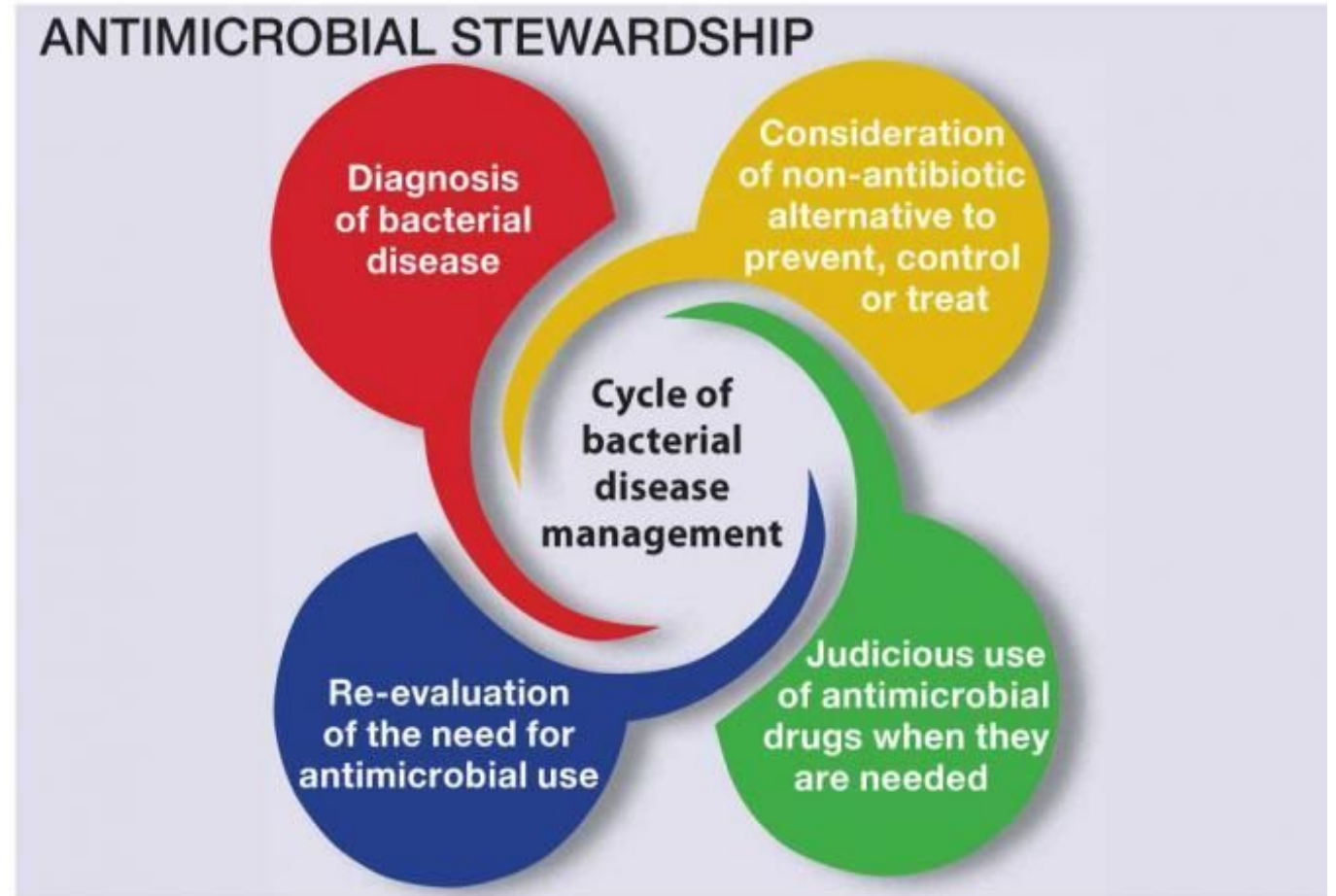
Table

## CDC's seven core elements of antimicrobial stewardship

1	Leadership commitment	
2	Accountability	
3	Drug expertise	
4	Action	
5	Tracking	
6	Reporting	
7	Education	

# Hospital Antibiotic Stewardship Program

- **Leadership Commitment:**  
Dedicating necessary human, financial and information technology resources



# Hospital Antibiotic Stewardship Program

- **Accountability:** Appointing a single leader responsible for program outcomes. Experience with successful programs show that a physician leader is effective

## Stewardship Team



# Hospital Antibiotic Stewardship Program

Appointing a single pharmacist leader responsible for working to improve antibiotic use.

## IDSA Antibiotic Stewardship Guidelines

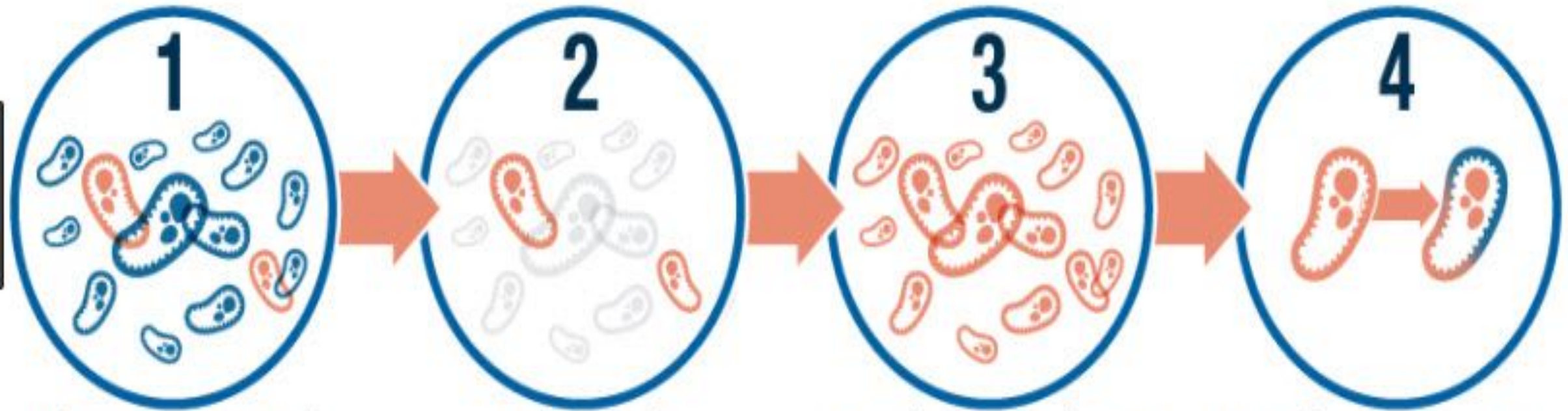
Dellit TH, et al. Clin Infect Dis. 2007;44:159-77

**Definition:** Judicious use of antimicrobials in order to improve patients outcomes, control resistance and decrease healthcare expense

**Achieved through:**



# How does antibiotic resistance occur?



1  
High number of bacteria.  
A few of them are resistant  
to antibiotics.

2  
Antibiotics kill  
bacteria causing the illness,  
as well as good bacteria  
protecting the body  
from infection.

3  
The resistant bacteria now  
have preferred conditions to  
grow and take over.

4  
Bacteria can even transfer  
their drug-resistance to other  
bacteria, causing more  
problems.

# Hospital Antibiotic Stewardship Program

- **Action:** Implementing at least one recommended action, such as systemic evaluation of ongoing treatment need after a set period of initial treatment (i.e. “antibiotic time out” after 48 hours)





# Hospital Antibiotic Stewardship Program

- **Tracking:** Monitoring antibiotic prescribing and resistance patterns

Do I really need antibiotics?



## SAY YES TO ANTIBIOTICS

when needed for certain infections caused by **bacteria**.



## SAY NO TO ANTIBIOTICS

for **viruses** such as colds and flu, or runny noses, even if the mucus is thick, yellow or green. Antibiotics also won't help for some common bacterial infections including most cases of bronchitis, many sinus infections, and some ear infections.



Antibiotics are only needed for treating certain infections caused by bacteria.

Antibiotics do not work on viruses.

# Hospital Antibiotic Stewardship Program

- **Reporting:** Regular reporting information on antibiotic use and resistance to doctors, nurses and relevant staff

# Hospital Antibiotic Stewardship Program

- **Education:** Educating clinicians about resistance and optimal prescribing

# Hospital Antibiotic Stewardship Program

# Hospital Antibiotic Stewardship Program

- Outcome measures

# Hospital Antibiotic Stewardship Program

- Outcome measures
- Antibiotics use in hosp
- Appropriate use
- Adverse Drug Reaction

# Hospital Antibiotic Stewardship Program

- Education

# Hospital Antibiotic Stewardship Program

- Education
- when
- which
- how much
- how long
- whom all
- when to stop



# Hospital Antibiotic Stewardship Program

- Emerging Developments in Antibiotic Stewardship



**BE  
ANTIBIOTICS  
AWARE**

**SMART USE, BEST CARE**

# Hospital Antibiotic Stewardship Program

- Emerging  
Developments in  
Antibiotic Stewardship

- Best antibiotics
- Best Suited
- Best Routes
- Best Doses
- Best Compliances
- Best markers
- Best Pharmaco...

# Questions

- Classification
- Aware

- Best practices