Antimicrobial Stewardship Program
Objectives

• Outline the definition and goals of an Antimicrobial Stewardship Program (ASP)
• Discuss emerging issues in antimicrobial resistance and the implications for antimicrobial drug use in healthcare facilities
• Explain the components of the Jackson Health System ASP
Antimicrobial Resistance is an Emerging Global Problem...

How Antibiotic Resistance Happens

1. Lots of germs. A few are drug resistant.
2. Antibiotics kill bacteria causing the illness, as well as good bacteria protecting the body from infection.
3. The drug-resistant bacteria are now allowed to grow and take over.
4. Some bacteria give their drug-resistance to other bacteria, causing more problems.

Centers for Disease Control and Prevention. 2013.
Antimicrobial Stewardship

• Definition: “Coordinated interventions designed to improve and measure the appropriate use of antimicrobials by promoting the selection of the optimal antimicrobial drug regimen, dose, duration of therapy, and route of administration”

• Goals of antimicrobial stewardship
  – Achieve optimal clinical outcomes related to antimicrobial use
  – Minimize toxicity and other adverse events
  – Reduce the costs of health care for infections
  – Limit the selection for antimicrobial resistant strains

CDC Core Elements of Hospital ASPs

- **Leadership Commitment:** Allow for dedicated time, resources, and participation
- **Accountability:** Assign a stewardship program leader responsible for program outcomes
- **Drug Expertise:** Identify a pharmacist leader
- **Action:** Implement at least one recommended action/intervention
- **Tracking:** Monitor prescribing and resistance patterns
- **Reporting:** Regular reporting on antibiotic use, resistance, and outcome measures
- **Education:** Educate clinicians about resistance and optimal prescribing

Centers for Disease Control and Prevention. 2014.
CMS Standards

• Stipulate that the following goals are met:
  – Coordinate among all components of the hospital responsible for antibiotic use and factors that lead to antimicrobial resistance
  – Document the evidence-based use of antibiotics
  – Demonstrate improvements in proper antibiotic use
    • Reduction in Clostridium difficile infections
    • Reduction in antibiotic resistance

• Went into effect January 1, 2017
ASP at Jackson Health System

- Established in 2003
- Prospective audit and feedback for targeted antimicrobials
- Formulary maintenance
- Policy and protocol development
- Antimicrobial surveillance through Vigilanz software
- Antimicrobial restrictions with approval process
...We are all part of the solution!

- Take an antibiotic “Time Out” as part of your daily rounds
- Reassess antimicrobial therapy based on available cultures and susceptibilities
- Pick the correct drug, dose, and duration
- De-escalate broad spectrum antimicrobials whenever possible
- Stop antimicrobials when no longer needed
- Wash your hands
- Adhere to contact precautions