

Antibiotic stewardship – the ultimate return on investment

**Get Smart
About Antibiotics Week**
Wednesday, November 16, 2011



Did you know?

1. Antibiotic resistance is one of the world's most pressing public health threats.
2. Antibiotics are the most important tool we have to combat life-threatening bacterial diseases, but antibiotics can have side effects.
3. Antibiotic overuse increases the development of drug-resistant germs.
4. Patients, healthcare providers, hospital administrators, and policy makers must work together to employ effective strategies for improving antibiotic use – ultimately improving medical care and saving lives.

Save money with antibiotic stewardship

Antibiotic stewardship programs and interventions help ensure that patients get the right antibiotics at the right time for the right duration. Numerous studies have shown that implementing an antibiotic stewardship program can not only save lives, but can save significant healthcare dollars. Inpatient antibiotic stewardship programs have consistently demonstrated annual savings to hospitals and other healthcare facilities of \$200,000 to \$400,000.

- According to a University of Maryland study, implementation of one antibiotic stewardship program saved a total of \$17 million over 8 years at one institution.
 - After the program was discontinued, antibiotic costs increased over \$1 million in the first year (an increase of 23 percent) and continued to increase the following year.
- In a study conducted at The Johns Hopkins Hospital, it was demonstrated that guidelines for management of community-acquired pneumonia could promote the use of shorter courses of therapy, saving money and promoting patient safety.
- Targeting certain infections may decrease antibiotic use. For example, determining when and how to treat patients for urinary tract infections, the second most common bacterial infection leading to hospitalization, can lead to improved patient outcomes and cost savings.

Antibiotic stewardship programs are a “win-win” for all involved.

- A University of Maryland study showed one antibiotic stewardship program saved a total of \$17 million over 8 years.
- Antibiotic stewardship helps improve patient care and shorten hospital stays, thus benefiting patients as well as hospitals.

Why we must act now

- The way we use antibiotics today or in one patient directly impacts how effective they will be tomorrow or in another patient; they are a shared resource.
- Antibiotic resistance is not just a problem for the person with the infection. Some resistant bacteria have the potential to spread to others – promoting antibiotic-resistant infections.
- Since it will be many years before new antibiotics are available to treat some resistant infections, we need to improve the use of antibiotics that are currently available.

Promote antibiotic best practices – a first step in Antibiotic Stewardship:

1. Ensure all orders have dose, duration, and indications
2. Get cultures before starting antibiotics
3. Take an “antibiotic timeout,” reassessing antibiotics after 48-72 hours

Healthcare facility administrators and payers

- Make appropriate antibiotic use a quality improvement and patient safety priority.
- Focus on reducing unnecessary antibiotic use, which can reduce antibiotic-resistant infections, reduce *Clostridium difficile* infections, and reduce costs, while improving patient outcomes.
- Emphasize and implement antibiotic stewardship programs and interventions for every facility – regardless of facility setting and size.
- Monitor Healthcare Effectiveness Data and Information Set (HEDIS®) performance measures on pharyngitis, upper respiratory infections, acute bronchitis, and antibiotic utilization.

Antibiotic Stewardship in your facility will:

- ↓ **Decrease** antibiotic resistance
- ↓ **Decrease** *C. difficile* infections
- ↓ **Decrease** costs
- ↑ **Increase** good patient outcomes



Centers for Disease Control and Prevention

For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-63548
Email: cdcinfo@cdc.gov Web: <http://www.cdc.gov/getsmart/> Web: