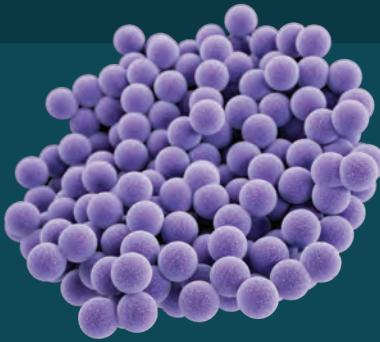


## EVIDENCE SUMMARY

# Prevent Healthcare-Associated Infections



## WHAT IS CDC'S 6|18 INITIATIVE?

The CDC is partnering with health care purchasers, payers, and providers to improve health and control health care costs. CDC provides these partners with rigorous evidence about high-burden health conditions and associated interventions to inform their decisions to have the greatest health and cost impact. This initiative aligns evidence-based preventive practices with emerging value-based payment and delivery models.

## PROPOSED PAYER INTERVENTION

**Require antibiotic stewardship programs in all hospitals and skilled nursing facilities.**

## WHO'S AT RISK?

At least 2 million illnesses and 23,000 deaths can be attributed each year to antibiotic-resistant infections. Nearly 900,000 cases of antibiotic-resistant infections were reported in 2010. Preliminary 2014 data suggest more than 40% of U.S. acute care hospitals have antibiotic stewardship programs that incorporate the CDC Core Elements for Hospital Antibiotic Stewardship Programs.<sup>1</sup>



## OPPORTUNITIES FOR PAYERS AND PROVIDERS

Continue work with CMS to expand conditions of participation to assure antibiotic stewardship programs in a broader range of health care settings.



## KEY HEALTH AND COST EVIDENCE MESSAGES FOR PAYERS AND PROVIDERS

Payers can promote the adoption of antibiotic guidelines that restrict widespread broad-spectrum use. Pharmacists and infectious disease staff can recommend discontinuing antibiotics or provide alternatives to prescribers. This can decrease antibiotic resistance and significantly reduce deadly diarrheal infections.

## CURRENT PAYER COVERAGE (AS OF AUGUST 2015)

### MEDICARE

- ✓ Proposed revision of Conditions of Participation to require antibiotic stewardship programs for long-term care and acute care settings aligning with CDC's Core Elements of Antibiotic Stewardship Programs.

### MEDICAID

- ✓ Proposed revision of Conditions of Participation to require antibiotic stewardship programs for long-term care and acute care settings aligning with CDC's Core Elements of Antibiotic Stewardship Programs.

### COMMERCIAL/PRIVATE

- ✓ Not required.
- ✓ Anthem, Blue Cross (CA): Quality-In-Sights®, Hospital Incentive Program (Q-HIP®), national hospital quality and value-based payment initiative, intended rollout in 2016.

## SUPPORTING HEALTH AND COST EVIDENCE: SCIENCE BEHIND THE ISSUE

**A study implementing the CDC Antibiotic Stewardship Guidelines resulted in 25% of antimicrobial orders being modified (86% resulted in less-expensive therapy, and 47% resulted in use of a drug with a narrower spectrum of activity), significantly increasing microbiologically based prescribing (63% vs. 27%).** Stepwise implementation of an antimicrobial stewardship program demonstrated progressive decreases in antimicrobial consumption and savings of \$913,236 over 18 months.<sup>2</sup>



**A study of an intervention that led Canadian medical trainees to implement CDC-recommended antibiotic "time outs" reduced antibiotic costs on the unit from \$149,743 (Canadian dollars) (January 2011 to January 2012) to \$80,319 (January 2012 to January 2013), for a savings of \$69,424 (46% reduction).<sup>3</sup>**



**A pharmacist records review of inpatients who were prescribed two or more antibiotics in order to identify redundant combinations identified 70% of combinations investigated were inappropriate.** The pharmacist-stewardship intervention was projected to have saved \$10,800 and 584 days of reduction in antibiotic combination days.<sup>4</sup>

## REFERENCES

1. CDC. Core Elements of Hospital Antibiotic Stewardship Programs. Atlanta, GA: US Department of Health and Human Services, CDC; 2014. Available at <http://www.cdc.gov/getsmart/healthcare/pdfs/core-elements.pdf>
2. Dellit TH, Owens RC, McGowan JE, Gerding DN, Weinstein RA, Burke JP, et al. Infectious Diseases Society of America and the Society for Healthcare Epidemiology/Burden of America Guidelines for Developing an Institutional Program to Enhance Antimicrobial Stewardship. Clinical Infectious Diseases. 2007;44(2):159-77. doi: 10.1086/510393. Available from: <http://www.journals.uchicago.edu/doi/pdf/10.1086/510393>
3. Lee TC, Frenette C, Jayaraman D, Green L, Pilote L. Antibiotic self-stewardship: trainee-led structured antibiotic time-outs to improve antimicrobial use. Ann Intern Med. 2014 Nov 18;161(10 Suppl):S53-8. doi: 10.7326/M13-3016
4. Glowacki RC, Schwartz DN, Itokazu GS, Wisniewski MF, Kieszkowski P, Weinstein RA. Antibiotic combinations with redundant antimicrobial spectra: clinical epidemiology and pilot intervention of computer-assisted surveillance. Clinical Infectious Diseases. 2003;37(1):59-64.

