

What's New in the Patient Safety World

July 2016

NQF/CDC Guideline on Antibiotic Stewardship

With the continued emergence of pathogens resistant to multiple antibiotics there is a renewed urgency to optimize use of antibiotics. The latest CDC report notes that 20-50 percent of antibiotics prescribed in hospitals are unnecessary or inappropriate ([CDC 2016](#)). Antibiotic stewardship programs have proven to be successful in hospitals at reducing antibiotic resistance (see or October 14, 2014 Patient Safety Tip of the Week “[Antibiotic Stewardship](#)”). And we also discussed antibiotic stewardship in ambulatory and long-term care settings in our November 2015 What's New in the Patient Safety World column “[Medications Most Likely to Harm the Elderly Are...](#)”.

Despite the push to get antibiotic stewardship programs functioning at high levels, a recent study found that among 4,184 U.S. hospitals, 39% reported having an antibiotic stewardship program that met all seven CDC-defined core elements ([Pollack 2016](#)). 59% of hospitals with greater than 200 beds had such programs but only 25% of hospitals with less than 50 beds reported achieving all seven CDC-defined core elements of a comprehensive ASP.

In our November 2015 What's New in the Patient Safety World column “[Medications Most Likely to Harm the Elderly Are...](#)” we mentioned that the National Quality Forum had recently announced a new initiative on antibiotic stewardship. That resource is now available. [Antibiotic Stewardship in Acute Care: A Practical Playbook](#) is produced by the NQF and numerous partner organizations, including the CDC ([NQF 2016](#)).

For each of the CDC core elements the Playbook includes a brief rationale and overview, examples for implementation, potential barriers and suggested solutions, and suggested tools and resources. The seven CDC-defined core elements ([CDC 2016](#)) of a comprehensive antibiotic stewardship program are:

1. **Leadership Commitment:** Dedicate necessary human, financial, and information technology resources.
2. **Accountability:** Appoint a single leader responsible for program outcomes who is accountable to an executive-level or patient quality-focused hospital committee. Experience with successful programs shows that a physician leader is effective.
3. **Drug Expertise:** Appoint a single pharmacist leader responsible for working to improve antibiotic use.

4. **Action:** Implement 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).
5. **Tracking:** Monitor process measures (e.g., adherence to facility-specific guidelines, time to initiation or de-escalation), impact on patients (e.g., Clostridium difficile infections, antibiotic-related adverse effects and toxicity), antibiotic use, and resistance.
6. **Reporting:** Report the above information regularly to doctors, nurses, and relevant staff.
7. **Education:** Educate clinicians about disease state management, resistance, and optimal prescribing.

The Playbook does a very good job of identifying potential barriers and suggesting solutions. For each core element it also provides links to resources available to help with that element. Such resources include not only those pertinent to patient safety but also those involved in making the business case for a good antibiotic stewardship program. It also provides examples of potential interventions (system interventions, patient-specific interventions, and diagnosis- and infection-specific interventions). It offers suggestions on tracking both process and outcome measures and antibiotic use.

You’ll find the Playbook a very valuable tool, both for getting your antibiotic stewardship program up to snuff (meeting the 7 CDC-defined elements) and taking it to the next level. It will also help you get ready to meet The Joint Commission’s proposed new standards on antibiotic stewardship ([TJC 2015](#)).

Other excellent resources on antibiotic stewardship are available for free from the Pennsylvania Patient Safety Authority ([Adkins 2015](#), [Bradley 2015](#)), [The Joint Commission](#), the [CDC](#), and [Johns Hopkins Hospital](#). The [CDC core elements document](#) has a nice checklist for you to see if your organization is meeting the core elements of a good antibiotic stewardship program.

And, as we were getting ready to publish this column, CMS has announced that hospitals will be required to have antibiotic stewardship programs and demonstrate that they have reduced inappropriate antibiotic usage ([CMS 2016](#)).

Some of our prior columns on antibiotic stewardship:

- October 14, 2014 [“Antibiotic Stewardship”](#)
- November 2015 [“Medications Most Likely to Harm the Elderly Are...”](#)
- July 2016 [“NQF/CDC Guideline on Antibiotic Stewardship”](#)

References:

CDC (Centers for Disease Control and Prevention). Core Elements of Hospital Antibiotic Stewardship Programs. Page last updated: May 25, 2016

<http://www.cdc.gov/getsmart/healthcare/implementation/core-elements.html>

Pollack LA, van Santen KL, Weiner LM, et al. Antibiotic stewardship programs in U.S. acute care hospitals: findings from the 2014 National Healthcare Safety Network (NHSN) Annual Hospital Survey. Clin Infect Dis 2016; First published online: May 19, 2016

<http://cid.oxfordjournals.org/content/early/2016/05/18/cid.ciw323.abstract>

NQF (National Quality Forum) National Quality Partners Antibiotic Stewardship Action Team. Antibiotic Stewardship in Acute Care: A Practical Playbook. May 2016

http://www.qualityforum.org/Publications/2016/05/Antibiotic_Stewardship_Playbook.aspx?utm_source=external&utm_medium=link&utm_term=ABX&utm_content=Playbook&utm_campaign=ABX

TJC (The Joint Commission). Proposed Standard for Antimicrobial Stewardship in AHC, CAH, HAP, NCC, and OBS. The Joint Commission 2015; November 2015

https://jointcommission.azure.qualtrics.com/CP/File.php?F=F_5tDHGzIVDMHenDn

Adkins J, Bradley S, Finley E. Strategies to Turn the Tide against Inappropriate Antibiotic Utilization. Pa Patient Saf Advis 2015; 12(4):149-157

<http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2015/Dec;12%284%29/Pages/149.aspx>

Bradley S. Antibiotic Stewardship in Hospitals and Long-Term Care Facilities: Building an Effective Program. Pa Patient Saf Advis 2015; 12(2): 71-78

<http://patientsafetyauthority.org/ADVISORIES/AdvisoryLibrary/2015/Jun;12%282%29/Pages/71.aspx>

CDC (Centers for Disease Control and Prevention). Get smart for healthcare website. Page last updated: January 13, 2016

<http://www.cdc.gov/getsmart/healthcare/>

The Joint Commission. Antimicrobial Stewardship Toolkit.

http://www.jointcommission.org/topics/hai_antimicrobial_stewardship.aspx

Johns Hopkins Medicine. JHH Antibiotic Management Guidelines (updated annually).
<http://www.hopkinsmedicine.org/AMP>

CMS (Centers for Medicare & Medicaid Services). CMS Issues Proposed Rule that Prohibits Discrimination, Reduces Hospital-Acquired Conditions, and Promotes Antibiotic Stewardship in Hospitals. June 13, 2016
<https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-06-13.html>

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