

# What's New in the Patient Safety World

August 2016

## Some Reassurance on Antibiotic Stewardship

Last month we discussed new guidelines on antibiotic stewardship (see our July 2016 What's New in the Patient Safety World column "[NQF/CDC Guideline on Antibiotic Stewardship](#)") and in our several other prior columns on antibiotic stewardship listed below we've noted the overprescription of antibiotics for inappropriate indications, both in hospitals and ambulatory settings.

One such category where inappropriate antibiotic prescribing is rampant is the upper respiratory tract infection (RTI) that is usually self-limited and many of which are caused by viruses so are not amenable to antibiotic treatment. Many primary care practitioners remain concerned that failure to use antibiotics in such cases may lead to adverse consequences in their patients. They often have the impression that the primary reason for avoiding antibiotic prescribing is to prevent development of antibiotic-resistant organisms and that such concern applies to populations rather than to their individual patients. In fact, that's not true as we discussed in our November 2015 What's New in the Patient Safety World column "[Medications Most Likely to Harm the Elderly Are...](#)" that the medications most likely to harm the elderly are antibiotics.

But it would be reassuring to see a study showing that avoidance of antibiotics in such cases is, in fact, safe. So a recent study done in 601 general practices in the UK provides such welcome reassurance. Researchers used data from the UK Clinical Practice Research Datalink ([Gulliford 2016](#)). They found that general practices that adopt a policy to reduce antibiotic prescribing for RTIs might expect a slight increase in the incidence of treatable pneumonia and peritonsillar abscess. However, there was no increase likely in mastoiditis, empyema, bacterial meningitis, intracranial abscess, or Lemierre's syndrome. They estimate that if a general practice with an average list size of 7000 patients reduces the proportion of RTI consultations with antibiotics prescribed by 10%, then it might observe 1.1 more cases of pneumonia each year and 0.9 more cases of peritonsillar abscess each decade. They conclude that even a substantial reduction in antibiotic prescribing was predicted to be associated with only a small increase in numbers of cases observed overall, but caution might be required in subgroups at higher risk of pneumonia.

An accompanying editorial ([Del Mar 2016](#)) also finds some reassurance in these findings. Some rapid response letters ([Rapid Response 2016](#)) note the importance of adequate early followup and cooperation of parents when treating pediatric patients. But another of the rapid response letters reveals a critical root cause of overprescribing antibiotics – the

already harried general practitioner fears his workday will become overburdened by patients returning for an additional evaluation.

In our July 2016 What's New in the Patient Safety World column “[NQF/CDC Guideline on Antibiotic Stewardship](#)”) we noted that CMS has announced that hospitals will be required to have antibiotic stewardship programs and demonstrate that they have reduced inappropriate antibiotic usage ([CMS 2016](#)). Now The Joint Commission has also revised its standard regarding antibiotic stewardship, effective January 1, 2017 ([TJC, 2016](#)).

Elements of the new TJC standard for include:

1. Establishing antimicrobial stewardship as an organizational priority
2. Educating staff and practitioners involved in ordering, dispensing and monitoring antibiotics about antibiotic resistance and good stewardship practices both at the time of hiring or credentialing and periodically thereafter
3. Educating patients and families about appropriate use of antimicrobials
4. Establishing an antimicrobial stewardship team, including an infectious disease physician, infection preventionist(s), pharmacist(s), and practitioner(s) (note that they will allow part-time staff and even telemedicine consultants to fulfill some of the roles)
5. Ensuring the core elements of a good antibiotic stewardship program are in place (see below)
6. Ensuring the antimicrobial stewardship program uses organization-approved multidisciplinary protocols (for example, policies and procedures for things like formulary restrictions, C. diff treatment, parenteral to oral conversion, appropriateness of antibiotics for community acquired pneumonia, etc.)
7. Gathering, analyzing and reporting data on the program
8. Takes action on improvement opportunities identified in its antimicrobial stewardship program

As a reminder, 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 TJC prepublication document also provides links to some useful tools, such as materials for educating patients and their families

See our columns listed below for ways to deal with the problem of inappropriate antibiotic prescribing and antibiotic stewardship programs both in the hospital and the ambulatory setting.

**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:**

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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>

TJC (The Joint Commission). New Antimicrobial Stewardship Standard (Prepublication Requirements). June 24, 2016

[https://www.jointcommission.org/assets/1/6/HAP-CAH\\_Antimicrobial\\_Prepub.pdf](https://www.jointcommission.org/assets/1/6/HAP-CAH_Antimicrobial_Prepub.pdf)

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>



<http://www.patientsafetysolutions.com/>

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