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Reducing the Length of Outpatient Antibiotic Treatment – Is There an Easy Button for That?

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Antibiotic treatment guidelines have changed over the past decade. Whereas 10 days of antibiotics seemed to be the default, more recent research has demonstrated that for many infections, such as uncomplicated urinary tract infections or pneumonia, shorter durations are adequate.

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Antibiotic treatment guidelines have changed over the past decade. Whereas 10 days of antibiotics seemed to be the default, more recent research has demonstrated that for many infections, such as uncomplicated urinary tract infections or pneumonia, shorter durations are adequate.

Additionally, shorter antibiotic treatment regimens are associated with fewer adverse events and less antibiotic resistance. Thus, antibiotic treatment duration is an important target of antibiotic stewardship programs.

However, old habits die hard. How can we get prescribers to change their habits and prescribe antibiotics for shorter periods of time?

This week, *Pediatrics* is early releasing a report by Dr. Shan Sun and colleagues at Lurie Children's Hospital, entitled "Short Duration Electronic Health Record Option Buttons to Reduce Prolonged Length of Antibiotic Therapy in Outpatients," which describes an "Easy Button" that can result in reduced antibiotic treatment durations. (10.1542/peds.2020-034819).

The authors studied the impact of creating duration option buttons for 5 days and 7 days in the electronic health record for 7 antibiotics commonly used in the ambulatory setting. (There was also a 10-day button for amoxicillin and cefdinir, since they are often prescribed to treat strep pharyngitis.) Prescribers could also free text a different treatment duration.

What happened? Overall, there was a 5% decrease in 10-day antibiotic prescriptions, and this increased to a 9% decrease in clinic settings. There was no increase in re-orders, return visits, or inpatient admissions.

This type of intervention is known as a behavioral "nudge." A nudge presents a default option that makes the desired decision an easier one to make, while not eliminating other options. While prescribers were able to

choose any antibiotic duration they wanted, the EHR made it easier to choose shorter durations and indeed implied that these were the choices that were preferred by most prescribers.

The beauty of this intervention is its simplicity – no endless in-services or instructions were needed. They just added the buttons!

Since all of us are looking for easy ways to do the right thing, I would encourage you to read this article. This is something that many institutions and practices can easily implement within their electronic health record systems.

- International Practice Patterns of Antibiotic Therapy and Laboratory Testing in Bronchiolitis
- Parenteral Antibiotic Therapy Duration in Young Infants With Bacteremic Urinary Tract Infections
- Duration of Initial Empirical Antibiotic Therapy and Outcomes in Very Low Birth Weight Infants
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