

## Choosing Wisely: Pharmacy's role in effective use of medications

Choosing Wisely, an initiative led by the American Board of Internal Medicine, represents 415 evidence-based recommendations developed by more than 70 professional organizations to support the safe and effective use of diagnostics and treatments.<sup>1</sup> The recommendations are intended to be used by clinicians in discussions with patients to support decision-making related to the overuse of tests, procedures, and treatments in situations in which evidence does not support any benefit and the care may in fact cause harm.

An examination of the recommendations reveals that 110 (26.5%) are related to medications. Among these recommendations, the drug classes most commonly addressed are antimicrobials (21.8% of recommendations), neurologic or behavioral medications (15.4%), pain-management medications (6.4%), and anticoagulants, oncology medications, and hormones (5.5% each). These are followed by steroids (4.5%); antidiabetic, gastrointestinal, and cardiology agents (3.6% each); antihistamines (2.7%); and vaccines, nonprescription drugs, and chelating agents (1.8% each). Other drug classes account for the remaining 22 medication-related recommendations.

Mark Chassin, M.D., chief executive officer of the Joint Commission, and Robert Galvin<sup>2</sup> determined that healthcare quality problems can be grouped into three categories: underuse, overuse, and misuse. The application of these categories to medication use has been recommended as the foundation for a strategic plan for quality in pharmacy practice.<sup>3</sup> Overuse has been responsible for a variety of iatrogenic problems, many of which are medication related; examples include antimicrobial resistance, harm due to opioids, and osteoporosis and pneumonia due to proton pump inhibitors. The Joint Commission has focused on overuse and in 2011 proposed a National Patient Safety Goal to “minimize the overuse of tests, treatments, and procedures to reduce the risk of patient harm.”<sup>4,5</sup> Recently, the National Summit on Overuse identified overuse as a patient safety and quality concern and recommended five areas of focus to reduce overuse, including antimicrobials for upper respiratory conditions.<sup>6</sup>

The goals of the Institute for Healthcare Improvement's Triple Aim initiative are to create value in healthcare by improving the quality of, patients' experience with, and the affordability of care.<sup>7</sup> Each of the professional organizations that developed Choosing Wisely recommendations have endeavored to provide clinicians with a blueprint to achieve these goals. As pharmacists, we know that polypharmacy

abounds, that less-than-optimal selection of medications exists, that transitions of care can lead to adverse drug events, and that comprehensive evaluation of medication therapy is often absent, as are appropriate follow up and monitoring. This leads us to ask, What should pharmacy's Choosing Wisely recommendations be? We can certainly adopt and support the evidence-based medication-related recommendations that have already been developed. We can also put forth evidence-based pharmacy recommendations that would be of value for our patients.

We offer here a few recommendations for consideration. This is not meant to be a complete list but rather the basis for starting a dialogue about our contribution to Choosing Wisely and engaging patients and members of the healthcare team to ensure the best use of medications.

- Do not prescribe medications for patients older than 65 years or for patients receiving five or more medications without a comprehensive review of their existing medications, including nonprescription and herbal medications, to determine whether any of the medications should and can be discontinued. This recommendation is consistent with the American Geriatrics Society's recommendation to not prescribe a medication without conducting a drug regimen review.
- Multiple recommendations relate to the overuse of antimicrobials empirically, for prophylaxis, and for treatment. A core element of antimicrobial stewardship programs is: Do not continue antimicrobials in the hospital beyond two days without a time-out to reassess the need for continuation, de-escalation, or escalation of therapy.<sup>8</sup>
- Do not continue medications in the hospital or ambulatory care setting on the basis of the medication history in the electronic health record unless the list has been verified with the patient by a healthcare professional who has knowledge and skills in the area of medications and the patient has been assessed for the continued need for therapy.
- Do not prescribe medications at discharge that patients were receiving before admission without verifying that the medications are still needed and that the discharge medications will not result in duplication, drug interactions, or adverse events.
- Do not continue medications indefinitely without a periodic (at least annual) comprehensive review to ensure that all medications are still indicated.
- Do not initiate anticoagulants without a thorough review of recent procedures and current medications, including nonprescription and herbal medications.
- Do not initiate medications to treat symptoms, adverse events, or side effects without determining if an existing therapy is the cause and whether a dosage reduction, discontinuation of a drug, or another medication is warranted.
- Do not take herbal medications prior to surgery without contacting the patient's physician.

## ■ Editorial

- Multiple recommendations relate to the overuse of proton pump inhibitors. The Society of Hospital Medicine's recommendation is this: Do not prescribe medications for stress ulcer prophylaxis to medical inpatients unless they are at high risk for gastrointestinal complications. A related recommendation for consideration is the following: Do not continue proton pump inhibitors unless patients have ulcers or are at risk for gastrointestinal complications.

As pharmacists, it is our responsibility to ensure that every patient has a comprehensive pharmacotherapy plan that includes desired outcomes, therapeutic goals and endpoints, timelines, and monitoring criteria. The plan should be developed in collaboration with the patient and the healthcare team and should be accessible and transferrable across all sites of care.<sup>9</sup> Given the potential for adverse events, reduction in adherence, and increased costs associated with medications that are not needed, it is incumbent on pharmacists to evaluate opportunities to reduce unnecessary medications. Let us begin by identifying pharmacy's Choosing Wisely recommendations.

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**Rita Shane, Pharm.D., FASHP, FCSHP**, Chief Pharmacy Officer  
Cedars-Sinai Medical Center  
Los Angeles, CA  
[rita.shane@cshs.org](mailto:rita.shane@cshs.org)

**Paul W. Abramowitz, Pharm.D., Sc.D.(Hon), FASHP**, Chief  
Executive Officer  
ASHP

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