

Editorials

Evaluating Diagnostic Tests: Introducing a New Feature in *AFP*

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Since 2003, *American Family Physician (AFP)* has published an ongoing series of short articles that systematically evaluate the attributes of new drugs using the STEPS (Safety, Tolerability, Effectiveness, Price, and Simplicity) framework.¹ Choosing an appropriate treatment is only half of the challenge, of course; first, physicians need to make the correct diagnosis. Diagnostic test selection and interpretation are essential skills in family medicine.

Elements of the diagnostic testing process include estimating the pretest probability of disease based on the history, physical examination, and disease prevalence; selecting a test that best balances accuracy with potential harms and costs; and calculating posttest probability based on the test result.² Other important factors to consider include test availability and how a test compares with alternative diagnostic strategies. Most importantly, we want to know whether performing a diagnostic test is likely to change patient management and improve patient-oriented outcomes.^{3,4}

Unfortunately, many tests are promoted and disseminated into practice without a thorough assessment of their benefits and harms, which can include false positives, overdiagnosis, excessive cost, and overtreatment. For example, recently marketed tests that may cause more harm than good include immunosignature for cancer and infections; a breath test for lung cancer; patch vital sign monitoring; and biomarkers for Alzheimer disease.⁵

In this issue of *AFP*, we introduce the new feature “Diagnostic Tests: What Physicians Need to Know,” with a review of a blood test for colorectal cancer screening.⁶ Similar to “STEPS: New Drug Reviews,” this feature uses a structured approach to review key test characteristics, including discussions of accuracy, benefits, harms, cost, and cost-effectiveness. It concludes with a clinical bottom line: Is there a role for this test in primary care practice and, if so, for which patients? We aim for this new feature to cut through the “hype” and provide independent, objective assessments of new diagnostic tests that readers are considering incorporating into their practices. If you have comments about this feature or want to recommend new tests for us to cover, please let us know at afpjournal@aafp.org.

Editor’s Note: Dr. Lin is Deputy Editor and Dr. Ebell is Deputy Editor for Evidence-Based Medicine for *AFP*.

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