When Less Is More for Patients in Laboratory Testing

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In the quest to improve quality health care and reduce unnecessary and wasteful costs, pathologists and laboratory professionals must always consider patients first. In the laboratory, diagnostic tests are one of our crucial links to patients. Although the analytic quality of a test is important, there must also be a medical reason to justify why a particular test is being ordered and how the results will contribute to effectively guiding patient management. Why is this test necessary for this patient? Are there equal or better alternatives to consider?

In these cases, pathologists and laboratory professionals can step forward and help clinicians become better stewards of medical laboratory resources. That is why the American Society for Clinical Pathology (ASCP) joined the Choosing Wisely campaign, initiated by the American Board of Internal Medicine (ABIM) Foundation, to start physicians, patients, and other health care stakeholders thinking and talking about the appropriate utilization for medical tests and procedures that provide little or no benefit and, in some cases, cause harm to patients. A multiyear initiative, the Choosing Wisely campaign will provide resources for consumers and physicians to engage in these important conversations. That means helping patients choose care that is supported by evidence, not duplicative of other tests and procedures already received, free from harm, and truly appropriate.

National medical societies such as the ASCP that have joined the Choosing Wisely campaign have identified 5 initial tests or procedures often used in their specialty whose use should be reconsidered. For example, in April 2012 the American College of Radiology (ACR) recommended that patients who do not have any signs or symptoms of heart or lung disease should reconsider the need for a chest x-ray before surgery. An x-ray is not necessary for low-risk patients, and it does carry the risk of unnecessary radiation exposure. Instead, the ACR suggests physicians carefully analyze a patient’s medical history and perform a physical exam before proceeding with a chest x-ray.

As of February 21, 2013, the ASCP joined the ABIM Foundation and other medical specialty societies to each announce the 5 tests or procedures commonly used in their respective professions whose necessity should be questioned. The initial 5 choices from the ASCP include examples of tests that are overused, add no patient management value, or should be used only with specific medical indications.

Pathologists and laboratory professionals understand that physicians should not order tests unless they know how they will use the result. Health care providers recognize that tests differ, and the appropriate one depends on the intended use: screening, diagnosis, or monitoring the patient. Although this appears logical, decisions regarding diagnostic strategy are not always entirely rational in practice. Physicians often contact their pathologists and inquire what they should do with a particular test result.

As health care has evolved in the United States, providers have become increasingly dependent on laboratory testing for patients, when focusing more on their medical and family history and a physical examination could be more beneficial. No laboratory test is analytically perfect; pathologists and laboratory professionals recognize there are both false positives and negatives. Laboratory tests, however, are usually so reliable that physicians and patients often do not realize they have limitations. Consulting a pathologist or key laboratory professional before ordering unfamiliar laboratory tests rather than afterward can improve diagnostic value while eliminating the misuse of resources.
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The Process for Determining the 5 Tests

The ASCP list of 5 initial tests that physicians and patients should question was spearheaded by the Society’s Institute Advisory Committee. The review panel examined hundreds of options based on both the practice of pathology and evidence available through an extensive review of the literature. These recommendations, if instituted, would result in higher quality care, lower costs, and more effective use of our laboratory resources and personnel.

The ASCP Identifies 5 Tests Physicians and Patients Should Question

1. Do not perform population-based screening for 25-OH vitamin D deficiency.

Vitamin D deficiency is common in many populations, particularly in patients at higher latitudes, during winter months, in people of color, and in those with limited sun exposure. Over-the-counter vitamin D supplements and increased summer sun exposure are sufficient for most otherwise healthy patients. Laboratory testing is appropriate in higher risk patients (eg, osteoporosis, chronic kidney disease, malabsorption, some infections, obese individuals) when results will be used to institute more aggressive therapy.1

2. Do not perform low-risk human papillomavirus (HPV) testing.

National guidelines provide for high-risk HPV testing in patients with certain abnormal Pap smears and in other select clinical indications. However, there is no medical indication for low-risk HPV testing because the infection is not associated with disease progression, and there is no treatment or therapy change indicated when low-risk HPV is identified.2

3. Avoid routine preoperative testing for low-risk surgeries without a clinical indication.

Most preoperative tests performed on elective surgical patients are normal. Findings influence management in less than 3% of patients tested. In almost all cases, no adverse outcomes are observed when clinically stable patients undergo elective surgery, irrespective of whether an abnormal test is identified. Preoperative testing is appropriate in symptomatic patients and those with risk factors for which diagnostic testing can provide clarification of patient surgical risk.3

4. Only order methylated septin 9 (SEPT9) on patients for whom conventional diagnostics are not possible.

SEPT9 is a plasma test to screen patients for colorectal cancer. Its sensitivity and specificity are similar to commonly ordered stool guaiac or fecal immunochemical tests. It offers an advantage over no testing in patients who refuse these tests or who, despite aggressive counseling, decline to have recommended colonoscopy.4

5. Do not use the bleeding time test to guide patient care.

The bleeding time test is an older assay that has been replaced by alternative better coagulation tests. The relationship between the bleeding time test and a patient’s actual bleeding risk is limited. Furthermore, the test leaves a scar on the forearm.5

Through consensus, prominent ASCP pathologists and laboratory professionals identified the appropriate utilization of these 5 tests to improve patients’ health, reduce costs, and enhance the use of laboratory resources and personnel. Implementing the Society’s recommendations will contribute to better patient health care at a lower cost nationwide, which is the goal of the Choosing Wisely campaign.

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References


