

High-Value Testing Begins With a Few Simple Questions

In light of escalating health care costs and recognition that too large a proportion of care provides little or no benefit to patients, the American College of Physicians (ACP) convened a workgroup of physicians to identify common clinical situations in which the use of tests fails to provide high-value, cost-conscious care. The ACP defines high-value, cost-conscious care as delivery of services that provide benefits commensurate with their cost and that outweigh any associated harm (1, 2). Value is not merely cost. An expensive test that alters care and outcome in a positive way is of greater value than a cheap one that does not. This issue includes a commentary that presents 37 testing scenarios that the ACP workgroup believes provide little or no value to the patient (3). Undoubtedly, physicians, their patients, and others with a stake in health care will take issue with at least some of the items on this consensus-based list. Some readers might object to its very existence. Others might argue that the list is too short.

Annals encourages readers—whether physicians, other health care providers, or members of the lay public—to complete a brief Web survey (available at www.annals.org) to indicate whether they agree that each of the items represents low-value care and can indicate scenarios that they would add to the list. Readers may also post comments about the article by using the “Submit a comment” option that accompanies the article on annals.org. In publishing the workgroup’s views, *Annals* hopes to generate earnest discussion about achieving health care savings and improving quality of care through more thoughtful use of an ever-increasing array of tests.

Physicians, whether they agree or disagree with the ACP workgroup’s list or other groups’ lists (4) of overused interventions, can improve the value of testing by asking themselves a few common-sense questions before ordering any test (Table). Too often, we order tests without stopping to think about how (if at all) the result will help the

patient. A few moments of reflection could reduce the human and financial costs of low-value testing.

Repeated testing can be a valuable mechanism for following a patient’s clinical trajectory. For example, quarterly measurement of hemoglobin A_{1c} levels helps us and our patients assess the effectiveness of and modify diabetes therapy. Unfortunately, physicians often repeat tests when further benefit is unlikely. For example, a patient with documented bacterial pneumonia who has responded well to intravenous antibiotics is unlikely to benefit from repeated chest radiography before being discharged home on oral antibiotics. Before ordering any test, physicians should ask, “Did the patient have this test previously?” If so, “Is the result of a repeat test likely to be substantively different from the last result?” If the result is unlikely to be different from the previous result, reconsider whether the test is necessary.

Physicians sometimes order a test that was already done elsewhere because repeating it is easier than tracking down the prior result. Other times, we might justify repeated testing because of distrust of another institution’s results. This may be warranted in some select situations, but not most. In the absence of a true need for repeated testing, such behavior fails to reflect responsible stewardship of health resources and needlessly exposes patients to adverse effects, inconvenience, and costs associated with repeated testing. Before ordering a test, it is imperative to ask, “Was the test done recently elsewhere, and can I get the results instead of repeating the test?”

The purpose of testing is to guide clinical decisions. When considering testing, physicians should ask, “Will the test result change my care of the patient?” If the answer is no, then there is probably little reason to order it. In the face of uncertainty, physicians must weigh the benefits and harms of testing and make decisions based on probabilities (5). In addition to disease probabilities, physicians should consider, “What are the probability and potential adverse consequences of a false-positive result?” When the probability of a false-positive result is high and the potential adverse consequences are substantial, testing is unlikely to provide high value. Indeed, it might only offer potential harm. Another motivation for testing is to reassure the patient or ourselves by ruling out diagnoses that put the patient in imminent danger of a poor health outcome. However, before testing, we should ask whether harm is likely over the short term if the test is not done, and whether there are alternate strategies for reassurance that do not include unnecessary testing.

Patient expectation can be a powerful force in promoting testing. We want our patients to feel that they are well cared for and may order tests simply to please them. Reflecting on whether this is the case and, if so, pausing to explain to the patient why testing is likely to have little

Table. Questions Physicians Should Ask Themselves Before Ordering Tests

Did the patient have this test previously?
If so, what is the indication for repeating it? Is the result of a repeated test likely to be substantively different from the last result?
If it was done recently elsewhere, can I get the result instead of repeating the test?
Will the test result change my care of the patient?
What are the probability and potential adverse consequences of a false-positive result?
Is the patient in potential danger over the short term if I do not perform this test?
Am I ordering the test primarily because the patient wants it or to reassure the patient?
If so, have I discussed the above issues with the patient?
Are there other strategies to reassure the patient?

value or could even be harmful would be a responsible course of action. The discussion should touch on the issues raised in the **Table**. Armed with information that a test would not alter clinical action and/or might cause harm, many patients will change their minds about wanting the test.

Data suggest that unnecessary testing abounds. The Congressional Budget Office has estimated that up to 5% of the nation's gross national product is spent on tests and procedures that do not improve patient outcomes (6). The sixth edition of the ACP Ethics Manual specifically calls out responsible stewardship of resources as an ethical responsibility of physicians (7) and has been lauded for doing so (8). Such stewardship requires substantial and persistent effort with some hard decisions along the way. Addressing a few simple questions before ordering a test seems to be a reasonably easy way to start the journey toward high-value care.

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Editor in Chief

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References

1. Owens DK, Qaseem A, Chou R, Shekelle P, for the Clinical Guidelines committee of the American College of Physicians. High value, cost-conscious health care: concepts for clinicians to evaluate the benefits, harms, and costs of medical interventions. *Ann Intern Med.* 2011;154:174-80. [PMID: 21282697]
2. American College of Physicians. How Can Our Nation Conserve and Distribute Health Care Resources Effectively and Efficiently? [policy paper]. Philadelphia: American Coll Physicians; 2011. Accessed at www.acponline.org/advocacy/where_we_stand/policy/health_care_resources.pdf on 6 December 2011.
3. Qaseem A, Alguire P, Dallas P, Eisenberg LE, Fitzgerald FT, Horwitch C, et al. Appropriate use of screening and diagnostic tests to foster high-value, cost-conscious care. *Ann Intern Med.* 2012;156:147-9.
4. Good Stewardship Working Group. The "top 5" lists in primary care: meeting the responsibility of professionalism. *Arch Intern Med.* 2011;171:1385-90. [PMID: 21606090]
5. Sox HC, Blatt MA, Higgins MS, Marton KI. Medical Decision-Making. Philadelphia: American Coll Physicians; 2007.
6. Orszag PR. Increasing the value of federal spending on health care. Testimony to Committee on the Budget, U.S. House of Representatives, 16 July 2008. Accessed at <http://budget.house.gov/hearings/2008/07.16orszag.pdf> on 4 December 2011.
7. Snyder L; American College of Physicians Ethics, Professionalism, and Human Rights Committee. American College of Physicians Ethics Manual. Sixth Edition. *Ann Intern Med.* 2012;156:73-104.
8. Emanuel EJ. Review of the American College of Physicians Ethics Manual, Sixth Edition. *Ann Intern Med.* 2012;156:56-7.

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