# Physicians Support the Annual Physical Examination Despite Unproven Benefits

*Prochazka AV, Lundahl K, Pearson W, et al. Support of evidence-based guidelines for the annual physical examinations: a survey of primary care providers. Arch Intern Med* 2005;165:1347–52.

## **Study Overview**

<u>Objective</u>. To assess attitudes and practices regarding the annual physical examination and use of diagnostic testing during these examinations among primary care physicians.

<u>Design</u>. Cross-sectional mailed survey.

Setting and participants. 783 (47%) of 1679 primary care physicians responded to the survey, which included family practice physicians (38%), internal medicine physicians (43%), and obstetrician/gynecologists (16%) practicing in Boston, MA; Denver, CO; and San Diego, CA.

Main outcome measures. Proportion of physicians who perform and support the use of annual physical examinations. Additional outcomes included physician beliefs regarding annual examinations and use of diagnostic tests during these examinations. Multivariable models were used to identify physician characteristics predictive of supporting the use of annual examinations and performing unnecessary diagnostic testing during these examinations.

Main results. The majority of physicians (88%) reported performing annual physical examinations, and 65% expressed support for performing annual examinations. Most physicians agreed that annual examinations improve the physicianpatient relationship (94%), provide time for preventive counseling (94%), and are expected by patients (78%). In addition, 74% of physicians felt that annual examinations improve detection of subclinical illness, 63% thought they were of proven value, and 55% thought they were recommended by national guidelines. A substantial proportion of physicians supported the use of specific diagnostic tests during annual examinations, including lipid profiles (48%), urinalysis (44%), complete blood counts (39%), and kidney (32%) and liver (28%) function tests. A very small minority of physicians advocated for the routine use of chest radiographs and electrocardiograms. Multivariable models identified private practice physicians, obstetrician/gynecologists, younger physicians, and women physicians as supporting annual physical examinations. Private practice physicians, family and internal medicine physicians, and older physicians were more likely to favor potentially unnecessary testing during annual examinations (as indicated by those who reported performing a complete blood count).

<u>Conclusion</u>. The majority of primary care physicians support the use of annual physical examinations and report positive effects of these examinations. However, these physicians also report beliefs not supported by current evidence and guidelines. Many of these examinations likely result in the use of unnecessary diagnostic tests.

### Commentary

National guidelines have long promoted evidence-based medicine to guide the provision of preventive services [1]. However, a challenge in this area is to encourage physicians to provide screening services that are supported by strong evidence and to avoid those tests with limited supportive data.

The study by Prochazka et al provides important insight into the routine practice of annual physical examinations in the United States. The high proportion of primary care physicians who reported performing annual physical examinations is not entirely unexpected. Primary care physicians may struggle with the tension created by a perceived patient desire for these examinations and the lack of solid evidence to support them. In fact, annual physical examinations may be useful because they improve the physician-patient relationship and allow for preventive counseling. However, the number of physicians who incorrectly believe these examinations are necessary to detect subclinical disease and are supported by evidence is surprising. In addition, while some diagnostic testing may be appropriate (eg, lipid profiles), the majority of tests reportedly performed during annual examinations would likely be considered unnecessary, as they lack proven benefit in most screening settings. This study suggests that targeted physician education will be needed to reduce unnecessary testing and to address the problem of inadequate delivery of appropriate care that continues to be documented in the United States [2].

While this study does highlight an important area for targeted education and quality improvement efforts, it should

# **OUTCOMES RESEARCH IN REVIEW**

be considered in light of some limitations. These data represent physician self-reported (not actual) utilization and thus are subject to differences in individual perception (eg, the reporting of diagnostic testing). In addition, the lack of clinical data for patient encounters does not allow a more accurate assessment of the appropriateness of diagnostic testing during physical examinations.

## **Applications for Clinical Practice**

The annual physical examination is a long-standing practice within the U.S. health care system, and changes in the beliefs of primary care physicians regarding its utility are likely to be slow. Based on the results of this survey, efforts to improve adoption of evidence-based care will need to involve primary care physician education that includes utility of the annual examination and associated diagnostic tests.

-Review by Thomas D. Sequist, MD, MPH

#### References

- 1. United States Preventive Services Task Force. Guide to clinical preventive services, 3rd ed-periodic updates. Available at www.ahrq.gov/clinic/gcpspu.htm. Accessed 25 Jul 2005.
- 2. McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. N Engl J Med 2003;348:2635-45.

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