MINDFUL PRACTICE

The Value of Periodic Health Examinations

BY JON O. EBBERT, M.D., AND ERIC G. TANGALOS, M.D.

The Problem

Concerned about looming Medicare cuts and the increased practice pressure, your group is considering changing the way that it schedules patients to effectively eliminate the annual health examination. "Welcome to Medicare" has been no treat, but your group remains committed to offering this service when requested. Your group has asked you to submit your opinion. An informal survey of your patients suggests that some expect to receive this service year in and year out. However, you are unaware of any evidence that it improves patient outcomes.

The Question

Do periodic health examinations for the delivery of preventive health services improve patient outcomes, compared with the delivery of these services during focused "acute" visits?

The Search

You go to PubMed (www.pubmed.gov) and enter "periodic health examination" and limit the search to "review."

Our Critique

This study is limited by the potential difficulty in reproducing the selection of studies. The a priori definition of the PHE may initially be confusing because of the categorization of screening procedures (e.g., Pap smear and colon cancer screening) as a result of the PHE rather than as part of the PHE. However, we submit that this definition allows for a separation of the exposure (i.e., PHE) and the outcome (e.g., cancer screening). This review arguably provides the best available evidence on the overall effectiveness of the PHE. The study suggests that one benefit of the PHE is that it increases the rates of delivery of the most commonly delivered preventive screening services of Pap smear, cholesterol screening, and colon cancer screening, which is consistent with our clinical experience. We have observed that the rate of uptake of this screening is increased when physicians provide face-to-face counseling to patients on the goals, risks, and benefits of these procedures.

Clinical Decision

You decide to continue the practice of annual physicals for the patients who request them. Your group also decides to assemble a template to ensure that all of the preventive services are offered during these visits as well as to offer them when due during focused "acute" visits.

DR. EBBERT and DR. TANGALOS *are with the Mayo Clinic in Rochester, Minn. They have no conflict of interest to report. To respond to this column or suggest topics for consideration, write to Dr. Ebbert and Dr. Tangalos at our editorial offices or e-mail them at imnews@elsevier.com.*

L.E. Boulware et al.

Systematic review: The value of the periodic health evaluation. Ann. Intern. Med. 2007;146:289-300.

▶ **Criteria for Study Inclusion:** The PHE was a priori defined as "one or more visits with a health care provider for the primary purpose of assessing patients' overall health and risk factors for disease that might be prevented by early intervention." By definition, the PHE consisted "only of the history, risk assessment, and tailored physical examination that could lead to the delivery of preventive services." The PHE did not include "clinical preventive services that patients could receive during or after their visit for the PHE." Usual care was defined as the "delivery of clinical preventive services in the absence of a health care provider visit designated for the primary purpose of assessing patients' health and risk factors for disease."

▶ **Study Identification:** Multiple databases were searched through September 2006 comparing the PHE with usual care to assess benefits and harms. Reference lists of relevant articles were reviewed and contents of 24 periodicals in general medicine, preventive medicine, and public health were hand searched.

▶ **Study Selection:** Observational studies and randomized, controlled trials were included. Articles were screened by title, and abstracts were reviewed by two investigators. Investigators excluded the articles if they included participants under 18 years old, contained no original data, or had no comparison group.

▶ **Data Extraction:** Two reviewers sequentially abstracted data for each article for a wide range of variables including changes in patient attitudes, proximal or intermediate clinical outcomes (e.g., blood pressure or disease detection), distal clinical outcomes (death), economic outcomes, and public health outcomes. Quality was assessed using a formal quality score. An evidence-grading scheme was used that considered the best available evidence for each outcome. A "high" classification signified that further research would be unlikely to alter conclusions, "medium" signified that further research could alter conclusions, "low" signified that further research would be likely to alter conclusions, and "very low" signified that further research would alter conclusions.

▶ **Outcomes:** The magnitude of effect of the PHE on outcomes was standardized. An effect was considered to be clearly beneficial when investigators reported that the PHE consistently resulted in greater benefits or a reduction in harms, compared with usual care. An effect was considered clearly harmful when investigators reported that the PHE resulted in fewer benefits, more harms, or smaller reduction in harms. Evidence was considered to have no effect when findings were consistently neutral. Finally, evidence was considered mixed when investigators showed beneficial and harmful or neutral effects.

▶ **Results:** The PHE had a beneficial effect on the delivery of gynecologic examinations/Pap smears, cholesterol screening, and colon cancer screening (fecal occult blood testing) and on the proximal clinical outcomes of patient attitudes (e.g., worry). These studies were of medium to high quality. No clear effect on the distal economic and clinical outcomes of costs, disability, hospitalization, or mortality was found. No clear evidence of harm was uncovered.

Patient Demographics Influence Physician Performance Scores

BY DEBRA L. BECK
Contributing Writer

TORONTO — Physician practices treating higher proportions of less-educated patients have consistently lower HEDIS performance scores, according to preliminary research presented at the annual meeting of the Society of General Internal Medicine.

In fact, an increase of one standard deviation in the proportion of non–college graduate patients is associated with a significant Health Employer Data and Information Set (HEDIS) performance score decrease of as much as 2.5%.

"Our concern is that practice sites caring for disproportionate shares of vulnerable patients may be penalized by public performance reporting and pay-for-performance contracts," reported Dr. Mark Friedberg, of the division of general medicine at Brigham and Women's Hospital and Harvard School of Public Health, both in Boston.

"Without adjusting HEDIS scores for patient sociodemographic characteristics—or adjusting some aspect of the way these scores are used—physicians may feel an incentive to avoid patients from vulnerable populations," he said.

The measurement of primary care quality for public reporting has become a hot issue in recent years, with physicians who care for minority patients and those with lower incomes worried that they may be at a disadvantage in a system with a one-size-fits-all approach to quality measurement.

Dr. Friedberg noted a recent study (Health Aff. 2007;26:w405-w414 [Epub doi: 10.1377/hlthaff.26.3.w405]) that found that 85% of physicians polled agreed with the statement: "At present, measures of quality are not adequately adjusted for patients' socioeconomic status."

Fully 82% were concerned that measuring quality may deter physicians from treating high-risk patients.

Dr. Friedberg and his colleagues used the Massachusetts Health Quality Partners (MHQP) statewide reporting program, which supplied data from commercial insurers aggregated at the physician level on eight HEDIS measures: breast cancer, cervical cancer, chlamydia, asthma controller medications, HbA_{1c} testing, cholesterol testing, eye exams, and nephropathy.

MHQP is a statewide collaborative that includes the five largest health plans in Massachusetts, contracting with 90% of state primary care providers and covering 63% of Massachusetts residents, or about 4 million people.

Data were collected from 241 physician practice sites (including 1,489 physicians) that provided adult primary care to insured patients during 2004.

These data were linked to patient responses from the 2002-2003 Massachusetts Ambulatory Care Experiences Survey to calculate the prevalence of sociodemographic characteristics (age, gender, race, ethnicity, and education) within each practice site's patient panel. Practice site was used as the unit of analysis.

Median site-level HEDIS scores ranged from 94% for HbA_{1c} screening (interquartile range, 90%-96%) to 43% for chlamydia screening in women who were aged 21-25 years (interquartile range 34%-52%).

In bivariate analyses, lower site-level proportions of college graduate patients were significantly associated with lower HEDIS scores on all eight measures. These associations remained statistically significant for seven of the eight measures even after multivariate adjustment.

Significant bivariate associations between sites' HEDIS scores and the age, racial, and ethnic composition of their patient panels were present for chlamydia screening, but these associations did not remain statistically significant after multivariate adjustment.

"Primary care practice sites with disproportionate shares of patients having lower educational attainment may incur a 'performance measure penalty' on widely used HEDIS quality measures," Dr. Friedberg concluded. ■

Pages 46a—46b