

In the study by Paley et al,⁴ only the accuracy of ED diagnosis was evaluated, not the management of the patient. Today, in the patients being evaluated for possible cardiovascular disease, echocardiography would be more often used in arriving at a diagnosis and especially in making management decisions for the patient.

The modern imaging techniques when used appropriately have made the diagnosis of the patient's disease and management more timely and accurate. There is also no doubt that these imaging techniques are overused, both to reassure the physician that a proper diagnosis was made and to act as a defensive measure against a claim of malpractice. Although these imaging tests are generally benign as far as adverse events are concerned, for certain, these techniques increase the cost of medical care significantly. In an era when the medical dollar must be spent wisely since we have reached the bottom of the money barrel for medical care, we physicians must be responsible for using these studies only when they add significantly to the diagnosis or aid in an important way to management decisions.

When I first read the article by Paley et al,⁴ I mentally recognized that "I knew it all along." As a teacher of medical students, house staff, and cardiology fellows I have become increasingly aware that there has been ever decreasing time spent teaching the basic skills of history taking and physical examination, especially cardiac auscultation.^{5,6} As a cardiologist, I see less attention paid to these basic skills and especially to auscultation, considered by many no loss since echocardiography has been developed. It is impossible to argue against a technique that is more accurate than auscultation in diagnosing cardiac diseases and helpful in designing an approach to treatment. However, in an era when amazing imaging can determine a diagnosis and practice guidelines for management of most diseases are available, the physician, as opposed to the technician, adds only 2 things that are indispensable in caring for patients: the physician-patient relationship and informed judgments in making therapeutic decisions. The physician-patient relationship is formed at the time of initial contact during the taking of an attentive history and the performance of a careful physical examination. When the time comes to deciding that the patient needs surgery or an expensive or uncomfortable diagnostic study, without the confidence that the physician is knowledgeable and completely involved in their problem, it is likely that the patient will seek other opinions until they find someone they trust.

The study by Paley et al⁴ is highly supportive of the physician's ability using the classic diagnostic tools including a medical history, the physical examination, and basic laboratory studies to make an accurate diagnosis, reserving the expensive imaging techniques for those patients for whom there is diagnostic confusion or when difficult management decisions must be made. In this way, we can help reduce the cost to the patient without compromising the quality of their care.

Melvin D. Cheitlin, MD

Author Affiliation: Department of Medicine (Emeritus Professor of Medicine), University of California, San Francisco.

Correspondence: Dr Cheitlin, Department of Medicine, University of California, San Francisco, San Francisco General Hospital, 1001 Potrero Ave, Room 5F8, San Francisco, CA 94110 (mellac22@comcast.net).

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HEALTH CARE REFORM

Changes in Barriers to Primary Care and Emergency Department Utilization

The 2010 Patient Protection and Affordable Care Act¹ (ACA) aimed to expand health insurance coverage, improve access to medical care, and control health care costs.² An implicit goal of health insurance expansion is to improve access and utilization of primary care services and divert patients from what is believed to be higher-cost emergency care. Indeed, annual emergency department (ED) visit rates have increased from 90 million in 1996 to 124 million in 2008.³

See also pages 1319 and 1379

Using data from the 2005 National Health Interview Survey (NHIS), Rust et al⁴ reported an association between barriers to timely primary care and ED utilization. In Massachusetts, where health care reform legislation similar to the ACA was enacted in 2006, ED visits have remained high despite achieving near universal coverage (>98% of working-age adults).⁵ Thus, expanded national health insurance coverage in the setting of a primary care provider shortage may add to the problem of limited access to primary care services. To further evaluate this hypothesis, we quantified changes in national barriers to timely primary care access from 1999 to 2009, and their association with ED utilization.

Methods. We analyzed data from the NHIS, a cross-sectional household interview survey that approximates noninstitutionalized US civilian population.⁶ From 1999 to 2009, NHIS collected household interview data for a total of 317 497 adults (age, ≥18 years). Barriers to timely primary care captured in the survey included the following: (1) "Couldn't get through on the telephone"; (2) "Couldn't get an appointment soon enough"; (3) "Once you got there, you have to wait too long to see the doctor"; (4) "The (clinic/doctor's) office wasn't open when

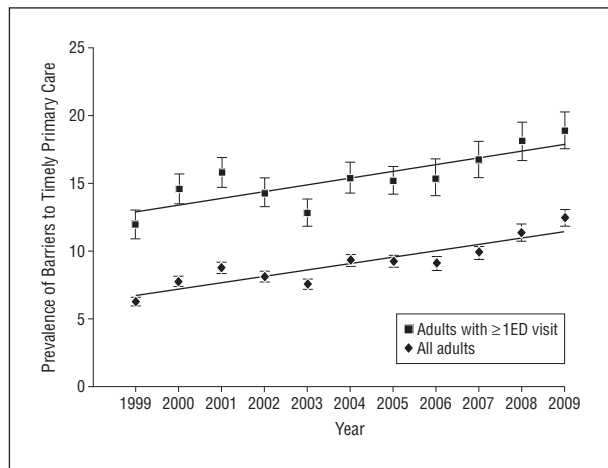


Figure. Changes in prevalence of barriers to timely primary care among US adults from 1999 to 2009.

you could get there”; and (5) “Didn’t have transportation.” These barriers were used to predict self-reported ED visits during the past 12 months.

We performed statistical analyses using Stata 10.1 (Stata-Corp, College Station, Texas). Survey commands were used to create nationally representative estimates. Multivariable analyses adjusted for demographic, socioeconomic status, health conditions, and access to care variables.

Results. Overall, 9.7% of adults per year had at least 1 barrier to timely primary care and 20.1% had at least 1 ED visit. Adults with a higher number of barriers were more likely to have at least 1 ED visit (18.8% for 0 barrier, 29.5% for 1 barrier, and 36.5% for ≥ 2 barriers). After adjusting for potential confounders, barriers to timely primary care were associated with increased ED utilization (compared with 0 barriers: adjusted odds ratio [AOR], 1.37 [95% confidence interval {CI}, 1.31-1.43] for 1 barrier and AOR, 1.68 [95% CI, 1.60-1.78] for ≥ 2 barriers).

Over the past decade, the prevalence of barriers to timely primary care among all adults, and specifically among those with at least 1 ED visit, has increased (**Figure**). From 1999 to 2009, the prevalence of having at least 1 barrier increased from 6.3% (95% CI, 6.0%-6.6%) to 12.5% (95% CI, 11.9%-13.1%). During that time, the strength of the association between number of barriers and ED utilization remained constant; for individual years, the AOR for at least 1 ED visit ranged from 1.29 to 1.44 (mean, 1.37) for 1 barrier and 1.54 to 1.91 (mean, 1.68) for 2 or more barriers. However, among adults with at least 1 ED visit, the prevalence of having at least 1 barrier increased from 12.0% (95% CI, 11.0%-13.0%) to 18.9% (95% CI, 17.6%-20.3%).

Comment. As previously reported using 2005 NHIS data,³ barriers to timely primary care were associated with increased ED utilization during 1999 to 2009. We extended these findings to demonstrate that these barriers have increased over the past decade, and were increasingly prevalent among those with ED visits. These results suggest that limited access to primary care services is an increasingly important contributor to rising ED volumes.

While policy makers attempt to reduce ED utilization through expanded health insurance coverage, the well-documented primary care provider shortage will likely accelerate the observed trend of increased barriers to timely primary care.⁷ On the basis of our study results, we believe that the increasing prevalence of these barriers may result in even higher patient ED utilization.

This study has some potential limitations. By using data from an existing survey, we were limited to questions that were already in the survey and could not alter or add other questions. The reported associations and temporal trends may be confounded by unmeasured factors not included in the NHIS. In addition, the NHIS was based on self-reported data, so barriers and ED utilization could not be confirmed and was subject to recall bias.

In conclusion, the association between barriers to timely primary care and increased ED utilization has been consistent over the past decade, and the prevalence of these barriers has been rising. In the setting of limited primary care workforce resources, health insurance expansion and increased demand for services may contribute to even more barriers to timely primary care.⁸ Optimal health care delivery and attempts to limit ED utilization will likely require solutions beyond expanded health insurance coverage including improved access to primary care services through increasing the supply and availability of primary care providers.

Paul T. Cheung, MPH
Jennifer L. Wiler, MD, MBA
Adit A. Ginde, MD, MPH

Author Affiliations: Department of Emergency Medicine, University of Colorado School of Medicine, Aurora.
Correspondence: Dr Ginde, Department of Emergency Medicine, University of Colorado School of Medicine, 12401 E 17th Ave, Mail Stop B-215, Aurora, CO 80045 (adit.ginde@ucdenver.edu).

Author Contributions: *Study concept and design:* Cheung and Ginde. *Acquisition of data:* Cheung and Ginde. *Analysis and interpretation of data:* Cheung, Wiler, and Ginde. *Drafting of the manuscript:* Cheung. *Critical revision of the manuscript for important intellectual content:* Wiler and Ginde. *Obtained funding:* Cheung and Ginde. *Administrative, technical, and material support:* Ginde. *Study supervision:* Ginde.

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Patient Concerns at Hospital Admission

Patient-centered care, communication, and patient satisfaction are increasingly important metrics of hospital care.¹ A key aspect of patient-centered communication is eliciting and addressing patients' concerns.² Outpatient research indicates that when concerns are addressed, patients report higher satisfaction.³ To our knowledge, hospitalized patients' concerns have not been studied.

Methods. We surveyed patients before and after the attending physician hospital admission encounter to describe the number and topics of concerns and the degree to which physicians addressed them. The study was

conducted between August 2008 and March 2009 on the general medical services at 2 hospitals within a university system where attending physicians care for patients with and without trainees. Participants were attending hospitalist physicians and patients admitted under their care who were able to give informed consent and communicate verbally in English. Eligible patients were approached before meeting the physician and, if they agreed to participate, asked to list "all of the problems and concerns you want to talk with the doctor about today."⁴ During the encounter, the study coordinator waited outside the patient's room to measure encounter length. After the encounter, patients rated how well each of their pre-encounter concerns was addressed: "not at all," "some-what," "mostly," or "completely."

In quantitative content analysis,⁵ we iteratively developed a code book to describe themes within the topics of patients' concerns. The final code book included 11 conceptual categories. Two-coder agreement on a 20% sample of concerns was 92% on at least 1 category and 79% on all categories. We assessed associations among whether concerns were addressed, number of pre-encounter concerns, and encounter length using logistic regression (Stata version 11; StataCorp, College Station, Texas). The institutional review board at the University of California, San

Table. Topics of Patient Concerns at Admission

Topic Category	Concerns, No. (%) (n=299) ^a	Examples ^b
Treatments including medications, procedures, therapies, adverse effects, and patient preferences	101 (34)	"Course of treatment—what are we doing and why?" "Am I starting a new set of medications?" "Concerned about hip surgery, hoping everything will work out."
Diagnoses including known diagnosis or to obtain a diagnosis or cause of illness	83 (28)	"Pneumonia." "What is wrong with my colon?" "Why am I sick?" "I'd like a definite diagnosis of why the breathless problems."
Logistics including facilities, communication, and coordination of care	57 (19)	"When will I get moved from ER to bed upstairs?" "Who is coordinating different care teams?" "Who do I call if I have a problem?"
Prognosis, expected course, or outcome of disease, severity of illness, and likelihood of recovery	40 (13)	"How could this possibly affect my future health?" "Current condition's level of seriousness." "How long will I be incapacitated?"
Pain or other symptoms: any concern about a physical or emotional symptom including cause of illness and management	38 (13)	"Pain in legs, especially in right leg." "Cough—dry, dry throat." "Relief of current symptoms."
Patient behavior: how patients should manage their medical condition including lifestyle choices and diet	24 (8)	"What am I allowed/not allowed to do during and after my radioactive iodine treatment?" "Discuss with doctor my lifestyle healthwise."
Tests and test results including blood work, imaging, and biopsies, and the results of these	23 (8)	"Chest x-ray." "More answers/info about the MRI and CAT scan." "First, I'd like to hear about the test results."
Hospital discharge including length of hospitalization, discharge planning, follow-up care	19 (6)	"How long will I have to be in the hospital?" "Who is in charge of my discharge?" "What kind of follow-up care should I have to ensure complete healing?"
Prevention actions: patient or health care providers should take to prevent recurrence or further illness	16 (5)	"How to stop UTIs from happening?" "What I could have done to prevent current condition."
Advanced care planning including code status and advance directives	1 (<1)	"I want a notation/correction on my records that I do have a DNR."
Other concerns that could not be clearly categorized into the above categories	22 (7)	"My health." "Heart." "Long time (since Spring) of one medical thing after another."

^aBased on quantitative content analysis of 109 patients' pre-encounter concerns. Topic categories are not mutually exclusive because some concerns included elements of multiple categories; thus, counts sum to greater than 299 and percentages to greater than 100%.

^bAbbreviations were all written by the patients.