

## How Much Do Physicians Consider Patient Out-of-Pocket Costs?

Pham HH, Alexander GC, O'Malley AS. Physician consideration of patients' out-of-pocket costs in making common clinical decisions. *Arch Intern Med* 2007;167:663–8.

### Study Overview

**Objective.** To determine the role of patient out-of-pocket (OP) costs in physician decision making when prescribing medication, ordering diagnostic tests, and choosing inpatient versus outpatient care.

**Design.** Nationally representative telephone survey of physicians conducted in 2004–2005.

**Participants.** Data from a 2004–2005 telephone survey were analyzed. There were 6628 physician respondents (response rate, 53%), including 3291 primary care physicians, 2041 medical specialists, and 1296 surgeons. One third of physicians practiced in solo or 2-person practices, 21% practiced in a hospital or medical school, and 4% practiced in a health maintenance organization (HMO).

**Main outcome measures.** Proportion of physicians reporting significant consideration of patient OP costs when prescribing medications, ordering diagnostic tests, and choosing an inpatient versus outpatient care setting. Significant consideration of patient OP costs was defined as responding either “always” or “usually,” as opposed to “sometimes,” “rarely,” or “never” when asked how often patient OP costs are weighed in the decision-making process.

**Main results.** The majority of physicians (78%) gave significant consideration to patient OP costs when prescribing medications; however, only 40% considered such costs when

ordering diagnostic tests, and half (51%) considered patient OP costs when choosing a care setting. Primary care physicians were more likely than specialists to consider patient OP costs when prescribing medications (85% vs. 75%;  $P < 0.001$ ), ordering diagnostic tests (46% vs. 30%;  $P < 0.001$ ), and choosing a care setting (54% vs. 43%;  $P < 0.001$ ). Physicians practicing in HMOs were more likely than those in solo or 2-person practices to consider patient OP costs when prescribing medications (90% vs. 80%;  $P < 0.001$ ) but were less likely to consider these costs when ordering diagnostic tests (33% vs. 51%;  $P < 0.01$ ) and choosing a patient care setting (44% vs. 56%;  $P < 0.05$ ). Physicians expressing confidence in access to high-quality diagnostic imaging services were less likely to consider patient OP costs in ordering diagnostic tests than were physicians reporting limited access (38% vs. 42%;  $P = 0.06$ ). Physicians expressing confidence in access to elective hospital admissions were less likely to consider patient OP costs when choosing a care setting than physicians with limited access (49% vs. 55%;  $P = 0.01$ ). Further, physicians treating the highest volume of patients with Medicaid insurance were more likely than those treating the lowest volume to consider patient OP costs when prescribing medications (83% vs. 77%;  $P < 0.001$ ).

**Conclusion.** The majority of physicians consider patient OP costs when prescribing medications; however, many do not consider these costs when ordering diagnostic tests or choosing a care setting. This finding could have substantial implications for the effectiveness of cost-sharing programs.

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## Commentary

The continually rising cost of health care has spurred the development of new strategies to improve quality of care in a cost-efficient manner. In recent years, efforts have often included programs to transfer a larger proportion of costs directly to patients through high deductibles or tiered copayments [1]. The effectiveness of these cost-sharing programs is reliant on the willingness of both patients and physicians to recognize costs as an important component of the clinical decision-making process, as well as an assurance that effective or needed clinical services are not preferentially deferred due to costs [2].

The current investigation by Pham and colleagues provides important information regarding physician consideration of patient OP costs when making clinical decisions across a spectrum of scenarios. Perhaps not surprisingly, physicians more commonly consider patient OP costs when prescribing medications than when selecting diagnostic tests and patient care setting. Physicians may not consider patient OP costs due to a lack of awareness of these costs, or they may take a more active stance of being unwilling to consider costs due to concerns that quality of care will be compromised. This study suggests, at least initially, that physician awareness plays a key role in the decision-making process, as physicians on average are more familiar with drug copayment systems than they are with costs related to diagnostic testing or patient care settings. Effective clinical decision support tools that make physicians more aware of patient OP costs may positively impact the decision-making process and help to alleviate the patient cost burden. This study did not find a relationship between physician decision making and the presence of electronic prescribing tools; however, this was partly due to a lack of available information regarding the level of decision support technology currently used by physicians.

The study also highlights important structural characteristics associated with physician consideration of patient OP costs, including clinical training background, practice type,

local availability of health services, and characteristics of the patient population. Future studies will need to explore these preliminary findings in more detail to understand how specific features of the health system influence the clinical decision-making process.

Although this study sheds light on an important topic, there are limitations that should be noted. First, while physician consideration of patient OP costs is an important mediator of clinical decisions, we have no information regarding patients and their relative consideration of costs when making choices regarding their health care. It is not known, for instance, what percentage of patients avoid filling prescriptions or having diagnostic testing on the basis of cost. In addition, the survey was designed to assess general perceptions of physicians and was not conducted in a real-time manner that would assess individual clinical encounters, limiting the potential strength of the associations identified in the analyses.

## Applications for Clinical Practice

Patient cost-sharing is an increasingly common method of containing health care costs. To ensure a larger impact on clinical decision making, future programs should be designed with specific attention given to increasing physician awareness and consideration of patient OP expenses. Without this perspective, cost-sharing programs may negatively impact clinical care in situations where cost deters a patient from following through on a physician's recommendations.

—Review by Thomas D. Sequist, MD, MPH

## References

1. Newhouse JP. Consumer-directed health care and the RAND Health Insurance Experiment. *Health Aff (Millwood)* 2004; 23:107–13.
2. Huskamp HA, Deverka PA, Epstein AM, et al. The effect of incentive-based formularies on prescription-drug utilization and spending. *N Engl J Med* 2003;349:2224–32.

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