

Physician Strategies to Reduce Patients' Out-of-pocket Prescription Costs

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Background: Physicians often do not communicate with patients about out-of-pocket costs, although research indicates that physicians and patients value such discussion.

Methods: Cross-sectional national random sample mail survey of 1400 cardiologists and general internists to quantify barriers to communication about out-of-pocket costs and strategies used to assist patients in order of likelihood (from 5 [extremely likely] to 1 [not at all likely]).

Results: Overall, 519 (39.1%) of 1328 eligible physicians responded to the survey. The most common barriers were lack of habit, insufficient time, and concern over patient discomfort. The most common strategies used

to assist patients were switching to a generic drug (mean, 4.34; SD, 0.86), using office samples (mean, 4.16; SD, 1.22), and discontinuing nonessential medicines (mean, 4.03; SD, 0.99). There were no statistically significant differences between cardiologists and general internists in barriers or strategies examined ($P < .05$).

Conclusions: Our findings suggest that patient-physician communication about out-of-pocket costs is a problem affecting specialists and generalists nationwide. Despite barriers, physicians use multiple strategies that may vary in efficacy to assist patients burdened by these costs.

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OUT-OF-POCKET COSTS ACCOUNT for approximately one fifth of health expenditures and have increased markedly during the past decades.^{1,2} These costs have been the focus of considerable public concern, most recently surrounding the Medicare prescription drug benefit.³ Numerous studies suggest that high out-of-pocket costs may lead to cost-related medication nonadherence⁴ and otherwise threaten quality of care.⁵⁻⁷

Despite this, little is known about how patients and physicians communicate about these costs. Our previous study of a group of 484 patients and 133 physicians found that although most respondents believed that discussions of out-of-pocket costs were important, these discussions seldom occurred.⁸ Barriers reported by the subset of respondents recalling a time when they wanted to discuss out-of-pocket costs but did not do so have also been identified.⁹ However, the study was limited to general internists, examined patients and physicians in one region of the country, and focused primarily on differences between preferences and experiences discussing out-of-pocket costs.

With these limitations in mind, we designed a cross-sectional survey of a nationally representative random sample of cardiologists and general internists. In addition to generalizing our findings across a broader group of physicians, we were also interested in further exploring barriers to discussing out-of-pocket costs and the strategies physicians use to overcome them. We reasoned that this information might be important for 2 reasons. First, understanding barriers and strategies to address costs might help individual patients and physicians work together to minimize the burden from these costs. Second, such information might help to inform local, regional, or national interventions to promote patient-physician communication about out-of-pocket costs.

METHODS

PARTICIPANTS AND STUDY PROTOCOL

We selected a random sample of 700 general internists and 700 cardiologists from the American Medical Association Masterfile of all licensed physicians in the United States. Physicians who were retired, those without a forwarding address, and physicians in train-

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Table 1. Characteristics of the 519 Physician Respondents

Characteristic	Value*
Age, mean (range), y	47 (26-85)
Male sex	401 (77.7)
Primary care physician	260 (51.1)
Works in an academic medical center	257 (50.8)
No. of employees in the primary practice site, median	7
Ownership in practice	
Not an owner	307 (62.3)
Partial owner	74 (15.0)
Full owner	112 (22.7)
% of pay depending on volume of patients	
0	161 (37.2)
1-50	80 (18.5)
51-99	75 (17.3)
100	117 (27.0)

*Data are given as number (percentage) of respondents unless otherwise indicated. Totals may not equal 519 because of missing data.

ing were considered ineligible and excluded. A confidential survey was mailed to each physician in February 2003 with a \$2 cash incentive and a cover letter explaining the study. Two subsequent waves of surveys were sent to nonrespondents approximately 4 weeks apart. The Institutional Review Board of The University of Chicago approved the study protocol.

SURVEY ITEMS

Based on qualitative physician interviews and an analysis of our prior study, we designed a questionnaire to assess physicians' beliefs regarding barriers to discussions of out-of-pocket costs and strategies to assist patients burdened by these costs. To maximize the relevance of our survey items, we framed questions about strategies to address high out-of-pocket costs in the context of a hypothetical patient. Response options used 5-point Likert scales, ranging from "strongly disagree" to "strongly agree" or "extremely likely" to "not at all likely." We also included variables assessing respondents' clinical (specialty, practice type, practice size, length in practice, ownership in practice, and length of clinic appointments) and sociodemographic (age and sex) characteristics. The survey was extensively pretested, and content and construct validity were prospectively assessed.

STATISTICAL ANALYSIS

We used simple descriptive statistics to examine the frequencies of different barriers to discussions of out-of-pocket costs and strategies used to overcome them. All analyses were performed using statistical software (*JMP* version 4.0; SAS Institute Inc, Cary, NC).

RESULTS

RECRUITMENT, SUBJECT CHARACTERISTICS, AND ATTITUDES ABOUT DISCUSSIONS

Of the 1400 physicians in the original sample, 53 were unreachable by mail and 19 were ineligible for inclusion. Of the remaining 1328 physicians, 519 (39.1%) returned completed questionnaires. The mean age of respondents was 47 years, 401 were men, 260 were self-identified as primary care physicians, and 257 reported

Table 2. Barriers Preventing Greater Patient-Physician Discussion About Out-of-pocket Costs

Barrier	No. (%) of 519 Respondents*
Insufficient time	209 (44.3)
Patient discomfort	165 (35.0)
No habit	159 (33.9)
No solution	147 (28.7)
Patient lack of knowledge regarding costs	136 (29.2)
Patient preference not to have costs considered	76 (16.0)
Physician discomfort	70 (14.3)

*Totals may not equal 519 because of missing data.

working in an academic medical center (**Table 1**). Compared with respondents, nonrespondents were more likely to be cardiologists (430 [53.1%] of 810 subjects vs 239 [46.3%] of 516 subjects; $P = .01$) and male (665 [82.1%] of 810 subjects vs 401 [77.7%] of 516 subjects; $P = .05$). There was no discernable association between response time and barriers identified (P values, .41-.97) or strategies used (P values, .31-.92) to address patients burdened by their out-of-pocket costs.

PERCEPTIONS REGARDING CONSUMER COST SHARING

Nearly all physicians (474/510 [92.9%]) reported that their patients in general were burdened by out-of-pocket costs, and a similar proportion (468/515 [90.9%]) believed that physicians should consider patients' out-of-pocket costs when writing prescriptions. Three fourths of respondents (351/467 [75.2%]) believed they have an obligation to initiate discussions about out-of-pocket costs when writing or renewing a prescription, but only one third (179/490 [36.5%]) reported that they know how much patients are spending out-of-pocket for prescriptions. There were no significant differences between cardiologists and general internists with regard to these beliefs (P values, .09-.71).

BARRIERS PREVENTING DISCUSSIONS AND STRATEGIES TO ASSIST PATIENTS

Table 2 identifies barriers preventing greater patient-physician communication about out-of-pocket costs. The 3 most commonly cited barriers to discussions were insufficient time, concern over possible patient discomfort, and lack of habit, which were cited by 209 (44.3%), 165 (35.0%), and 159 (33.9%) respondents, respectively. There were similar barriers perceived between cardiologists and general internists (P values, .12-.91).

Physicians reported using a wide variety of strategies to assist patients burdened by their out-of-pocket costs (**Table 3**). The frequency with which these were used varied substantially, on a scale from 5 (extremely likely) to 1 (not at all likely). In order of likelihood, the strategies physicians were most likely to use were to switch the patient from a brand-name to a generic drug, give the

patient office samples, critically review the medical list and discontinue nonessential medicines, and switch to a different brand-name drug in the same medication class. Respondents were less likely to report prescribing a higher dose of medicine and telling the patient to split the tablets, referring the patient to a pharmaceutical assistance program, recommending an over-the-counter medicine, or referring the patient to a public aid agency or social worker. Physicians were least likely to encourage patients to address their concerns with a different physician involved in their care or to do nothing. Although on bivariate analyses, general internists were more likely than cardiologists to report some strategies, such as the use of over-the-counter substitutes (mean likelihood score, 3.46 vs 2.92; $P < .001$), switching to generic drugs (mean likelihood score, 4.43 vs 4.23; $P < .01$), switching to cheaper brand-name drugs (mean likelihood score, 4.06 vs 3.86; $P = .02$), and referral to a public aid agency (mean likelihood score, 3.33 vs 2.93; $P < .001$), these differences did not persist in multivariate analyses controlling for potentially confounding physician and practice characteristics.

COMMENT

Our findings confirm previous work that indicates patient-physician communication about out-of-pocket prescription costs may be an important yet neglected aspect of clinical practice. Furthermore, our results provide an understanding of the relative importance of the barriers perceived and strategies used to assist patients who are burdened by high out-of-pocket costs.

These findings have several implications. First, by identifying the greatest barriers that physicians perceive to prevent greater discussion about out-of-pocket costs, our results can help to inform the development and evaluation of interventions to promote patient-physician communication about out-of-pocket costs. In particular, our findings, which build on those identified by examining barriers among 29 general internists in one region of the country,⁸ suggest that physicians should develop the habit of using brief just-in-time interventions at the point of prescription ordering that may reduce burdened patients' out-of-pocket costs. The impact of a physician reminder system based on patients' out-of-pocket costs has not been studied, to our knowledge, although research does suggest that physician reminder systems can have a small to modest effect on overall prescribing patterns and that they are most effective when part of a multimodal intervention strategy.^{10,11} Given that almost all physicians seem to believe that they have a responsibility to consider patients' out-of-pocket costs when writing a prescription, it is plausible that reminder systems may be a particularly potent means to alter prescribing patterns in this setting. One obstacle to such systems may be a lack of awareness of the out-of-pocket costs associated with a prescription at treatment ordering, a finding supported by research suggesting that physicians often have poor knowledge of overall pharmaceutical costs.¹²

Second, our finding that physicians use various methods to help patients burdened by their out-of-pocket costs raises many questions about the relative desirability of

Table 3. Comparison of Strategies Used to Assist 519 Patients Burdened by Out-of-pocket Prescription Costs*

Strategy	Likelihood of Using the Strategy, Mean (SD)†
Switch from a brand-name to a generic drug	4.34 (0.86)
Give the patient office samples	4.16 (1.22)
Critically review medication list and discontinue nonessential medicines	4.03 (0.99)
Switch to a different brand-name drug within the same drug class	3.96 (0.99)
Prescribe a higher dose of medicine and tell the patient to split the tablets	3.58 (1.24)
Refer the patient to a pharmaceutical company assistance program	3.57 (1.26)
Recommend the use of an over-the-counter medicine as a substitute	3.21 (1.30)
Refer the patient to a public aid agency or social worker	3.15 (1.27)
Encourage patients to address their concerns with a different physician involved in their care	1.86 (1.15)
Do nothing	1.47 (0.75)

*Thirty-seven respondents reported using other techniques to address patients' concerns, most commonly that patients write their congressperson and consider purchasing medicines either through the Internet or from Canada or Mexico.

†The scale is from 1 (not at all likely) to 5 (extremely likely).

these methods, questions that, to our knowledge, have not been addressed by research. Some methods, such as switching to a generic or less-expensive brand-name medication, seem likely to be beneficial. Other methods may be more problematic. Although tablet splitting may reduce out-of-pocket costs considerably, it can complicate prescription regimens, may not be appropriate for long-acting or sustained-release drugs, and can be technically difficult for some tablets. That the use of office samples was the second most likely strategy to assist patients burdened by out-of-pocket costs is also noteworthy. On the one hand, the use of office samples may offer practices a valuable economic means to assist patients¹³ and contact with the pharmaceutical industry has been claimed to offer physicians important educational opportunities.¹⁴ On the other hand, the use of office samples has been criticized because of poor compliance with guidelines for medication dispensing,¹⁵ lack of counseling and medication review with the use of samples,¹⁵ sample misuse by physicians and other health care personnel,¹⁶ and encouragement of inappropriate prescribing.¹⁷⁻¹⁹ Our study cannot answer whether concerns regarding samples outweigh the economic relief that they offer some patients, but it does suggest that the use of samples is one of the principal means that physicians use to assist those burdened by their out-of-pocket costs.

Third, our study results can help to inform the development of interventions that promote patient-physician communication about out-of-pocket costs. Such interventions must adequately address the barriers previously discussed that were reported as similarly common among cardiologists and general internists. Furthermore, in addition

to the use of office samples, there is a similar paucity of data regarding the frequency, safety, and effectiveness of many of the other strategies that physicians may use in an effort to reduce patients' out-of-pocket costs. These include brand-name to generic switches, selective medication discontinuation, tablet splitting, and referrals to pharmaceutical assistance programs.

An impressive body of scholarship has been produced that explores the differing communication patterns of physicians,²⁰ the association between communication styles and health outcomes,^{21,22} and the effect of changes in health care delivery on the patient-physician relationship.²³ Similarly, considerable work has been done examining the ethical framework that should guide the patient-physician relationship.²⁴⁻²⁶ Despite this, far less work has examined the "black box" of patient-physician communication about out-of-pocket costs.

The recently passed Medicare prescription benefit has renewed awareness of the burden that these costs pose for many Americans, seniors and nonseniors alike. This bill will provide some relief for seniors who have numerous chronic conditions, poor current prescription benefits, and limited income. However, the Medicare prescription benefit will not eliminate the impact that high out-of-pocket costs have for the average beneficiary of modest means. For this group of beneficiaries, and those outside of the Medicare legislation, patient-physician communication about out-of-pocket costs may become increasingly important as efforts are made to optimize clinical decision making in the inevitable setting of health care scarcity.

Our study had several limitations. First, our results are based on self-report. However, our results are consistent with our earlier work based on a different survey modality of a different population. Second, as with any survey, our results may be modified by nonresponse bias. However, we found no evidence of response-wave bias, nor were there marked differences in age, sex, or practice type between respondents and nonrespondents. Third, we based our assessment of strategies on responses to a hypothetical patient rather than on actual observation of clinician behavior and we did not explore the perceived importance of out-of-pocket costs relative to other potential areas of patient-physician communication. Finally, because we do not have detailed information regarding patient case mix, we are not able to identify specific physician and practice characteristics associated with perceived barriers or strategies while controlling for patient-level characteristics.

In conclusion, our research suggests that patient-physician communication about out-of-pocket costs is a problem affecting generalists and specialists nationwide. Despite barriers to greater communication, physicians use multiple strategies that may vary in efficacy to assist patients burdened by these costs. Further work is needed to evaluate the safety and effectiveness of these strategies.

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