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Elderly Patients' Preferences and Experiences with Providers in Managing Their Drug Costs

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OBJECTIVES: To determine whether elderly patients with high drug expenditures want and receive providers' help in managing drug costs.

DESIGN: Cross-sectional survey.

SETTING: A Medicare managed care plan (>400,000 members) in one state in 2002.

PARTICIPANTS: One thousand one hundred six seniors (62% response rate) sampled so that half exceeded caps on their drug benefits the previous year, and all had total drug expenditures in the top quartile of members in their cap level.

MEASUREMENTS: Participants' preferences and experiences with providers discussing costs and participation in choosing medications.

RESULTS: Two-thirds reported difficulty paying for medications, and one-fourth decreased medication use because of cost. Most wanted providers to ask about medication affordability (81%), consider cost (86%), offer choices (70%), and to persuade them or decide for them which medication to use (88%), but few said providers asked about affordability (17%), usually or always discussed prices (19%), or offered choices (45%), although nearly all said providers chose their medications (93%). Sixty-two percent had asked providers for help with drug costs, although 34% who used less medication because of cost or had difficulty paying for medications had not asked for help.

CONCLUSION: Providers should be aware that elderly patients want their help in managing drug costs but do not always receive it or ask for help when they need it. Providers could improve communication by initiating conversations about cost and by asking patients about preferences when prescribing. **J Am Geriatr Soc 55:1974–1980, 2007.**

Key words: prescription drug costs; Medicare drug benefit; patient–provider communication; decision making

Most Medicare beneficiaries now have drug coverage such as Medicare Part D, although many still face cost-sharing for medications from copayments, deductibles, and coverage gaps.[1–3] Therefore, elderly persons can continue to be at risk for high out-of-pocket prescription costs and for decreasing their use of essential medications because of financial burden.[1–5] Because providers prescribe medications, they can play a key role in helping elderly patients with medication costs and improving treatment adherence.

Nevertheless, communication between providers and patients about cost occurs infrequently; only 16% of patients say their providers have asked whether they can afford their medications.[6] There are various reasons why providers do not discuss costs with patients, including lack of time, not being in the habit of doing so, or because they assume that pharmacists will take responsibility for managing patients' drug costs.[7–9] One main barrier is that providers say they do not know patients' preferences regarding discussing medication costs—such as whether patients want such discussions or will be uncomfortable discussing cost—and providers often assume that patients will initiate the discussion if cost is a concern for them.[7–9] Although studies of the general population (not necessarily elderly people) indicate that patients often want to discuss out-of-pocket cost,[6,9] how this applies to elderly patients is less clear. Elderly patients and patients with chronic disease are less interested in being involved in general decision making regarding health than are younger or healthier patients.[10–15] In addition, studies of Medicare beneficiaries

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indicate that patients who are relatively younger (aged 65–74 vs $\geq$75) respond differently to cost pressures by being more likely to decrease medication use, even after controlling for insurance, health, and other demographic characteristics.[16] Therefore, understanding whether elderly patients want providers to discuss cost, how they wish to be involved in choosing medications, and whether they initiate these discussions when experiencing difficulty paying for medications can help providers know how to improve discussions with their elderly patients about cost and increase patient satisfaction.

METHODS

Setting and Study Design

This study was a cross-sectional survey of 1,106 seniors in a Medicare managed care plan (>400,000 members) in one state with capped brand-name and generic drug benefits in 2001 and generic-only benefits in 2002.[16] Because the original goal was to study benefit caps—similar to the coverage gap in Medicare Part D—half of the participants were randomly sampled from members with $750 or $1,200 caps who exceeded their caps for 75 to 180 days in 2001. The other half was randomly sampled from members with $2,000 caps who did not exceed their caps but had total drug expenditures similar to those of members exceeding the lower caps.[16] This sampling strategy resulted in participants with total drug expenditures in the top quartile of drug expenditures of members with the same cap levels. Eligibility criteria also included aged 65 and older, not using Medicaid, and continuous enrollment from 2001 to the time of the 2002 survey. Participants were excluded if they self-reported being too ill to participate or could not complete the survey in English. Participants were surveyed once between March and July 2002. Interviews were conducted primarily by telephone, with written questionnaires mailed to participants who requested mailed surveys or could not be contacted by telephone. The University of California at Los Angeles institutional review board approved this study.

Measuring Monthly Total Drug Expenditures

To identify the target population, average monthly total drug expenditures were calculated from 2001 pharmacy data by summing all drug costs paid by each member plus the costs paid by the plan. For members who exceeded caps, drug expenditures were averaged from the beginning of 2001 up to the point the cap was exceeded.

Measuring Demographic Characteristics

Participants reported age, education, income, marital status, ethnicity, annual household income, household size, self-rated health, ability to perform instrumental activities of daily living,[17] and whether they had any of 10 common health problems (hypertension, diabetes mellitus, heart disease, depression, stroke, cancer, peptic ulcer disease, hypercholesterolemia, osteoporosis, and bronchitis or asthma). The incomes of participants who provided only income ranges (40%) were imputed using the median income of participants who gave actual incomes (47%) and who were from the same income ranges and household sizes. For participants who provided no income information (13%), the median income of all participants reporting actual income was used.

Measuring Financial Burden and Decreased Medication Use

To measure financial burden, participants were asked "How easy or difficult was it for you to pay for your prescriptions?" Those who responded somewhat difficult or very difficult were considered to report financial burden from medication costs. To measure decreased medication use, participants were asked whether they had used less medication than prescribed, had stopped, or had not started a new prescription because of cost (yes/no).

Measuring Preferences About Discussing Cost and Choosing Medications

Participants reported how strongly they agreed or disagreed with the following statement: "I want my provider to ask me if I can afford my medications," and "I want my providers to think of the cost of medications when choosing a medication for me." Regarding choosing medications, two aspects of decision making were examined: to be offered choices and who should decide.[13] Participants selected from the following: "I prefer a provider that (1) doesn't offer me choices about medications and decides which one I should use, (2) offers me choices about medications but decides which one I should use, (3) offers me choices and persuades me about which one I should use, and (4) offers me choices and has me decide which one I should use." Participants were categorized as wanting to be offered choices if they selected responses 2, 3, or 4. Participants were categorized as wanting providers to persuade them of decide for them which medication to use if they selected responses 1, 2, or 3.

Measuring Experiences with Discussing Cost and Choosing Medications

Participants' experiences with providers were measured by asking "Has your provider ever asked you whether you can afford the cost of your medications (yes/no)?" and "How often do you and your provider talk about the price of a medication when he or she writes you a prescription (never, sometimes, usually, always)?" Participants were also asked to choose which participatory style best described their provider's way of choosing medications (1–4 above).

Asking Providers for Help with Drug Costs

To understand how often participants initiated discussions with providers about medication costs, they were asked "Did you talk to your provider about whether you could cut down on medication costs (yes/no)?" Participants who responded "no" indicated the main reason why they had not asked for help by selecting among five choices: provider can't do anything, didn't have an appointment yet, could afford medication, uncomfortable, and other. Previous work on barriers to patients communicating with providers about general out-of-pocket medical costs informed these responses.[18]

Statistical Analyses

Unadjusted frequencies were used to describe participants' preferences and experiences with providers discussing affordability, cost, offering choices, deciding which medication to use, and whether they had asked providers for help. Frequencies were examined for participants having difficulty paying for medications and for participants not having difficulty paying for medications to determine differences between preferences and experiences between these two groups. Multivariate logistic regression was conducted to examine characteristics of participants who wanted providers to discuss affordability and to consider cost by dichotomizing responses into strongly agree/somewhat agree versus neither/somewhat disagree/strongly disagree and to examine which patients wanted providers to offer them medication choices or wanted to decide for themselves which medication to use. Responses were dichotomized into offer choices versus not offer choices, and persuade/decide for me versus decide for myself. The model included age, sex, education, ethnicity, household size, income, health status, instrumental activities of daily living, number of health conditions, 2001 total drug expenditures, difficulty paying for medications, whether a participant exceeded their cap, telephone versus written survey, and whether a participant provided income information. These variables were chosen based on clinical interest (e.g., age, number of health conditions) and significance of $P<.25$ on univariate analyses. For significant categorical predictor variables, effect sizes are represented using adjusted odds ratios (ORs) with 95% confidence intervals (CIs). Significance level for all statistical analyses was two-sided $P<.05$. Sensitivity analyses were also conducted that excluded all participants who reported no income data.

RESULTS

From a sample of 2,344 potentially eligible participants (1,172 exceeded caps, 1,172 did not exceed caps), 537 (23%) were excluded because of death, self-report of too ill to participate, disenrollment, or inability to complete the survey in English. Of the remaining 1,807 participants, 1,116 (62%) completed surveys, 454 (25%) refused, and 237 (13%) could not be contacted. Two-thirds completed surveys by telephone and one-third by mail. The response rate was the same in participants who exceeded caps (525/854 = 62%) and those who did not (591/953 = 62%).

Demographic Characteristics

Participants were on average aged 76.1; 65% were female and 88% white, 52% had a high school degree or less, and 41% reported fair or poor health (Table 1). Sixty-nine percent had an annual household income of $30,000 or less. For nonresponders, only age and sex were available from claims data. Nonrespondents were slightly older than respondents (77.1 vs 76.1, $P<.001$) but similar in sex distribution.

Financial Burden from Drug Costs

Two-thirds reported difficulty paying for their prescriptions, and one-fourth decreased medication use because of cost (Table 1). Participants' monthly total drug expenditures averaged $210 (5th to 95th percentile: $139–281) in 2001. By comparison, Medicare beneficiaries nationwide averaged $134 per month in 2000 and $193 in 2003.[19] Two-thirds had total drug expenditures greater than $2,250, the 2006 coverage gap threshold in the Medicare Part D.

Table 1. Participant Demographics (N = 1,116)

Characteristic	Value
Age, mean	76.1
Female, %	65
White, %	88
Married, %	53
Education, %	
≤High school degree	52
Some college	30
≥College	18
Household size, number of people, mean	1.8
Annual household income, $	
Mean	31,116
≤15,000, %	20
15,001–30,000, %	49
30,001–40,000, %	11
>40,000, %	20
Health status, %	
Excellent	5
Very good	18
Good	36
Fair	30
Poor	11
Instrumental activity of daily living score, mean (maximum score 8 = no limits in function)	7
Number of health conditions, out of 10 measured, mean	3.7
Monthly total prescription expenditures in 2001, $	
Mean	210
95th percentile, %	281
5th percentile, %	139
Exceeded drug benefit cap in 2001, %	47
Difficulty paying for medications in 2002, %	68
Decreased medication use because of cost in 2002, %	26
Telephone (vs written survey), %	68

Preferences About Discussing Cost

Four in five participants wanted their providers to ask about medication affordability (81%) and consider cost when prescribing (86%) (Table 2). In multivariate analyses, participants with difficulty paying for medications were more likely to want providers to ask about affordability (OR = 1.66, 95% CI = 1.37–2.01) and consider cost (OR = 1.34, 95% CI = 1.08–1.65), although more than two-thirds of participants with no difficulty paying for medications still wanted providers to ask about affordability (68%) and consider costs (80%) as well (unadjusted frequencies). Participants with lower incomes (≤$30,000) were also more likely to want providers to discuss affordability (OR = 1.76, 95% CI = 1.22–2.55) and consider

Table 2. Unadjusted Frequencies for Participants' Preferences and Experiences Discussing Cost and Choosing Medications

Preferences and Experiences	All (N = 1,116)	Participants with Difficulty Paying for Medications (n = 741)	Participants with No Difficulty Paying for Medications (n = 354)
	%		
Preferences			
I want my doctor to ask me whether I can afford my medications.			
Strongly agree or somewhat agree	81	87*	68
Neither agree nor disagree	10	7	18
Somewhat disagree or strongly disagree	9	7	14
I want my doctor to think of the cost of medications when choosing a medication for me.			
Strongly agree or somewhat agree	86*	88	80*
Neither agree nor disagree	6	5	8
Somewhat disagree or strongly disagree	9	7	13
Which type of doctor do you prefer?			
Offers me choices	70	70	70
Persuades me or decides for me	88	87	90
Experiences			
Has your doctor ever asked you whether you can afford the cost of your medications? (yes)	17	19	11
How often do you and your doctor talk about the price of a medication when he or she writes you a prescription?			
Never	44	39	53
Sometimes	37	38	36
Usually or always	19	22	11
Asked doctors for help in cutting medication costs (yes)	62	66	52
If NO, could you tell us the main reason (below) why not?	(n = 395)	(n = 235)	(n = 159)
I didn't think the doctor could do anything	47	54	36
I didn't have an appointment	19	23	13
I could afford my prescriptions	19	7	38
Other	11	12	10
I was uncomfortable telling my doctor	4	4	3
Which type of doctor describes your doctor			
Offers me choices	45	45	45
Persuades/decides for me	93	92	94

Note: Less than 3% were missing for any one question.
*Numbers do not add to 100% because of rounding error.

cost (OR = 1.54, 95% CI = 1.03–2.32) (Table 3), as were participants who gave income information or who completed telephone (vs written) surveys. However, approximately three-fourths or more of participants who had higher incomes (>\$30,000), who did not give income information, or who completed written surveys still wanted providers to ask about affordability and consider cost (unadjusted frequencies). Excluding participants who gave no income information did not change the finding that lower income predicted greater likelihood of wanting providers to discuss affordability but did change its significance as a predictor of wanting providers to consider cost when prescribing (from $P = .025$ to $P = .06$).

Preferences in Decision Making

Participants wanted providers to offer choices (70%) and persuade them or decide for them (88%) which medications to use (Table 2). Difficulty paying for medications and income level were not significant predictors of whether participants wanted to be offered choices, although difficulty paying for medications was a significant predictor of participants wanting to decide for themselves which medications to use (OR = 1.37, 95% CI = 1.03–1.83) (Table 3). Female participants and participants with higher education levels were more likely to want options, but sex and education were not significant predictors of wanting to decide for themselves on medications. Participants who completed written (vs telephone) surveys were also more likely to want to be offered options and to choose medications for themselves based on multivariate analyses, although two-thirds of telephone respondents still wanted to be offered options (65%), and three-fourths of written survey respondents (78%) still wanted providers to persuade them or decide for them when choosing medications (unadjusted frequencies). Excluding participants who pro-

Table 3. Adjusted Odds Ratios for Participants' Preferences on Discussing Cost and Choosing Medications

Independent Variable	Discussing Cost: Want Providers to Ask About Affordability (80%)	Discussing Cost: Want Providers to Consider Cost (85%)	Choosing Medications: Want Providers to Offer Choices (70%)	Choosing Medications: Want to Decide for Themselves Which Medication to Use (12%)
	Odds Ratio (95% Confidence Interval)			
Age, every increase in 10 years	1.21 (0.91–1.60)	1.22 (0.89–1.66)	0.80 (0.63–1.02)	0.75 (0.53–1.06)
Female	1.00 (0.71–1.40)	1.08 (0.74–1.57)	1.75 (1.30–2.36)*	1.22 (0.80–1.86)
Education, some college or higher†	0.75 (0.54–1.05)	0.78 (0.54–1.13)	1.44 (1.07–1.93)*	1.19 (0.79–1.78)
White‡	0.64 (0.36–1.13)	0.61 (0.32–1.16)	1.42 (0.93–2.18)	0.83 (0.46–1.49)
Annual household income >$30,000§	1.76 (1.22–2.55)*	1.54 (1.03–2.32)*	1.10 (0.78–1.54)	0.91 (0.57–1.44)
Health status fair or poor‖	1.13 (0.77–1.66)	1.11 (0.73–1.69)	1.11 (0.79–1.57)	1.10 (0.68–1.80)
Difficulty paying for mediations	1.66 (1.37–2.01)*	1.34 (1.08–1.65)*	1.15 (0.96–1.39)	1.37 (1.03–1.83)*
Exceeded cap	0.95 (0.69–1.30)	1.15 (0.81–1.63)	1.05 (0.80–1.39)	0.82 (0.56–1.20)
Average monthly total drug expenditures >$150/month#	1.11 (0.66–1.86)	1.04 (0.59–1.82)	1.11 (0.69–1.77)	0.52 (0.29–0.93)*
Gave income information	2.34 (1.42–3.86)*	1.69 (0.96–2.97)*	1.46 (0.95–2.25)	1.33 (0.62–2.83)
Telephone survey**	1.81 (1.29–2.55)*	1.51 (1.04–2.20)*	0.32 (0.23–0.46)*	0.27 (0.18–0.41)*

* Significant at $P < .05$.
† Reference: high school education or less.
‡ Reference: non-white.
§ Reference: ≤$30,000.
‖ Reference: excellent, very good, or good.
\# Reference: ≤$150.
** Reference: written survey.

vided no information on income did not change findings that income was not a significant predictor of whether patients wanted choices or to decide for themselves which medications to use.

Experiences with Discussing Cost

Few said providers asked about affordability (17%) or usually or always discussed prices when prescribing (19%) (Table 2). Fewer than one in five participants having difficulty paying for medications said their providers had asked about affordability (19%) or usually or always discussed prices (22%) (Table 2). Of participants who decreased medication use because of cost, fewer than one in three said that their providers has asked about affordability (17%) or usually or always discussed prices (27%). For participants who said their providers had not asked about affordability, most said they wanted providers to ask about affordability (79%). Of participants who said that their provider never or only sometimes talked about price, most said they wanted their provider to consider cost (84%).

Experiences with Decision-Making

Just less than half of participants said their provider offered choices (45%), and nearly all participants said their provider persuaded them or decided for them which medication to use (93%) (Table 2). For participants who said their provider did not offer choices, 45% wanted to be offered choices.

Asking for Help Cutting Drug Costs

Sixty-two percent had asked their provider whether they could cut down on their medication costs (Table 2). Of participants having difficulty paying for medications or who used less medication because of cost, 34% said they had not asked for help. For participants who did not ask for help cutting costs, the majority still wanted providers to ask about affordability (77%), consider cost (83%), and offer choices (65%). The most common reasons reported by participants for not asking for help were believing that their provider could not do anything (47%), not having an appointment (19%), could afford prescriptions (19%), other (11%), and feeling uncomfortable (4%). Participants whose providers had asked about affordability reported higher rates of asking for help (86%) than did participants whose providers had not asked (56%).

DISCUSSION

This is the first study to the authors' knowledge to examine elderly patients' expectations of their providers in managing drug costs. One-fourth decreased medication use, and two-thirds had difficulty paying for medications, indicating the need for providers to help elderly patients with their drug costs.[6,7,9,18,20–22] The vast majority of participants wanted such help from providers, wanting providers to ask them about medication affordability, consider cost, discuss options, and decide for them which medications to use. It is likely that this reflects a wish by elderly patients to be involved by expressing their opinions on cost, affordability, and medication options to their providers and having

providers consider these preferences when using their medical expertise to choose medications. Although participants who had difficulty paying for medications and who had lower income were more likely to want these discussions, at least two-thirds of participants with no problems paying for medications or who had higher income levels also had these preferences. Providers' concern that elderly patients will be uncomfortable discussing cost may be misplaced; only 4% of participants reported this. These findings indicate that providers should engage in discussions about cost and choosing medications with most of their elderly patients.

In this study, fewer than one in five participants reported communication between themselves and providers about cost. Even among elderly patients who had difficulty paying for medications or who were nonadherent to medications because of cost, only one-third said that providers had asked about affordability or usually or always discussed cost when prescribing. These findings confirm that discussions between patients and providers about costs occur infrequently[6,9,22] and that providers cannot readily identify which patients most need such help managing drug costs.[6] Part of the problem is that providers can not rely on elderly patients to initiate these conversations; one third of participants having difficulty paying for medications or who decreased medication use because of cost did not ask providers for help in cutting drug cost.[9,22] Thus, for communication about cost to improve, providers will need to actively initiate these conversations with elderly patients. In this study, participants were also more likely to ask for help (86% vs 56%) if their provider had asked them about medication affordability than if their provider had not. Although barriers to discussion cost exist (lack of time and easy access to accurate information on cost), a number of cost-cutting strategies, such as switching from brand-name to generic drugs, can be considered,[7,23] and most patients find discussions about cost helpful.[22] To implement this, providers could ask, each time they write a prescription, how well patients are managing the cost of their medications.

These findings that elderly patients want providers to help manage their drug costs has significant policy implications for the Centers for Medicare and Medicaid Services and health plans in that they will need to consider giving providers—not just patients—easy access to cost information (e.g., using the Internet, personal digital assistant, or electronic prescribing).[24] This will also help providers address other barriers to discussing costs, including insufficient time and lack of information on medication costs.[7,8,17,22] Providers often find it time consuming to determine an individual patient's coverage information at the point of prescribing.[8,21,25] Providing such information can aid providers and patients in holding meaningful and accurate conversations about medication costs and options. Pharmacists, who have easier access to prescription copayment information because of billing systems, also play an important role in discussing costs and affordability with elderly patients. Unfortunately, discussions between patients and pharmacists often occur after the prescription has been written and the patient has left the provider's office. Therefore, additional time and effort is required by pharmacists to contact providers to change the prescription, and it also makes it less likely that patients and providers will discuss, face to face, the cost and benefits of different medication options.

The mode of survey (telephone vs written questionnaire) remained a significant predictor of participants' preferences for providers helping manage drug costs, even after accounting for participant demographics. Participants who completed telephone surveys were more likely to want providers to discuss affordability and consider cost and less likely to want providers to offer choices or to decide for themselves which medication to use. Thus, further exploration is needed to determine whether participants believe that there are "socially correct" answers to questions about discussing cost with providers or about decision-making styles. Even so, the main findings that most elderly patients want more communication about cost remains robust; more than two-thirds of participants who completed written surveys wanted to discuss cost, consider affordability, and have providers choose their medications, and two-thirds of telephone respondents wanted to be offered choices.

The limitations of this study are that participants came from a single, large Medicare managed care plan operating in a single state. The sample did not include all plan members but instead focused on enrollees with higher drug expenditures, which is more likely to represent beneficiaries who are at risk for reaching the coverage gap in the Medicare Part D and have greater cost sharing.[1–5] Elderly patients with lower drug expenditures may be less concerned about drug costs, although this study found that most participants who said they could afford their medications wanted much more discussion of their costs and medication options. Participants reported their providers' communications about cost, and providers could have discussed affordability and prices more or less often than participants reported or considered participants' ability to pay without informing participants. The examination of medical decision making was restricted to two main aspects (being offered choices and who should decide), without asking about other aspects such as whether patients wished to rely on themselves or providers for medical information.[12,13] The study was limited to participants who could complete a written or telephone survey in English, thus limiting the potential influence of cultural and ethnic preferences on medical decision-making.

These findings suggest that many elderly patients want their providers' assistance with managing their drug costs, even if they had never said so or could afford their current medications. Therefore, providers should adopt a strategy of initiating such discussions of medication cost with all elderly patients, including offering options and eliciting decision-making preferences, as a means of improving medication adherence, patient satisfaction, and care.

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