**ReCAP** 

The full version of this article may be viewed online at DOI: 10.1200/JOP.2015.007401

# of Cancer Care

Physician Experience and Attitudes Toward Addressing the Cost

Ivy Altomare, MD, Blair Irwin, MD, MBA, Syed Yousuf Zafar, MD, Kevin Houck, MPH, Bailey Maloney, Rachel Greenup, MD, MPH, and Jeffrey Peppercorn, MD, MPH

Duke University Medical Center; Duke Cancer Institute, Durham; North Carolina State University, Raleigh, NC; Massachusetts General Hospital; and Harvard Medical School, Boston, MA

Corresponding author: Ivy Altomare, MD, Duke University Medical Center, Duke Cancer Network, 3100 Tower Blvd, Ste 600, Durham, NC 27707; e-mail: ivy.altomare@ duke.edu.

Disclosures provided by the authors are available with this article at jop.ascopubs.org.

**QUESTION ASKED:** Because the cost of oncologic care is perpetually rising, we wanted to know how often physicians who treat cancer discuss the cost of care (both out-of-pocket and societal) with their patients, what the nature of those discussions is, and whether such discussions affect treatment decisions.

**SUMMARY ANSWER:** Sixty percent of responding physicians reported addressing costs frequently or always in clinic, 40% addressed costs rarely or never, and 36% did not believe it is the doctor's responsibility to explain costs of care to patients. Additional responses are listed in Table 3. The majority of physicians feel their patients are not well informed about costs. "I don't know enough/lack of resources" is the largest reported barrier to cost discussions, and those who reported frequent discussions were significantly more likely to explain costs and to prioritize treatments in terms of cost.

METHODS: A 15-question, study-specific, self-administered anonymous survey was sent electronically to a randomly selected sample of 2,290 ASCO physician members.

BIAS, CONFOUNDING FACTOR(S), DRAWBACKS: Our overall response rate was somewhat low at 15%, with an adjusted response rate of 25% after adjusting for nonpracticing physician ASCO members. This increased the potential for selection bias, by which the respondents to this survey may not represent the true beliefs and practices of medical, radiation, and surgical oncologists.

REAL-LIFE IMPLICATIONS: Our study offers a current snapshot of the frequency, nature, and attitudes toward cost discussions among medical, radiation, and surgical oncologists and their patients. Although the majority of responding physicians seem to agree that such discussions are legitimate—and arguably necessary—components of quality cancer care, there remains a substantial proportion who do not discuss costs nor feel it is their duty. Few believe they have adequate resources to discuss costs, suggesting that greater cost transparency, education concerning costs of care, tools to facilitate discussions, and validated interventions are needed. JOP



DOI: 10.1200/JOP.2015.007401; published online ahead of print at jop.ascopubs.org on February 16, 2016.

Table 3. Physician Attitudes Toward Out-of-Pocket Costs Versus Societal Costs

	% Response by Attitude				
Question or Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Doctors should explain to patients the costs the patient will have to pay for his or her cancer treatment.	12	32	21	28	8
Doctors should explain to patients the costs society will have to pay for the patient's treatment.	5	17	33	34	11
When choosing a new treatment, doctors should consider the costs to the patient.	15	60	15	7	2
When choosing a new treatment, doctors should consider the costs to the insurance company or government.	9	44	19	21	6
I feel prepared to discuss cost effectiveness of treatments I recommend.	11	35	21	26	8
I have easy access to quality resources which assist me in cost discussions with my patients.	8	18	20	39	16
Society should only pay for treatments that improve survival, not those that only improve response or disease control.	4	10	15	41	30
If two treatments are the same, the doctor should prescribe the cheaper medicine.	29	50	14	7	0
Every US patient should have access to effective cancer treatments regardless of their cost.	24	44	15	12	5
The FDA should consider cost effectiveness of the treatment before issuing an approval.	20	36	21	17	7

# Physician Experience and Attitudes **Toward Addressing the Cost of Cancer Care**

Ivy Altomare, MD, Blair Irwin, MD, MBA, Syed Yousuf Zafar, MD, Kevin Houck, MPH, Bailey Maloney, Rachel Greenup, MD, MPH, and Jeffrey Peppercorn, MD, MPH

Duke University Medical Center; Duke Cancer Institute, Durham; North Carolina State University, Raleigh, NC; Massachusetts General Hospital; and Harvard Medical School, Boston, MA

## **Abstract**

### Purpose

We surveyed US cancer doctors to examine current attitudes toward cost discussions and how they influence decision making and practice management.

#### Methods

We conducted a self-administered, anonymous, electronic survey of randomly selected physician ASCO members to evaluate the frequency and nature of cost discussions reported by physicians, attitudes toward discussions of cost in clinics, and potential barriers.

## Results

A total of 333 of 2,290 physicians responded (response rate [RR], 15%; adjusted RR after omitting nonpracticing physician ASCO members, 25%), Respondent practice settings were 45% academic and 55% community/private practice. Overall, 60% reported addressing costs frequently/always in clinic, whereas 40% addressed costs rarely/never. The largest reported barrier was lack of resources to guide discussions. Those who reported frequent discussions were significantly more likely to prioritize treatments in terms of cost and believed doctors should explain patient and societal costs. A total of 36% did not believe that doctors should discuss costs with patients. Academic practitioners were significantly less likely to discuss costs (odds ratio [OR], 0.41; P = .001) and felt less prepared for such discussions (OR, 0.492; P = .005) but were more likely to consider costs to the patient (OR, 2.68; P = .02) and society (OR, 1.822; P = .02).

### Conclusion

Although the majority of respondents believe it is important to consider out-of-pocket costs to patients, a substantial proportion do not discuss or consider costs of cancer care. Lack of consensus on the importance of such discussions and uncertainty regarding the optimal timing and content appear to be barriers to addressing costs of care with patients.

#### INTRODUCTION

The rising cost of cancer care has become an increasingly popular topic of discussion and research in the United States, with respect to both out-of-pocket costs for patients and overall cost burden to the US health care system. Medical expenditures for cancer care are viewed by many as unsustainable; currently, expenditures are 5% to 11% of the overall US health care budget and are rising at a faster rate than many other sectors of medicine.<sup>2,3</sup> Although difficult to estimate, the cost of cancer care is projected to grow from



DOI: 10.1200/JOP.2015.007401; published online ahead of print at jop.ascopubs.org on February 16, 2016.

approximately \$125 billion in 2010 to \$158 billion in 2020. 4.5 These facts, when added to the current climate of expanded health care coverage, payment reform, and an explosion in the number of costly therapeutics, have created an unprecedented debate about the role of the cancer provider in controlling the costs of care. 6,7 Both ASCO and the Institute of Medicine (IOM) have issued guidance statements that, when making treatment decisions, cancer providers should discuss the costs of cancer care with patients.<sup>1,8</sup> However, the goals of this discussion as well as when and how the discussion should take place are not detailed. Some believe that cancer physicians have an obligation to society to practice medicine based on the optimal use of scarce resources<sup>3</sup>; others maintain that a physician's duty is to the individual patient to maximally reduce financial toxicity and out-of-pocket expenses on the basis of the cost-benefit profile of available therapies. 9 Conceivably, some may support a third opinion, that physicians have neither the training nor the responsibility to consider such issues and that treatment decisions should be based on efficacy data alone.

Despite the issuance of the 2009 ASCO guidelines and the 2013 IOM report that suggest the need for physician-patient cost discussions, little is known about the current state of these discussions. To study this, we conducted an anonymous electronic survey of US medical, surgical, and radiation oncologists to examine the contemporary nature of their attitudes toward treatment-related costs and cost discussions and how such discussions influence decision making and practice management.

## **METHODS**

## **Survey Development**

We developed a study-specific 15-question survey to evaluate physician self-reported experiences about discussing and managing the costs of cancer care (including frequency of discussions, who initiates discussions, and use of resources to inform and promote such discussions). We included questions to contrast physician attitudes toward patient out-of-pocket costs and societal costs and to determine, from the physician perspective, the most common barriers to cost discussions during a clinical encounter. The protocol was approved by the Duke University Institutional Review Board. Ten pilot interviews were conducted among academic and community physicians at Duke University and the Duke Cancer Network to improve survey design, usability, and face validity.

## Survey Methods

Invitations for study participation and confidential, self-administered surveys were sent electronically to an anonymous, randomly selected sample of 2,290 ASCO physician members in September 2013, with three subsequent e-mail reminder requests. Results were recorded in the electronic survey system Qualtrics, an encrypted, web-based survey tool, and missing data were not imputed. Survey responses other than demographics were either yes or no or were graded on 5-point Likert scales. Differences in reported answers among groups were compared by using simple logistic regression with two-sided *P* values.

#### **RESULTS**

## **Response Rates and Demographics**

Overall, 333 of 2,290 invited physician ASCO members responded, which represented a response rate (RR) of 15%. Only four anonymous invitees declined survey participation by email because of a nonpractitioner status, and their responses were not included among the results. When the total estimated number of nonpracticing physician and the non-boardcertified ASCO members randomly selected to receive surveys were omitted, the adjusted RR was 25% (333 of 1,320 on the basis of 2014 ASCO census data obtained via ASCO customer service communication, September 2015). Overall, 35% of respondents were medical oncologists, 35% were radiation oncologists, and 31% were surgeons. A total of 47% of physicians practiced general oncology, whereas 53% identified themselves as subspecialists. A total of 45% described their practice as academic, whereas 55% of respondents were in community or private practice; additional practice descriptors and other demographics are listed in Table 1. A total of 38% of respondents predicted that, given the current state of reimbursement, their medical practices would be unsustainable in the next 5 years. Approximately three quarters of the cohort were men, and three quarters were white. Overall, 54% of our respondents had been practicing oncology for greater than 15 years; 31%, between 5 and 15 years; and 14%, less than 5 years; 2%, were still in training. A total of 89% of respondents devoted 50% or more of their time to direct patient care.

# Frequency and Nature of Cost Discussions With Patients

The majority of responders (n = 199, or 60%), stated that they often or frequently discuss costs of cancer care with their

86/98 (88)

9/98 (9)

2/98 (1)

1/98 (1)

2/98 (2)

80/98 (82)

18/98 (18)

Table 1. Demographics of Respondents

Medical Specialty

Practice setting Academic

Community hospital/clinic

Multispecialty group

Asian/Pacific Islander

Self-reported ethnicity

African American

patients' finances.

White

Other

Sex

Hispanic

Single specialty > 4 providers

Single specialty 1-4 providers

Medical Oncologists (n = 117; 35%)	Radiation Oncologists (n = 115; 35%)	Surgical Oncologists (n = 101; 31%)
36/116 (31)	46/115 (40)	67/101 (66)
27/116 (23)	32/115 (28)	12/101 (12)
34/116 (29)	20/115 (17)	2/101 (2)
15/116 (13)	14/115 (12)	13/101 (13)
7/116 (6)	12/115 (10)	8/101 (8)

85/115 (74)

13/115 (11)

2/115 (2)

7/115 (6)

8% (9/115 (8)

No./Total No. (%) by Respondent Group

Male 254/328 (77) 87/116 (75) 87/113 (77) 74/328 (23) Female 29/116 (25) 26/113 (23) patients. However, a sizeable portion, 35%, stated that they rarely discuss costs, and 6% reported that they never discuss costs with their patients. Initiation of discussions was evenly split between patient and provider. Regarding physician perspectives on patient knowledge, 85% disagreed with the statement that "most patients are well informed about the costs of their cancer treatment." Overall, 79% agreed that most patients are surprised by the out-of-pocket costs of their cancer treatment. Similarly, 77% felt that most patients do not understand the costs that society will have to pay for their treatment, whereas 19% were unsure. Physicians were roughly

All Responders

149/333 (45)

73/333 (22)

57/333 (17)

42/333 (13)

26/333 (8)

249/328 (76)

42/328 (13)

20/328 (6)

14/328 (4)

10/328 (3)

77/114 (68)

20/114 (18)

10/114 (9)

11/114 (10)

1/114 (1)

(N = 333)

The most commonly reported barriers to point-of-care cost discussions are listed in Table 2. Across the board, 90% of respondents said that continuing medical education programs, web-based resources, or expert guidelines on cost effectiveness of cancer therapies would be "very" or "somewhat" useful.

split on the degree to which they were aware of financial issues affecting their patients; 56% reported that they felt confident

they had an accurate sense of their patients' financial well-

being, and 44% reported that they did not understand their

Physicians referred their patients to a third-party financial counselor often (44%) or sometimes (37%). A total of 81% reported a high level of satisfaction with the ancillary financial support services available to their patients, although 14% were dissatisfied, and 6% had no access to such financial counseling.

## **Attitudes Toward Costs of Care and Cost Discussions**

When discussing treatments for their patients, 94% of surveyed physicians say that they always or mostly offer all treatment options regardless of cost, and 55% never or rarely prioritize treatments in terms of their cost. The majority of surveyed physicians agreed that it is their responsibility to consider outof-pocket costs to patients (75%) and societal costs (53%) when choosing a treatment. A total of 44% of surveyed physicians agreed with the statement "doctors should explain to patients the costs of his or her cancer treatment," but only 22% agreed with the statement "doctors should explain to patients the costs society will have to pay for their cancer treatment." Approximately two thirds of surveyed physicians felt that every US patient should have access to effective therapies regardless of their costs, slightly more than half felt that the FDA should consider cost effectiveness when issuing approvals, and 79% agree that, if two treatments are the same, the doctor should choose to prescribe the cheaper medicine (Table 3).

## **Differences Among Groups**

Physicians who reported having frequent cost discussions with their patients were significantly more likely than physicians who reported rarely or never conducting such discussions to prioritize treatments in terms of cost (odds ratio [OR], 2.91; P < .01), to report understanding of their patients' financial

Table 2. Barriers to Cost Discussions



NOTE. Totals do not equal 100% because physicians were able to select more than one answer.

well-being (OR, 2.96; P = .01), and to feel that doctors should explain out-of-pocket (OR, 2.63; P < .01) and societal (OR, 3.76; P < .01) costs.

Practitioners in an academic setting were significantly less likely than physicians in community or private practice to discuss costs with their patients (OR, 0.41; P < .01), and they felt less prepared for such discussions (OR, 0.49; P = .01). However, academics were more likely to consider costs to the patient (OR, 2.68; P = .02) and to the government (OR, 1.82; P = .02) when choosing a treatment.

#### DISCUSSION

Discussion of costs of care has been identified as a key component of quality cancer care and of individualized treatment of patients who have advanced cancer. <sup>8,10</sup> The degree of financial toxicity that can be imposed by cancer treatments was recently demonstrated by a study of insured patients with cancer, which found that nearly half of surveyed participants reported a significant or catastrophic subjective financial burden. To cope with the costs of care, the majority of patients in this study cut back on leisure activities, reduced spending on food and clothing (46%), and used savings to defray out-of-pocket expenses (46%). <sup>11</sup> Many patients want to discuss costs with their providers. A recent survey of women with breast cancer revealed that 94% of surveyed patients agreed that doctors should inform patients about costs of care,

and 53% felt that doctors should consider direct costs to the patient when making treatment decisions. <sup>12</sup> Our survey indicates that physicians feel similarly, because the majority of cancer providers in our survey, 75%, agreed that it is their responsibility to consider out-of-pocket costs to patients. However, there is less agreement that it is the doctor's role to discuss costs with their patients; only 44% of our surveyed physicians agreed with that statement. There is a potential conflict with the goals of patients in this area that merits additional investigation.

Our results are consistent with other physician surveys on this subject but suggest that there may be shift in the practice of discussing costs in the oncology clinic over time. A 2007 pilot survey of ASCO physician members found that 42% of surveyed physicians reported discussing costs, and 80% felt that physicians should consider the financial impact of treatment choices. A 2010 study that contrasted attitudes of US and Canadian oncologists reported that 42% of US oncologists discuss costs frequently or often and that 84% agree that patient out-of-pocket costs influence treatment decisions. In our survey, 60% reported frequent discussions of cost with their patients.

Although the majority of surveyed physicians now feel obligated to initiate and carry out cost discussions, our survey found that many feel poorly prepared to discuss costs. Only 26% felt that they had adequate resources to discuss costs,

Table 3. Physician Attitudes Toward Out-of-Pocket Costs Versus Societal Costs

% Response by Attitude Strongly **Neither Agree** Strongly Question or Statement Agree Agree nor Disagree Disagree Disagree Doctors should explain to patients the costs the patient 8 12 32 21 28 will have to pay for his or her cancer treatment. Doctors should explain to patients the costs society will 5 17 33 34 11 have to pay for the patient's treatment. 7 When choosing a new treatment, doctors should consider 15 15 2 60 the costs to the patient. 6 When choosing a new treatment, doctors should consider 9 44 19 21 the costs to the insurance company or government. I feel prepared to discuss cost effectiveness of treatments 11 35 21 26 8 I recommend. I have easy access to quality resources which assist me in 8 18 20 39 16 cost discussions with my patients. Society should only pay for treatments that improve 30 4 10 15 41 survival, not those that only improve response or disease control. 7 0 If two treatments are the same, the doctor should 29 50 14 prescribe the cheaper medicine. Every US patient should have access to effective cancer 24 44 15 12 treatments regardless of their cost. 7 The FDA should consider cost effectiveness of the 20 36 21 17 treatment before issuing an approval.

Abbreviation: FDA, US Food and Drug Administration.

which suggests that greater cost transparency, education concerning costs of care, and tools to facilitate discussions may be beneficial. One third of providers reported that they do not address costs of care because they cannot help with patient's costs.

Our study demonstrates potential challenges and limitations in addressing costs of cancer care through discussion alone. Physicians want to discuss and consider costs, and they request more knowledge and resources on cost effectiveness. Conversely, they feel a professional commitment to offer the best treatment possible regardless of costs. An overwhelming majority of surveyed physicians stated that they always or mostly offer all treatment options to patients regardless of cost. The majority said that they do not prioritize treatments in terms of their cost, and approximately two thirds of surveyed physicians felt that every US patient should have access to effective therapies regardless of their costs. Similar conflicting sentiments were expressed in the findings of a recent physician

survey in the Netherlands, where results indicated that cancer providers rejected cost considerations in individual patient care on the basis of ethical obligations to offer the best treatments possible, although they did feel that such considerations are important at the level of hospital policy. Our survey data mirror this Netherlands study, in that only a minority of physicians felt that they should explain societal cost-of-care choices to their patients, but a majority felt that cost effectiveness should be a component of the FDA approval process.

A clear limitation of this study, and of the strength of conclusions we can draw from this data about discussions of costs of cancer care, is the low overall RR of 15%. This increases the potential for selection bias, in which the respondents to this survey do not represent the true beliefs and practices about cost discussions of the US oncology community. However, there are several reasons to consider this data important. First, when we adjusted for the fact that the survey was sent to all ASCO

members but the questions are only relevant to practicing clinicians, the RR was an estimated 25%, which remains low but is typical of other physician surveys. 13 We randomly selected ASCO members via e-mail invitation; given that all respondents indicated that they were in clinical practice and given that ASCO estimates that only 57.55% of their membership are board-certified physicians, roughly 40% of our sample may have been unable to respond (ASCO customer service personal communication, September 2015). The majority of physician ASCO members are medical oncologists. Therefore, even after the aforementioned adjustment, the relative RR for medical oncologists was likely lowest among the three specialties. The reason for this cannot be ascertained from our methodology. Importantly, our data do not suggest a monolithic view of cost discussions among oncologists. Thus, our observed trends are expected to persist even with a higher RR.

Our survey has other important limitations. Not all oncologists, and in particular not all surgical and radiation oncologists, are members of ASCO. In addition, we surveyed the perceived understanding of patient financial wellness, which may not correspond to the actual financial status of patients. With a self-administered survey, we could not explore issues, such as why some physicians did not feel responsible for discussing costs or why they felt that they could not affect the patient cost burden in greater detail, as we could if a focus group or structured interview methodology were used.

Our survey does have a number of strengths. Whereas previous cost survey studies have focused on a particular physician group, our survey polled multiple cancer provider groups that included private and academic medical oncology, radiation oncology, and surgery physicians. Statistical comparisons of responses among the three specialty groups were not made, because the apparent dramatic differences in RR make such comparisons potentially deeply flawed. However, this is among the first studies to highlight attitudes toward discussions of cancer care costs that extend beyond drug therapy alone. The possibility that costs of surgical cancer care and radiation therapy may not be adequately considered or discussed with patients should be studied more. Surgery and radiation therapy decisions can influence costs of care, just as drug costs do, and there may be opportunities for greater emphasis on discussions of cost in these fields to reduce financial burdens on patients 16,17 An additional notable comparison was that academic physicians, compared with their counterparts in community or private practice, are more likely to consider costs to the patient and to society but actually discuss costs with their patients less often. Furthermore, academic physicians feel less prepared for cost discussions than do physicians in private practice. Of course, we cannot determine the causes of these reported differences from our survey data, but one may hypothesize. Perhaps academic physicians are more sheltered from the cost pressures of running a practice and, therefore, have less experience explaining and managing patient costs.

In conclusion, our findings suggest that many cancer specialists support the ASCO guidance that patient-physician cost discussions are an important part of cancer care. The data indicate, however, that preparing physicians for these discussions may not be straightforward. In fact, given the varied comfort and experience levels of physicians on the basis of practice setting and specialty, training may need to be specifically tailored to each physician group. Certainly, discussions about treatment-related costs with individual patients may not be the way to address increasing societal costs of oncologic care. Studies such as these offer a snapshot into current practice and support the need to test interventions designed to improve this important area of communication. Surveys of members of the American College of Surgeons (ACS) and the American Society for Radiation Oncology (ASTRO) are needed to better define the attitudes of physicians in these fields toward discussions of costs in the clinic. Oncology fellowship programs in all disciplines could develop programs to train fellows to assess the value of therapy and to develop skill and comfort in discussing financial issues with patients. A greater emphasis on patient navigation and financial counselors in all settings may be necessary to help patients understand the costs of care and to reduce financial toxicity of treatment, when possible. Discussions of cost are now seen as legitimate and, arguably, necessary components of quality cancer care for many clinicians and patients. Additional efforts should define the optimal timing, content, and goals of such discussions and should evaluate interventions to facilitate such discussions in oncology practice. JOP

#### Acknowledgment

Jeffrey Peppercorn, MD, is supported by the Greenwall Foundation.

#### **Authors' Disclosures of Potential Conflicts of Interest**

Disclosures provided by the authors are available with this article at jop.ascopubs.org.

#### **Author Contributions**

**Conception and design:** Ivy Altomare, Blair Irwin, Syed Yousuf Zafar, Kevin Houck, Rachel Greenup, Jeffrey Peppercorn

Financial support: Ivy Altomare

Administrative support: Ivy Altomare

Provision of study materials or patients: Ivy Altomare

Collection and assembly of data: Ivy Altomare, Bailey Maloney, Rachel

Greenup

Data analysis and interpretation: Ivy Altomare, Blair Irwin, Syed Yousuf

Zafar, Kevin Houck, Rachel Greenup, Jeffrey Peppercorn

Manuscript writing: All authors

Final approval of manuscript: All authors

Corresponding author: Ivy Altomare, MD, Duke University Medical Center, Duke Cancer Network, 3100 Tower Blvd, Ste 600, Durham, NC 27707; e-mail: ivy.altomare@duke.edu.

#### References

- 1. Levit LA, Balogh E, Nass SJ, et al: Delivering high-quality cancer care: Charting a new course for a system in crisis. The National Academies Press, Washington, DC, 2013
- ${\bf 2.}$  Newcomer LN: Innovative payment models and measurement for cancer therapy. J Oncol Pract 10:187-189, 2014
- **3.** Jagsi R: Debating the oncologist's role in defining the value of cancer care: We have a duty to society. J Clin Oncol 32:4035-4038, 2014
- **4.** Mariotto AB, Yabroff KR, Shao Y, et al: Projections of the cost of cancer care in the United States: 2010 to 2020. J Natl Cancer Inst 103:117-128, 2011
- **5.** Keehan SP, Sisko AM, Truffer CJ, et al: National health spending projections through 2020: Economic recovery and reform drive faster spending growth. Health Aff (Millwood) 30:1594-1605, 2011
- **6.** Hornbrook MC, Malin J, Weeks JC, et al: Did changes in drug reimbursement after the Medicare modernization act affect chemotherapy prescribing? J Clin Oncol 32: 4042-4049, 2014

- $\hbox{\bf 7. Schnipper LE, Meropol NJ: Payment for cancer care: Time for a new prescription. } J Clin Oncol 32:4027-4028, 2014$
- **8.** Meropol NJ, Schrag D, Smith TJ, et al: American Society of Clinical Oncology: American Society of Clinical Oncology guidance statement: The cost of cancer care. J Clin Oncol 27:3868-3874, 2009
- 9. Sulmasy D, Moy B: Debating the oncologist's role in defining the value of cancer care: Our duty is to our patients. J Clin Oncol 32:4039-4041, 2014
- **10.** Peppercorn J: A common theme among ethical issues in oncology: The need to individualize advanced cancer care. Oncology (Williston Park) 27:97, 102, 2013
- **11.** Zafar SY, Peppercorn JM, Schrag D, et al: The financial toxicity of cancer treatment: A pilot study assessing out-of-pocket expenses and the insured cancer patient's experience. Oncologist 18:381-390, 2013
- **12**. Irwin B, Kimmick G, Altomare I, et al: Patient experience and attitudes toward addressing the cost of breast cancer care. Oncologist 19:1135-1140, 2014
- 13. Schrag D, Hanger M: Medical oncologists' views on communicating with patients about chemotherapy costs: A pilot survey. J Clin Oncol 25:233-237, 2007
- **14.** Berry SR, Bell CM, Ubel PA, et al: Continental divide? The attitudes of US and Canadian oncologists on the costs, cost effectiveness, and health policies associated with new cancer drugs. J Clin Oncol 28:4149-4153, 2010
- **15.** de Kort SJ, Kenny N, van Dijk P, et al: Cost issues in new disease-modifying treatments for advanced cancer: In-depth interviews with physicians. Eur J Cancer 43:1983-1989, 2007
- **16.** Bekelman JE, Sylwestrzak G, Barron J, et al: Uptake and costs of hypofractionated versus conventional whole-breast irradiation after breast conserving surgery in the United States, 2008 to 2013. JAMA 312:2542-2550, 2014
- **17.** Greenup RA, Camp MS, Taghian AG, et al: Cost comparison of radiation treatment options after lumpectomy for breast cancer. Ann Surg Oncol 19: 3275-3281, 2012

#### **AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST**

### Physician Experience and Attitudes Toward Addressing the Cost of Cancer Care

The following represents disclosure information provided by authors of this manuscript. All relationships are considered compensated. Relationships are self-held unless noted. I = Immediate Family Member, Inst = My Institution. Relationships may not relate to the subject matter of this manuscript. For more information about ASCO's conflict of interest policy, please refer to <a href="https://www.asco.org/rwc">www.asco.org/rwc</a> or <a href="https://jec.xhtml">jop.ascopubs.org/site/misc/ifc.xhtml</a>.

Ivy Altomare

Consulting or Advisory Role: Amgen, Incyte, Genentech, Novartis

Blair Irwin

No relationship to disclose

Syed Yousuf Zafar Employment: Novartis (I)

**Stock or Other Ownership:** Novartis (I) **Consulting or Advisory Role:** Genentech

Travel, Accommodations, Expenses: Genentech/Roche

Kevin Houck

No relationship to disclose

**Bailey Maloney** 

**Employment:** Samaritan Ambulance Service

Rachel Greenup

No relationship to disclose

Jeffrey Peppercorn

Employment: GlaxoSmithKline (I)

**Stock or Other Ownership:** GlaxoSmithKline (I) **Consulting or Advisory Role:** Genentech