Primary Care Clinicians' Perspectives on Reducing Low-Value Care in an Integrated Delivery System

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ABSTRACT

Context: Perceptions about low-value care (eg, medical tests and procedures that may be unnecessary and/or harmful) among clinicians with capitated salaries are unknown.

Objective: Explore clinicians' perceived use of and responsibility for reducing low-value care by focusing on barriers to use, awareness of the *Choosing Wisely* campaign, and response to reports of peer-comparison resource use and practice patterns.

Methods: Electronic, cross-sectional survey, distributed in 2013, to 304 salaried primary care physicians and physician assistants at Group Health Cooperative.

Main Outcome Measures: Attitudes, awareness, and barriers of low-value care strategies and initiatives.

Results: A total of 189 clinicians responded (62% response rate). More than 90% believe cost is important to various stakeholders and believe it is fair to ask clinicians to be cost-conscious. Most found peer-comparison resource-use reports useful for understanding practice patterns and prompting peer discussions. Two-thirds of clinicians were aware of the *Choosing Wisely* campaign; among them, 97% considered it a legitimate information source. Although 88% reported being comfortable discussing low-value care with patients, 80% reported they would order tests or procedures when a patient insisted. As key barriers in reducing low-value care, clinicians identified time constraints (45%), overcoming patient preferences/values (44%), community standards (43%), fear of patients' dissatisfaction (41%), patients' knowledge about the harms of low-value care (38%), and availability of tools to support shared decision making (37%).

Conclusions: Salaried clinicians are aware of rising health care costs and want to be stewards of limited health care resources. Evidence-based initiatives such as the *Choosing Wisely* campaign may help motivate clinicians to be conscientious stewards of limited health care resources.

INTRODUCTION

Improving quality and enhancing value in health care delivery is a national priority. Many public and private sector initiatives are developing, testing, and deploying strategies to reduce overuse and to promote appropriate use, quality, and optimal health outcomes.[1-3] Overtreatment and failures of care delivery and coordination account for nearly 20% and 18%, respectively, of waste of health care expenditures.[4] Many public and private sector initiatives, including the *Choosing Wisely*[5] initiative, are developing, testing, and deploying strategies to reduce overuse and to promote the appropriate use of health care services. Started in 2012 by the American Board of Internal Medicine Foundation in Philadelphia, PA, the *Choosing Wisely* initiative focuses on encouraging physicians, patients, and other health care stakeholders to have conversations about medical tests and procedures that may be unnecessary and, in some instances, may cause harm. As of June 2015, more than 70 specialty society partners have developed lists of at least 5 recommendations for tests and treatments that are potentially overused and do not provide meaningful benefits for patients.[5]

Care models that focus on clinician accountability, insurance risk protection, and alternative clinician payments have been receiving increasing attention, with health care reform as a possible model to decrease expenditures through the removal of financial incentives for providing more care. Understanding clinicians' perspectives is particularly important because health care professionals play a key role in choosing which health care services are used.

Group Health Cooperative (Group Health) is a mixed-model delivery system with just under 600,000 members in Washington State, 380,000 of whom are cared for in the integrated delivery system by approximately 1000 salaried, multidisciplinary clinicians (320 primary care physicians and pediatricians and 635 specialty physicians) in 25 Medical Centers. Group Health has been implementing a "Resource Stewardship" initiative to bring personalized information to clinicians to inform their clinical decision making on the use of particular services and to reduce the use of low-value care. In October 2012, each Medical Center received a report with clinician-specific practice pattern data from the previous year that included peer comparisons within each clinic. Data included clinician-specific total cost of care for patients and use of high-end imaging (computed tomography and magnetic resonance imaging), laboratory test

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ordering, prescribing, and specialty referrals. Follow-up data in Spring 2013 provided additional peer comparison data on rates of overuse of Papanicolaou tests and prostate-specific antigen screening in men older than 75 years in the previous 12 months.

The aims of this study were to explore the clinicians' perceived use of and responsibility for reducing low-value care, barriers to decreasing its use, and knowledge and perceived legitimacy of the *Choosing Wisely* initiative.[5] Additionally, we evaluated whether clinicians believed they have decreased their use of low-value care after receiving a peer comparison report on their practice patterns.

METHODS

Design Overview, Settings, and Participants

We conducted an online survey of 304 primary care clinicians at Group Health in Fall 2013 (Appendix 1 available at: www.thepermanentejournal.org/files/Winter2016/CareSurvey.pdf). An e-mail invitation was sent by the Medical Group President and Medical Director, with up to 3 reminder e-mails spaced 1 week apart. The survey collected information on our specific work in Group Health on the Resource Stewardship initiative and attitudes toward and awareness of low-value care. It also used select questions from a national survey of physicians conducted for the American Board of Internal Medicine Foundation by the Robert Wood Johnson Foundation in Princeton, NJ, to hear physicians' views about the health care system.[6] We used several of the same questions in our survey to enable direct comparisons with other US clinician populations. In the survey, we defined *low-value care* as "unnecessary care, or care that does not improve patient outcomes and can harm patients." To help clinicians better understand our definition, we also included the following examples of low-value care: "prescribing antibiotics for viral infections, recommending screening exams more frequently than needed, and ordering tests without informing patients of their harms and benefits so they can participate in a decision about whether they want an imperfect test (eg, PSA [prostate-specific antigen] screening)." The overall response rate was 62%; the response rate was 50% for physician assistants (n = 23) and 64% for physicians (n = 166).

Statistical Analysis

We compared the characteristics of respondents to nonrespondents to assess representativeness. Clinician characteristics were obtained from employee files. At the end of the survey, respondents were given the opportunity to provide open-ended responses, which were collated and reviewed for themes.

This quality-improvement initiative and subsequent evaluation survey analyses were determined to be exempt from human subjects review in compliance with the US Office for Human Research Protections (45 CFR part 46). All analyses were conducted with Stata 13.0 statistical software (StataCorp, College Station, TX).

RESULTS

Respondents were significantly older than nonrespondents (mean = 49 vs 46 years), and had more years practicing (mean = 21 vs 17 years; Table 1). Respondents were also significantly more likely than nonrespondents to have been at Group Health 10 or more years (59% vs 38%). There were no statistically significant differences between respondents and nonrespondents in panel size, sex, race, provider type, and primary department.

Attitudes and Awareness of Low-Value Care

Nearly all clinicians who responded to the survey (> 90%) replied that the cost of care they personally deliver is important to different stakeholders and believe it is fair to ask clinicians to be cost-conscious (Table 2). In contrast,

Table 1. Characteristics of nonrespondents and respondents among Group Health Cooperative primary care clinicians[a]

Characteristic	Nonrespondents (n = 115)	Respondents (n = 189)	Total (N = 304)	p value
Age in years in 2013, mean (SD)	46 (11)	49 (11)	48 (11)	< 0.05
Years in practice, mean (SD)[b]	17 (12)	21 (11)	19 (11)	< 0.05
Panel size per FTE for paneled clinicians, mean (SD)[c]	1587 (351)	1559 (410)	1569 (254)	0.59
Sex				0.16
Men	38	47	43	
Women	62	53	57	
Race/ethnicity				0.41
White	69	76	73	
Asian	21	18	19	
Unknown	3	2	3	
Other	7	4	5	
Clinician type				0.07
Physician[d]	80	88	85	
Physician assistant	20	12	15	
Primary department				
Family medicine	90	83	85	0.25
Internal medicine	2	3	3	
Pediatrics	9	14	12	
Years at Group Health				< 0.05
< 4	23	17	19	
4-9	39	24	30	
10+	38	59	51	

[a] Data are presented as percentages unless indicated otherwise.
[b] One response was missing years in practice.
[c] Paneled clinicians are primary care physicians who are responsible for caring for a panel of patients vs in a locum pool. Size is based on 90 nonrespondents and 164 respondents.
[d] Four physicians did not have a panel: 2 nonrespondents and 2 respondents.
FTE = full-time equivalent; SD = standard deviation.

clinicians were split about trading off patients' best interests and cost; 71% reported feeling pressure from patients to order more tests. Less than 15% of clinicians reported that low-value care was provided by themselves or by their colleagues sometimes, frequently, or almost always; 91% said they provided low-value care only rarely or occasionally.

Almost two-thirds of respondents said they had changed their practice to reduce low-value care in the prior 12 months, and approximately 40% had reduced low-value care a significant or moderate amount in the 2 areas targeted by resource use reports: overscreening for cervical and prostate cancers. Receipt of transparent resource use reports resulted in having conversations (74% of those who remember receiving the report reported participating in a discussion with their clinic chiefs; data not shown). Most clinicians found the clinic-level reports useful for understanding their own practice patterns and for provoking discussion among their peers. One-third of respondents found the information on their resource use surprising (data not shown).

One-third of clinicians were unaware of the *Choosing Wisely* campaign; among the 66% who were aware, 97% reported they considered it a legitimate source of information on unnecessary tests and procedures (data not shown).

Low-Value Care in Practice

Almost two-thirds (62%) of respondents said patients request tests or procedures that the clinician considered unnecessary at least several times per week (Table 3). Most (88%) indicated they were comfortable discussing avoiding low-value care with their patients, and 56% reported having such discussions 5 or more times in the past 30 days. In contrast, fewer physicians reported being comfortable speaking with colleagues about low-value care (70%); only 9% had conversations with colleagues 5 or more times in the past 30 days. Clinicians reported that patients follow their advice about avoiding unnecessary tests

Table 2. Attitudes toward and awareness of low-value care and the Resource Stewardship initiative

Survey question	N	Percentage of responses[a]			
The cost of care I personally provide is important:		Strongly disagree	Disagree	Agree	Strongly agree
To our health plan members	189	4	3	31	62
For the success of our health plan	188	3	0	20	78
For improving our health plan's reputation	188	3	8	37	53
To purchasers	188	3	1	24	72
It is unfair to ask physicians to be cost-conscious and still keep the welfare of their patients foremost in their minds	189	35	59	6	0
I should be solely devoted to my individual patients' best interests, even if that is expensive	187	9	43	36	12
There is currently too much emphasis on costs of tests and procedures	188	29	55	14	2
I feel pressure from my patients to order more tests and procedures in my clinical practice	188	2	27	57	14
		Rarely	Occasionally	Sometimes	Frequently/ almost always
The care I recommend to my patients is of low value	188	59	31	7	2
The care my colleagues provide is of low value	184	46	42	10	2
I found the Resource Stewardship report useful to:		Strongly disagree	Disagree	Agree	Strongly agree
Understand my practice patterns	128	5	18	67	10
Have conversations with our group about our practice patterns	129	4	26	64	6
Have discussions with individuals about practice patterns	126	7	41	48	3
		Yes		No	
Do you believe you have changed your practice in the past 12 months to decrease low-value care?	187	65		35	
In the past 12 months, I have changed my practice in:		Not at all	A small amount	A moderate amount	A significant amount
Referrals	188	36	50	12	2
Imaging	188	32	48	18	2
Prescribing	187	34	50	15	2
Laboratory test orderings	187	29	49	20	2
Reducing overscreening for cervical cancer	177	38	23	23	17
Reducing screening for prostate cancer in men ≥ 75 years	175	45	18	18	19

[a] Some percentages do not total to 100% because of rounding.

Table 3. Discussions around low-value care: comfort, frequency, and patient's perceptions

Survey question	N	Percentage of responses[a]				
How often do patients ask for a test or procedure that you think is unnecessary?	188	Less often than once a month	A couple of times a month	About once a week	Several times a week	Every day
		5	12	21	40	22
What is your level of comfort in having discussions about low-value care with		Very uncomfortable	Somewhat uncomfortable	Neutral	Somewhat comfortable	Completely comfortable
Patients?	182	2	6	9	44	40
Colleagues?	184	2	12	16	28	42
In the past 30 days, how many discussions have you had about low-value care with		None	1-2	3-4	5+	
Patients?	183	4	12	28	56	
Colleagues?	182	31	45	15	9	
When you talk to patients about unnecessary tests or procedures, how often do patients follow your advice? That is, how often do patients agree to avoid the unnecessary test or procedure?	185	Rarely/never	Not too often	About half the time	Often	Always/almost always
		1	2	36	45	16
Let's say a patient came to you convinced s/he needed a specific test. Would you:	176	Order the test	Order the test, but give reasons why you're against it		Refuse to order the test	
		2	78		21	

[a] Some percentages do not total to 100% because of rounding.

or procedures always or almost always (16%), often (45%), and about half the time (36%) when conversations with patients happen. However, when patients are insistent about getting a test or procedure without clear clinical indication, 80% of clinicians reported that they order the test or procedure but provide patients their reasons for advising against it.

Perceived Barriers to Reducing Low-Value Care

Notable barriers included time constraints (45%), challenges overcoming patient preferences and values (44%), community standards of care (43%), fear of patients' dissatisfaction (41%), patients' knowledge about harms of having low-value care (38%), availability of tools to support relevant shared decision making (37%), and fear of litigation (31%), as shown in Figure 1. Relationships with patients, tolerance of uncertainty, and support and prioritization from leaders and clinical colleagues notably were not perceived as important barriers to reducing low-value care.

Provider Feedback

Nearly 40% of clinicians (n = 70) provided open-ended responses about ways to improve efforts to decrease low-value care. Feedback ranged from ideas on reasons

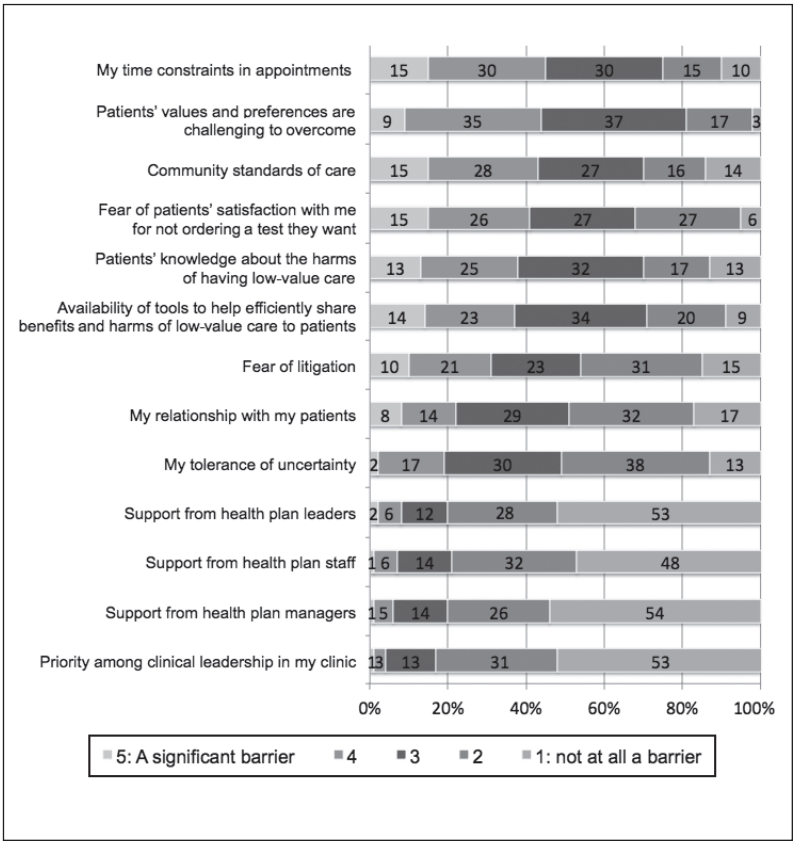

Figure 1. Perceived barriers to reducing low-value care ranging from significant barrier to not at all a barrier.[a]

[a] Survey asked respondents to rate each factor from 1 (not at all a barrier), shown at right, to 5 (a significant barrier), shown at left.

underlying the provision of low-value care (both upstream and downstream from primary care) to potentially useful toolkits (Table 4). The most frequent feedback was that clinicians felt a tension between being responsive to patients to promote patient satisfaction and restricting the use of procedures with little or no value. For example, physicians reported being torn by the conflicting institutional messages and incentives to simultaneously reduce low-value care and maintain patient satisfaction after patients request these tests or procedures. A number of clinicians expressed the need for more information for patients and for their own use. Additionally, there was a desire for public awareness campaigns to raise the profile of the importance of reducing low-value care. Several clinicians described the complexity of measuring low-value care because procedures and test decisions are often not clear and decision making may be nuanced for reporting. Despite this, there was unprompted support for receiving transparent, comparative performance information.

DISCUSSION

Salaried primary care clinicians in an integrated delivery system want to provide high-value care, but they identify the need for additional support to manage patient requests for unnecessary and low-value care and for tools to provide direct and timely feedback on their use of low-value care. Our salaried clinicians identified important barriers to reducing low-value care, many of which are actionable and reasonable targets for change. Some of the identified barriers can be addressed through public awareness and education strategies (eg, changes in community standards of care, patients' knowledge about the harms of having low-value care, and availability of tools to help efficiently share benefits and harms of low-value care to patients), whereas others rely on changes and enhancements in delivery system infrastructure (eg, longer appointment times). With additional information made available directly to patients and communities through a variety of channels, individuals may be able to engage in more informed discussions with providers about why more care is not always better and how more care can actually be harmful in certain situations.

Clinician quote: I am noting a sea change in patients—*they* are coming forward more frequently asking if a test is really necessary.

Transparent peer comparison data on overall resource use and use of low-value services were reported as important for understanding and promoting discussion about variation in practice patterns with practice groups and colleagues. The provision of peer comparison data through the Resource Stewardship initiative and the awareness and perceived legitimacy of the *Choosing Wisely* campaign suggest that evidence-based initiatives may be used to motivate clinicians to be conscientious stewards of limited health care resources.

Three other provider surveys have reported US primary and specialty physicians' attitudes toward low-value care, including attitudes and perceptions on the problems and possible solutions.[6-8] The first survey[7] received a 70% response rate from 627 physicians randomly selected from the American Medical Association Masterfile and reported overuse of unnecessary care within their own patients. In contrast to our salaried clinicians, these respondents identified malpractice concerns (76%), clinical performance measures (52%), and financial incentives (62%) as drivers of unnecessary care use. A national survey commissioned by the American Board of Internal Medicine Foundation reported on perceived problems, causes, and solutions for unnecessary tests and

Table 4. Themes from qualitative feedback on receiving transparent peer comparison resource use reports and on the quest for reducing low-value care

Theme	Clinician quote
Tension between reducing low-value care and patient satisfaction	I feel that we as primary care providers are often caught in the middle between a patient asking for/demanding testing. Our own work performance is tied largely to patient satisfaction scores, and many times, patients are extremely dissatisfied if they can't "get what they want when they want it." Most low-value care is patient instigated. Problem in not following patient requests will be patient complaints that need to be answered.
More and better patient-facing information is needed	Need specific handouts readily available to give to patients explaining why a certain test is or is not indicated and its risk/benefit. These conversations are too lengthy in the time constraints we have.
Providers also want cost information	I think the next step in doing this is to provide providers with actual costs of tests. I realize that the cost to the patient may vary depending on a number of things, but in order to better inform patients and ourselves about low-value care, this is the missing piece.
A public awareness campaign should be implemented to raise the profile of the importance of reducing low-value care	Increase public awareness of the *Choosing Wisely* program through outreach to media outlets that is consistent and ongoing. It takes time for the rationale and recommendations to register with the public as well as professionals. It would be helpful to have a public information campaign to get the message out there about unnecessary testing.
Providers want training on how to have better conversations about reducing low-value care with other providers	Having conversations with colleagues that actually change behavior is more of a challenge than the conversations with patients. The Resource Stewardship data have been a good effort to improve medical care here. I believe it's hard to move the needle without having a group discussion among medical staff about what goes on behind the exam[ination] room door: how and when to have these conversations about low-value care.
Medical decisions are nuanced and challenging to measure	We need to make sure we are generating good and accurate data with the hope [that] this info[rmation] [will] lead to healthy and important discussions.
Patients want low-value care reduced	I am noting a sea change in patients—*they* are coming forward more frequently asking if a test is really necessary. Some of this is from cost perspective (cost shares, deductible, copay) and some from informed consumerism about risks of unnecessary testing. I view this as a *great* change and an inroad to making these conversations easier and more effective and that we are on the same side.

procedures from 600 US primary and specialty physicians in 2014 (no response rate provided).[6] Another 2012 survey, the "Physicians, Health Care Costs, and Society," included 2556 physicians (65% response rate) also randomly selected from the American Medical Association Masterfile; this survey focused on physicians' views on controlling health care costs and reported important differences from ours.[8] In the 2012 survey, only 36% of physicians responded that they had a major responsibility for helping reduce health care costs; more than half reported that patients (52%), hospitals and health systems (56%), pharmaceutical and device manufacturers (56%), insurance companies (59%), and trial lawyers (60%) had a major responsibility. Unsurprisingly, these opinions appear to be related to the respondents' practice settings and type of compensation; 70% did not support eliminating fee-for-service reimbursement as a strategy. Finally, most of the surveyed clinicians in the 2012 survey agreed that they "should be solely devoted to their patients' best interests, even if that is expensive,"[8] compared with less than half of the clinicians in our study who agreed with that statement. Across all 3 surveys,[6-8] clinicians indicated they ordered tests because of patient insistence.

The national surveys of physicians[6-8] and our survey of salaried clinicians from an integrated delivery system support the notion that patients follow the advice of their clinicians and that most clinicians report talking with patients about reasons to avoid unnecessary tests. Important differences in reported "major" drivers of low-value care were observed across the surveys. In our capitated, integrated delivery system, the major barriers noted by our clinicians were community standards of care, time constraints, and patient satisfaction; fear of litigation was not a notable barrier relative to other recent US physician reports.[6-9] Malpractice (52%), safety (36%), and physician reassurance (30%) lead the national survey response, and patient satisfaction (23%) and time (13%) were much less important. Interestingly, only 5% of the national sample reported the fee-for-service system as a major driver.[6] Our survey provides an important contrast to reported drivers of low-value care relative to other published national populations.[6-8]

There are many differences between integrated delivery systems and other care models. However, with the Patient Protection and Accountable Care Act of 2010[10] (legislation to help increase the quality and affordability of health insurance and health care), clinician groups may become more like integrated practices through accountable care organizations and pay-for-performance/value and quality. Our survey indicated that clinicians are aware of rising health care costs and are willing to be stewards of limited health care resources.

This project was specifically designed to engage frontline primary care clinicians so we could better understand how transparent individual clinician-level practice pattern reports were received and what additional tools are needed to support reducing delivery of low-value care. Clinician engagement and interest expressed in the survey may have resulted from multiple reminder e-mails to respond to the survey and from clinicians being asked to respond to the survey from the Medical Group President and from the Medical Director for Quality Improvement, yielding a greater than 60% response rate. Additionally, we believe the enthusiastic response to the open-ended feedback at the end of the survey suggests that clinicians desire engagement in the discussion about improving value and reducing unnecessary spending.

CONCLUSIONS

Reducing the delivery and receipt of low-value care (eg, reducing unnecessary testing) will require continued involvement from clinical teams and patients. Success in reducing the delivery of low-value care will depend on deeper engagement of clinicians in all health care delivery settings. Continued support of materials for patients focused on common low-value care, such as the *Choosing Wisely* brochures for patients developed by *Consumer Reports,*[11] is an important step to support efficient discussions with health care clinicians. ❖

Disclosure Statement

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