“All the Money in the World . . .” Patient Perspectives Regarding the Influence of Financial Incentives

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Objective. To analyze patient perspectives of the use of financial incentives in a hypertension intervention.

Study Setting. Twelve Veterans Affairs primary care clinics over a 9-month period.

Study Design. Qualitative semistructured interviews conducted with 54 hypertensive veterans participating in an intervention to promote guideline-consistent therapy. Intervention components included an intervention letter requesting patients talk with their providers, an offer of U.S.\$20 to bring in the letter to their provider, and a health educator phone call.

Data Collection Methods. Semistructured interviews were conducted. Transcripts were coded for thematic content. The financial incentive theme was then subcoded for more detailed analysis.

Principle Findings. Most participants ($n = 48$; 88.9 percent) stated the incentive had (or would have) no effect on their decision to initiate a discussion with their provider. Some participants articulated reservations about the effectiveness and/or appropriateness of financial incentives in health care decisions; however, a few expressed the opinion that there may be some potential benefits to the use of financial incentives if they encourage patients to be active in their health care.

Conclusion. The findings of this study raise questions about the appropriateness and unintended consequences of employing patient-directed financial incentives in health care settings.

Key Words. Hypertension, veterans, financial incentives, qualitative

BACKGROUND

In the past two decades financial incentives have been increasingly utilized as tools for promoting health and behavior change (Gold et al. 1995; Giuffrida

and Torgerson 1997; Giuffrida and Gravelle 1998; Terry 1999; Kane et al. 2004; Petersen et al. 2006; Rosenthal and Dudley 2007). Incentives have targeted both patients (e.g., medication compliance, health promotion, smoking cessation) (Bains, Pickett, and Hoey 1998; Volpp et al. 2006; Finkelstein et al. 2007; Rosenthal et al. 2009) and health care providers (e.g., quality-enhancing and/or cost-saving interventions) (Hillman et al. 1998; Chaix-Couturier et al. 2000; Town et al. 2005; Teleki et al. 2006). Overall, financial incentives are viewed as an effective way to improve health care outcomes (Giuffrida and Torgerson 1997; Chaix-Couturier et al. 2000) and are increasingly implemented in the private sector by insurance companies and employers attempting to decrease health care costs (Fuhrmans 2008; Wilkinson 2008).

At the same time, multiple questions remain unanswered regarding financial incentives in health care, including optimal types and levels of rewards, concerns over fairness and ethical implications, and unintended consequences (Volpp et al. 2009). Although some research exists on patient opinions toward the use of incentives to affect provider behavior (Gallagher et al. 2001; Pereira and Pearson 2001; Pearson et al. 2006), very little has been done to explore patient perspectives of incentives specifically targeted toward their own behaviors (Long, Helweg-Larsen, and Volpp 2008). More specifically, research in the medical field (to our knowledge) has not explored questions regarding patients' beliefs about and attitudes toward the use of these types of financial incentives.

"Crowd out theory" from economics is one theoretical perspective that may be particularly useful in framing unanswered questions about the use of financial incentives in health care. Titmuss' (1970) *The Gift Relationship* is foundational to this theory. In *The Gift Relationship*, Titmuss documents a variety of perspectives from different countries toward the provision of blood for transfusion. From his research, he proposes that paying for blood rather than collecting blood through donations reduces the supply by "crowding

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out” those who believe it is their civic duty to donate to the blood supply. Since Titmuss’ publication, economists have tested the mechanisms of his theory, specifically the mechanisms of behavior “discontinuous” to standard incentive theory and economic reasoning (Gneezy and Rustichini 2000; Seabright 2004). Through a variety of experimental studies, some economists have come to the conclusion that individuals will perform a behavior for free if they see it as part of their civic responsibility, but not for a small amount of money because it is perceived as tainting the act (Seabright 2004).

In this paper, we describe patient perspectives regarding financial incentives in relation to a patient-activation intervention to encourage patients in the Department of Veterans Affairs (VA) health care system to talk with their primary care provider about initiating clinical practice guideline-concordant therapy (thiazide diuretics) for hypertension. In the randomized control trial (RCT) conducted to evaluate the intervention, financial incentives were found to have a modest—but not significant—effect in increasing the number of patients who discussed thiazides with their providers (Kaboli et al. 2008). In an exploratory study of the RCT, a sample of participants took part in semi-structured interviews about their perspectives of all aspects of the intervention, including their perceptions of the influence of financial incentives. Through these qualitative interviews, we analyze participants’ reactions to the offer of an incentive, as well as why they thought the incentives were or were not effective. The qualitative interviews provide insight into ways veteran patients describe possible factors contributing to the modest effect of the financial incentive. Although not its original intent, analysis of the veterans’ qualitative interviews also became an exploration of crowd out theory and how veterans articulated a similar concept when they talked about their beliefs regarding financial incentives. Given the high-value veterans place on civic responsibility (Campbell et al. 2007; Kaboli et al. 2007), VA patients may have been a uniquely situated population in which to conduct this research. However, the results of this exploratory study combined with previous work in crowd out theory raise important questions about the unintended consequences of employing patient-directed financial incentives in health care settings.

METHODS

Participants, Intervention, and Recruitment

We conducted semistructured interviews with 54 veterans with hypertension who were recruited from a larger group of 532 veterans participating in the

Veterans Affairs Project to Implement Diuretics (VAPID) conducted at the Iowa City and Minneapolis Veterans Affairs Medical Centers (VAMCs). Participants in the study received regular primary care at one of these two facilities or through one of their community-based outpatient clinics (five in Iowa, five in Minnesota). The parent study involved a RCT of an intervention designed to encourage hypertensive patients to speak with their provider about obtaining a prescription for a thiazide diuretic. Patients were randomized to a control arm or one of three study arms consisting of: (A) an individualized intervention letter with information about the value of thiazides; (B) an individualized intervention letter, an offer of a U.S.\$20 financial incentive if they talked with their provider about a thiazide prescription, and a 6-month copayment reimbursement (valued at U.S.\$48) if they were prescribed a thiazide; and (C) an individualized intervention letter, a financial incentive offer, and a phone call from a health educator. The individualized letter included the patient's last recorded blood pressure reading at the VA, a personalized risk reduction percentage for heart attack or stroke if target blood pressure was maintained, and possible medication regimens involving adding or switching to a thiazide diuretic. In study arms (B) and (C), the offer of a financial incentive was explained at the end of the letter. Patients also were asked to return a postcard indicating whether they talked with their provider about their hypertension, whether they were prescribed a thiazide diuretic, and, if not, their provider's rationale for not initiating treatment with a thiazide. Study personnel distributed the U.S.\$20 financial incentive upon receipt of the returned postcard. The incentive was not contingent upon whether a thiazide diuretic was prescribed.

Participants for the qualitative interviews were recruited according to a purposeful, stratified sampling design: (1) by site (Iowa or Minnesota), (2) by intervention arm (A–C), and (3) by thiazide prescription status as determined by review of the electronic medical record. Purposeful sampling was used to maximize variation of perspectives and cover each of the key stratification variables. The number of participants per strata was based on an estimation of how many would be needed to reach saturation (or data redundancy) for a homogeneous group (Kuzel 1999). Attention was also paid to secondary variables, including age, gender, and copay status, in an effort to approximate the larger study sample. Of those who were selected from the parent study and asked to participate, the participation rate was 88.5 percent (54/61)—one declined and six were unable to be reached within a 2-week timeframe.

Qualitative Interviews

Open-ended, semistructured interview guides were developed for each arm of the study to cover the different intervention strategies. The interview guides were evaluated and revised periodically throughout the study period as analysis evolved and new topics emerged. During the interviews, lasting an average of 16 minutes (range: 9–46 minutes), veterans were asked about their: (1) decision regarding whether or not to initiate a discussion with their provider, (2) conversation with their provider about thiazides, (3) understanding of why they were or were not prescribed a thiazide, (4) opinions of the intervention (Pilling et al. 2010), and (5) opinions regarding the use of financial incentives in promoting the intervention. (Interview guides are available upon request from the corresponding author.) Although discussions of incentives could occur at any point in the interview, most responses coded as “incentive” were elicited from questions such as “How did the U.S.\$20 incentive influence your decision to talk to your doctor?” (see Box 1 for more examples). Because Arm A participants were not eligible to receive remuneration for talking to their provider, they were asked about the potential impact of financial incentives as hypothetical questions.

The interviews were conducted within 2 weeks of the primary care visit in which participants were asked to initiate the discussion and took place over a 9-month period from March to December 2007. All interviews were completed by telephone (except for one conducted in person) and were recorded

Box 1: Incentive-Related Questions

Arms of Intervention:**Arm A**

Now think of a hypothetical situation. If you were offered a U.S.\$20 incentive to talk with your doctor about trying a diuretic to control your blood pressure, do you think the incentive would have changed anything? Would you have been more or less likely to talk with your doctor?

Would it have affected the way you talked with your doctor?

Thinking about VA patients in general, do you think providing a U.S.\$20 incentive for them to talk with their doctor about trying a diuretic would increase or decrease the number of patients who did so? Why/why not?

Arm B/C

Did you talk with your provider about the U.S.\$20 incentive [or copay reimbursement]?

If yes → What did you say? How did he/she respond?

If no → Why didn't you tell them about the incentive [and copay reimbursement]?

How did the U.S.\$20 incentive influence your decision to talk to your doctor?

Thinking about VA patients in general, do you think providing a U.S.\$20 incentive for them to talk with their doctor about trying a diuretic would increase or decrease the number of patients who did so? Why/why not?

on digital voice recorders. Interviews were transcribed verbatim and reviewed against the original recording by the interviewer prior to importation into NVivo 8 (QSR International 2008), a qualitative data management and software program. The study was approved by the Institutional Review Boards of the Iowa City and Minneapolis VAMCs and the respective VA Research and Development Committees. Signed informed consent was obtained from all participants.

Analysis

The data collection and coding analysis occurred simultaneously, informing both the evolving interview guide and coding dictionary (Agar 1996; Miller and Crabtree 1999; Pope, Ziebland, and Mays 2006). Each transcript was independently coded by a minimum of three individuals. Two coders had graduate-level training in qualitative methods and coded all transcripts; two additional coders were research assistants trained by the more experienced coders. Every transcript was coded by at least one of the research assistants as well. The team met to compare coding and the final coding consensus was entered in *NVivo*. Consensus coding was performed in an effort to increase the validity and reliability of the coding by refining the content boundaries of the codes and making coding more consistent. As new codes were added, previous transcripts were revisited and coded for content related to these new codes. The “incentive” code was one of the original codes defined in the coding dictionary and was used to categorize any content related to incentives. The “incentive” code was then subcoded, focusing on the question of why participants perceived the incentive offer as effective or not. Final subcodes are presented in the results.

Lastly, we conducted further analysis of two subcodes using “matrix coding” (Miles and Huberman 1994). With matrix coding, coded segments from specified codes are divided by participant. Predetermined, mutually exclusive categories are also derived. For this analysis, the specified subcodes focused on two questions: (1) Did the U.S.\$20 incentive influence your decision to talk with your doctor? and (2) Thinking about VA patients in general, do you think providing a U.S.\$20 incentive for them to talk with their doctor would increase or decrease the number of patients who did so? Coders then independently coded each participant’s response to the questions to mutually exclusive categories: yes/increased, no/decreased, unknown, or question was not asked/answered. A coder unfamiliar with the dataset (with graduate-level training in qualitative methods) and a research assistant who conducted the

previous coding read through each participant's discussion related to these two subcoded questions and decided on a category. Disagreements were resolved through a third coder.

RESULTS

The mean age of the study sample was 65.1 years and 98 percent of the participants were male. Demographic and baseline characteristics were similar for those included in the qualitative study and the parent RCT sample (see Table 1). The one notable difference between the groups was the higher proportion of qualitative interview participants who were prescribed a thiazide by their primary care provider. This difference was intentional due to the decision to stratify by prescription outcome in an effort to better understand the main outcome of the parent study.

In the RCT, financial incentives had a modest effect on the likelihood that patients initiated a discussion with their provider (Kaboli et al. 2008). The addition of each component of the intervention had a stepped effect (see Figure 1); however, the difference between Arms A and B (addition of the incentive) was not statistically significant. The addition of a health educator phone call (the difference between Arms B and C) was significant. The intervention results were not known when the semistructured interviews were conducted and originally analyzed. In this paper, we combine the results of the RCT with its tandem qualitative study to help us understand the potential reasons for why the incentive did not have a greater effect on discussion rates.

Table 1: Characteristics of the Randomized Clinical Trial (RCT) and Qualitative Samples at Index Visit

	<i>Total RCT Sample (N = 478)</i>	<i>Qualitative Sample (N = 54)</i>	<i>p-Value</i>
Age (years)	64.0	65.1	.38
Gender (male)	472 (98.7%)	53 (98.2%)	.50
Site (IA)*	279 (58.4%)	29 (53.7%)	.56
Copay for medications	336 (70.3%)	41 (75.9%)	.53
Intervention arm*			.73
Arm A	175 (36.6%)	18 (33.3%)	
Arm B	144 (30.1%)	19 (35.2%)	
Arm C	159 (33.3%)	17 (31.5%)	
Prescribed Thiazide*	112 (23.4%)	26 (48.2%)	< .001

*Qualitative sample stratified by these variables.

Figure 1: Discussion Rate by Arm of Intervention ($N = 532$)

Matrix Analysis

Despite evidence of the financial incentive having a modest effect, most participants (88.9 percent) stated the incentive did *not* influence their decision to initiate a discussion with their provider (Table 2). We also asked participants whether the incentive might have influenced other veterans to initiate the discussion. Fifty-nine percent said an incentive would influence other veterans to bring in the letter, 20.4 percent said it would not, and 16.7 percent “couldn’t speak for others.” Two additional participants were not asked the question directly.

We also performed analyses comparing the perceived influence of the financial incentive on oneself and others according to whether participants were offered the incentive (Arms B and C) or not (Arm A) (Table 3). No one in Arm A said the financial incentive would have influenced them personally; however, there was no statistical difference between those who experienced the offer of an incentive and those who did not ($\chi^2(2) = 3.52, p < .17$). On the other hand, participants in Arm A were more likely than those in Arms B or C

Table 2: Perceived Influence of Financial Incentive on Self versus Other Veterans

	Self ($N = 54$)	Others ($N = 54$)
Yes	3 (5.6%)	32 (59.3%)
No	48 (88.9%)	11 (20.4%)
“Can’t Speak for Others”/Don’t know	1 (1.9%)	9 (16.7%)
Not asked/answered	2 (3.7%)	2 (3.7%)

Table 3: Perceived Influence of Financial Incentive on Self versus Other Veterans Stratified by Incentive versus No Incentive Intervention Arms

	<i>Self (N= 52)*</i>		<i>Others (N= 52)*</i>	
	<i>Arm A Only (n= 17)</i>	<i>Arms B and C (n= 35)</i>	<i>Arm A Only (n= 17)</i>	<i>Arms B and C (n= 35)</i>
Yes	0	3	6	26
No	16	32	7	4
“Can’t Speak for Others”/Don’t know	1	0	4	5
	<i>p = .17</i>		<i>p = .02</i>	

*Two participants were not asked the incentive questions and were excluded from this analysis.

to state that other veterans would *not* be influenced by the incentive ($\chi^2(1) = 7.82, p < .005$).

Qualitative Analysis: Incentive Subcodes

The results from the larger study as well as the quantitative analysis of questions from the qualitative interviews provide a framework for examining the effectiveness of financial incentives for this intervention. Below, we summarize participants’ narrative responses about financial incentives to provide more depth and understanding of the participants’ perspectives.

Simplicity of the Intervention. Throughout the interviews, many participants talked about the ease of participating in the intervention.

I thought it was very simple and straight to the point . . . I just thought it was [a] very well explained letter, you know. Didn’t have any trouble with it [at] all.

The fact that 58 percent of participants in Arm A initiated the discussion with their provider is also evidence that they were not burdened by the intervention, whatever their primary motivation for speaking with their primary care provider may have been. Thus, from the patients’ perspective, the financial incentive may not have been necessary to promote a simple health behavior (see Box 2 for more quotes).

Adequacy of Monetary Value. Some participants did not feel the U.S.\$20 incentive was sufficient to influence veterans to initiate a discussion with their provider.

Box 2: Simplicity of the Intervention

It was pretty self-explanatory.

It was perfectly clear and I knew every word that it said and the doctor did too.

Well, maybe. You know, twenty dollars isn't a lot [of] money. Not talkin' about a hundred dollars, we're talkin' twenty dollars.

Evidence of the inadequacy of U.S.\$20 to influence participants' decisions is mentioned in another quote in Box 3, as well as being categorized under different themes (e.g., "I don't really think it's a big thing" in Box 4). From this perspective, increasing the amount of money offered for the incentive might have enhanced its effect.

Appreciation of VA Health Care. Others did not even want to consider an incentive because they appreciated the care they received from the VA and did not feel it was appropriate to take money from the institution.

I don't think the twenty dollars, if it's an incentive—, I woulda done it without the twenty bucks, because tell you the truth, I feel very fortunate to be allowed into the VA medical system . . . the [VAMC] is the finest hospital in the United States as far as I'm concerned. . . so I would do whatever they want me to do to, to ensure that I get to go there.

As another example, one participant reported during the semistructured interview that he did not send in his postcard because he did not want the U.S.\$20 from VA and another threw his postcard away (Box 4 for additional quotes). The sentiment of appreciation and stewardship of the VA was expressed by several veterans across a variety of contexts.

Either/Or Proposition: Financial Incentives in Opposition to Health Care. One of the most interesting and frequently encountered responses was the description of an either/or proposition (see Box 5). Many participants expressed the belief that they could *either* prioritize their health *or* they could prioritize money in this intervention. Participants implied that when

Box 3: Adequacy of Monetary Value

Just twenty dollars? I . . . (long pause) . . . Gosh, that's, doesn't seem like enough. I mean, what, you know the price of gas nowadays?

Box 4: Appreciation of VA Health Care

P: Well, I don't really think it's a big thing [the incentive]. I don't (pause)—

I: —don't think it matters?

P: (overlapping) No, I mean, that's my personal—, I mean, we getting so much benefit through them [VA] anyway, the way I look at it, I don't need the \$20.

I think the VA should [get out of?] giving out incentives. They have enough money problems and they're doing a good job now. I mean, they're there to help the veterans, and I think they're doing a good job, so I don't think they [need to?] PAY veterans to go to 'em.

I don't like to take advantage of the, the VA. And I thought, gee, they don't have to pay me.

P: I felt, when he said disregard it or whatever, that's what I should have done. Anybody can use twenty bucks but I'm not going to take twenty bucks from anybody if I feel I don't deserve it, so I threw it away. (laughter).

I: Well you can receive it. I can tell them that you talked to your doctor, um, if you would like me to.

P: No, keep it—, (laughter) keep it where it would do more good.

presented with this either/or proposition, individuals should prioritize their health. As one participant stated,

All the money in the world wouldn't, ya know, if I can't trust my own personal feelings with the advice of professional people, twenty bucks isn't gonna do anything.

Box 5: Either/or Proposition: Financial Incentives in Opposition to Health Care

I don't know, I said, "Wait till I see it," I said. That ain't the idea that I'm here, I just wanna make sure that we're doing things right.

I: Okay, do you have any reason why you decided not to say anything or?

P: Well I feel sort of funny about, you know, being paid for something that I need.

Oh I would imagine it would, but if they're concerned about their health I don't think \$20 would mean much.

In some cases that [the incentive] may be a little factor in their candor. [I: Um hmm.] I don't know. You know, *I would hope it isn't* but, you know, money does different things to different people.

Oh, I don't know what kind of characters go to the VA there. Does money motivate some of them—, twenty dollar bill motivate them to do something that they wouldn't normally do? I don't know, *I would hope not*. [I: Ok.] I would hope that we would be talking about what we should—, by *doing the right thing*, you know? [I: Um hmm.] If you need it—, need to take it, you, you take the diuretics, if not you wouldn't, you know? (. . . later in the interview . . .) Money would be no incentive to me for, for this, one way or the other, I just feel it's a, you know when you're working on your health it's gotta be a team effort between the doctor and myself, the patient, and uh, that wouldn't be any incentive. *You got to do what the right thing is no matter what*.

Another participant did not even talk about the incentive to his provider because he did not want it to be a “money situation.”

Participant: I didn't even want to bring it up because I didn't want that to influence him one way or the other and I didn't want it to be a money situation. I want it to be so that I got my blood pressure down. There was a \$20 incentive and also there was 6 months [of] medication free. And I thought, “Wow, that's a good deal” but I didn't—, I thought, “Well, it's not a big deal.”

Interviewer: So, would you say it influenced the way you thought about it at all?

Participant: No. I just thought I'd leave it in the hands of the doctor. I have faith in the doctor and he takes care of me.

Others went so far as to make judgmental statements about those who may have been influenced by the incentive, while a few worried about the possible coercive effects of offering an incentive.

The way I feel is that, you know, they shouldn't have to be offered the money. (...) And most people are conscientious about it. Sure, there's probably some that just don't give a damn, you know, but, you know, for the conscientious person, that's taking an active role in their health care, and all that, it would be something that they would want to discuss.

For these participants, the incentive was discussed in contrast to the intervention. They did not recognize the incentive as being aligned with the intervention to promote clinical practice guidelines. It made them uncomfortable to have money added to their participation in the intervention.

Financial Incentives Could Be Beneficial. A small subgroup of participants recognized that the incentive was designed to induce their active involvement in their health care. One participant stated that the offer of a financial incentive had no influence on him, but that he was supportive of the use of incentives if they help others improve their health.

Well, I think if they're trying to improve the health care for their patients, any kind of incentive that will get the person to visit the doctor more often, if they have a health problem, is always good. So, if a monetary incentive is the only way to get them in, to see the doctor because of a health issue, then that's probably their best approach.

The participants in this subgroup saw the incentive as a “little bonus” or even as serving a greater good, as exemplified by the last quote. Of note, the few participants who stated the financial incentive had some influence on their

decision also had more positive views of financial incentives; however, all added that they would have initiated a discussion with their provider regardless of the offer of a financial incentive. For example, one participant said,

I was there for a routine appointment anyhow, so it was just a little added bonus. (it is) extremely effective for people who are a little bit reluctant.

DISCUSSION

The null hypothesis of the parent study is that financial incentives would not significantly increase the number of patients who discussed thiazide diuretics with their primary care providers—and the null hypothesis was not disproved. The RCT demonstrates financial incentives had a modest—but not statistically significant—effect on patient behavior. When asked directly in semi-structured interviews, most participants stated the incentive had no effect on their decision to talk with their provider. Interestingly, a majority of these same participants responded that the financial incentive would have the desired effect on other VA patients. The trend toward an increasing number of patients participating in the intervention with the addition of an incentive raises the likely possibility that some patients were simply reluctant to state that the modest financial incentive was compelling in their own case, even though they recognized, and were, to some degree, likely to be influenced by its value. The question is why patients were reluctant to admit the influence of the financial incentive, particularly when the incentive was congruent with improving the patient's own health. Crowd out theory along with the semi-structured interviews from this study provide some insight into this question.

Titmuss' *The Gift Relationship* is an early description of human behavior contradicting standard economic theory. Yet, unlike more recent experimental studies of crowd out theory (Gneezy and Rustichini 2000; Mellstrom and Johannesson 2008), the number of participants who took part in the intervention increased modestly with the addition of the incentive. At the same time, some found ways to participate (fulfill their responsibility), while avoiding the incentive completely (e.g., did not return the postcard). It is likely in our study that some patients felt discomfort with the offer—and receipt—of the incentive but also felt a responsibility to improve their own health and thus followed the guidance of the intervention.

The modest effect of the financial incentive for this health intervention also could have resulted from the introduction of patient-directed incentives into the patient-provider relationship. Findings from the qualitative study

provide some evidence that the patient's relationship with the provider may have factored into the patient's decision to bring in the letter (Pilling et al. 2010). Drawing on more recent developments in crowd out theory, signaling is one of the mechanisms economists have described to explain crowd out theory or discontinuous behavior more generally. With the signal model, crowd out theory is no longer simply about payment reducing intrinsic motivation or altruistic behavior, but that the behavior signals to others in your social network that you are intrinsically motivated, giving you greater social esteem and matching you with others of similar orientation (Seabright 2004; Benabou and Tirole 2006; Ellingsen and Johannesson 2008). This assertion is born out in our findings as some patients specifically remarked that they did not want their physician to know they could receive a financial incentive for bringing in the letter. Drawing on signaling models, participants may have feared that accepting the incentive would signal the wrong message and taint their provider's view of them as responsible, intrinsically motivated patients. In addition, the findings from the matrix analysis in which participants stated other veterans were likely influenced by the incentive, while they were not, may be evidence that participants wanted to signal intrinsic motivation to the interviewers as well.

For this simple, one-time intervention, the most salient question may be whether the incentive was necessary—or even appropriate. The primary issue for most participants was being “concerned about their health” and “doing things right.” For these individuals, the incentive became an either/or proposition—either you choose what is “right” for your health or you choose the monetary incentive. Some went so far as to say financial incentives should not be used in connection with health care decisions because patients should be motivated enough to take care of their health on their own. In other words, the offer of financial incentives may “crowd out” individuals' intrinsic motivation to actively participate, or at the very least, create discomfort for those who see it as an either/or proposition. Long, Helweg-Larsen, and Volpp (2008) found a similar dichotomy in their survey in which over 50 percent of respondents agreed or strongly agreed that “people should not be paid to do things they should do anyway.”

Ultimately, the results of the RCT indicated the financial incentive did trend toward the predicted effect unlike several economic studies of crowd out theory. However, given the results were not significant and the qualitative findings demonstrated strong negative reactions toward financial incentives which mirror results in experimental studies of crowd out theory, this study raises questions about the unintended consequences and appropriateness of using patient-directed financial incentives in a health care setting.

Study Limitations

The main limitation of this study is that it was restricted to a sample of predominantly white and male VA patients. Researchers have found high rates of altruism in VA populations (Campbell et al. 2007; Kaboli et al. 2007) that may make incentives particularly unnecessary or less effective in this population. In addition, the sense of stewardship for VA may be unique as veterans appear to be particularly cognizant and appreciative of the health care benefits they receive (Kaboli et al. 2007; Pilling et al. 2010). Given this orientation, veterans may be especially negative toward behaviors they see as contradicting a belief system based on service and sacrifice. In other words, they may be uniquely susceptible to crowd out theory. However, given the proportion of patients who participated in the intervention did increase with the offer of a financial incentive, the population may not be so different. At the same time, they were willing to articulate their discomfort with incentives in health care. This combination contributes to the growing knowledge base regarding when and how to apply financial incentives in the health care setting.

CONCLUSION

Future research should explore patient perspectives of incentives in other health care settings and for other targeted health behaviors. A next step would be to compare veteran patient responses to the offer of financial incentives to patients in a private sector primary care setting to better understand the effect of veteran patients' relationship in the VA. With the paucity of research in the area of patient perspectives of financial incentives in health care, more research is necessary to better understand these perspectives. In the only other study of patient perspectives of incentives, Long, Helweg-Larsen, and Volpp (2008) found participants were evenly divided about whether it was a good idea to pay patients to make a behavior change. Although the questions were different, both studies suggest patients have contrasting views—and support contrasting theories—of the use of financial incentives in health care.

Whether patient-directed financial incentives should be used and in what contexts continues to be an unanswered research question. In part, research is lacking on how to implement incentives in broader public health and clinical settings (Volpp et al. 2009). As patient-directed financial incentives expand to broader use outside of targeted settings—from cocaine use among methadone patients to workplace weight loss campaigns—patients' views of the appropriateness of incentives will become more salient. Public health

campaigns that attempt to foster a broad appeal will encounter a variety of patient opinions about their roles and motivations for taking care of their health. With the increase in the use of incentives in public and private sectors such as insurance plans and workplace programs, the choice to use incentives should be made with crowd out theory in mind, as it also relates to how patients articulate their views of financial incentives in health care. One would not want to “crowd out” patients’ intrinsic motivation to improve their health or foster resentment toward those who “just don’t give a damn,” while attempting to incentivize us all to be conscientious, active patients.

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Appendix SA1: Author Matrix.

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