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Clinician Perspectives on Working With Health Coaches: A Mixed Methods Approach

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We sought to understand how health coaches affect the work of primary care clinicians and influence their perception of patient care. As a mixed methods hypothesis-generating study, we administered a structured post-visit survey and conducted in-depth individual interviews with primary care clinicians who worked with health coaches at two urban community health centers. Survey responses were compared using *t* tests. Interviews were transcribed and analyzed using Atlas.ti software and modified grounded theory. Surveys were completed by 15 of 17 clinicians for 61% of eligible patient visits (269/441). Compared to usual care patients, clinicians rated visits with health-coached patients as less demanding (2.44 vs. 3.06, $p < .001$) and were more likely to feel that they had adequate time with their patient (3.96 vs. 3.57, $p < .001$). Qualitative findings expanded upon these results and uncovered four key health coach activities thought to improve patient care. Through developing a rapport with patients over time and working with patients between medical visits, health coaches (a) empower patients by offering self-management support, (b) bridge communication gaps between clinicians and patients, (c) assist patients in navigating the health care system, and (d) act as a point of contact for patients.

Keywords: health coaching, provider-patient communication, clinician experience, mixed methods, team-based care

In 2005, 196 million Americans were living with one or more chronic conditions, and this number is expected to grow to 238 million by 2020 (Bodenheimer, Chen, & Bennett, 2009), particularly among minority and low-income populations (Bodenheimer, Chen, & Bennett, 2009). Forty-five percent of U.S. adults have hypertension, hypercholesterolemia, or diabetes (Fryar, Hirsch, Eberhardt, Yoon, & Wright, 2010), with a substantial proportion experiencing poor disease control (Cheung et al., 2009; Ford et al., 2010; Egan, Zhao, & Axon, 2010).

Many patients' care needs are not being met (McGlynn et al., 2003) because primary care clinicians do not have time in the typical 15-minute visit to provide all recommended acute, chronic, and preventive care. Acute care tends to take priority over preventive and chronic care needs (Blendon et al., 2004; Yarnall et al., 2009; Østbye et al., 2005; Bodenheimer, 2007; Bodenheimer & Laing, 2007). One approach to address this problem is for nonclinician members of the patient care team, such as health coaches, to assume greater responsibility in chronic care management (Bodenheimer, Wagner, & Grumbach, 2002; Rothman & Wagner, 2003).

Health coaches help patients gain the knowledge, skills, and confidence to become informed and active participants in their own care (Bennett et al., 2010). There is growing evidence in the effectiveness of this form of self-

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management support, which has been linked to improved clinical outcomes, adherence to treatment plans, and patient empowerment (Willard-Grace et al., 2013). Self-management support is also one of the six essential requirements for achieving recognition as a Patient Centered Medical Home (National Committee for Quality Assurance, 2011). With proper training, medical assistants are well suited for the health coach role. They are among the most ethnically diverse health care personnel, enabling them to provide linguistically and culturally concordant coaching (Chapman et al., 2010). Moreover, there is growing evidence that medical assistants, as members of the care team, can provide effective health coaching for patients with diabetes (Ivey et al., 2012; Nelson, Pitaro, Tzellas, & Lum, 2010), hypertension (Nelson, Pitaro, Tzellas, & Lum, 2010), and depression (Bodenheimer & Pham, 2010).

Clinician buy-in is essential to building robust health coaching programs, yet the authors know of no studies that examine the impact of health coaches on work experience and patient care from the clinician's point of view. To understand how the integration of health coaches affects the work of primary care clinicians as well as their overall assessment of patient care, we designed a mixed methods study for clinicians participating in a 2-year randomized controlled trial (RCT) of health coaching in a primary care setting.

Method

In this mixed methods (Stange, 2004; Borkan, 2004; Creswell, Fetters, & Ivankova, 2004) study, we administered a structured survey and conducted in-depth individual interviews with primary care clinicians at two community health centers in San Francisco. These clinicians were participants in an RCT in which patients with uncontrolled Type 2 diabetes, hypertension, and hyperlipidemia were assigned to receive a health coach or usual care for 12 months (Willard-Grace et al., 2013).

We define health coaching to include self-management support, navigational support of clinic and community recourses, medication reconciliation, and other patient-centered support (Bennett et al., 2010). This health-coaching model is grounded in the transtheoretical model (Prochaska & DiClemente, 2005) and motivational interviewing (Miller & Rollnick, 2002). Health coaches learned to assess the patients' stage of change, elicit their motivations for health behavior modifications, and address barriers to health improvement. The primary outcomes of the study were based on clinical measures such as glycemic control, blood pressure, and LDL cholesterol (Willard-Grace et al., in press), as well as patient experience (Thom et al., 2014) and medication adherence (Thom et al., in press).

Health coaches maintained continuity of care with their patients during the year. They met with patients before the medical visit to review medications and identify patient priorities for the visit, stayed in the room for the visit, and remained with patients afterward to review the care plan and create personal action plans for improved self-management (Bodenheimer & Laing, 2007). Health coaches called and met with patients between medical visits and interacted with clinicians during and between medical visits as patient issues arose.

To assess clinician experience with heath coaching, we asked clinicians to fill out a brief survey immediately after a medical visit with each patient enrolled in the study regarding their experiences of that medical visit. All surveyed visits occurred after the patient had been enrolled in the study for at least 5 months. The survey included seven items from two validated instruments, each scored on a 5-point Likert scale. The first item assessed how demanding the visit was (1 = *much less demanding than usual*, 5 = *much more demanding than usual*; Kravitz et al., 2002). The other six items assessed the clinician's experience of the visit and the clinician's perception of the patient experience, including perceptions of patient understanding of the care plan as well as patient satisfaction with the medical encounter (Probst, Greenhouse, & Selassie, 1997). These items were answered on a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*).

To enrich and triangulate our quantitative findings, we also conducted individual, semi-structured interviews with the clinicians engaged in the study. Clinicians were interviewed after having worked with a health coach for at least 3 months, and all interviews were conducted during the study period. Interviews explored clinicians' specific experiences working with health coaches and how these experiences

impacted their working life and their overall assessment of patient care. Sample questions included, "Can you think of a specific case when a health coach enhanced/detracted from patient care?" and "In what ways has a health coach increased/reduced your workload?" The interviews lasted 30 to 60 minutes and were audio recorded and transcribed verbatim. All participants provided informed consent and study protocols were approved by the UCSF Committee on Human Research.

We compared clinician survey results for patients in each of the two study arms using independent samples *t* tests. Qualitative analysis was conducted in Atlas.ti using modified grounded theory (Scott & Dana, 2008; Walker & Myrick, 2006). Four team members independently coded each transcript, and reached consensus on code definitions and themes through an iterative process. After individual analyses were completed, the quantitative and qualitative data were integrated to compare findings.

Results

Fifteen of 17 eligible clinicians completed at least one survey (88%), with a range of 0 to 63 surveys, a mean of 15.8 (*SD*, 16.5), and a median of 9 per clinician (see Table 1). Surveys were completed for 61% (269/441) of patients, with a higher rate of completion for patients with a health coach compared with usual care (165/224, 73.7% v. 104/217, 47.9%, $p < .001$). Patients in each study arm with completed surveys were similar with respect to baseline characteristics (see Table 2).

Table 1
Characteristics of Clinician Participants

Characteristic	Proportion (*n*) or Mean (*SD*)
Site A	52.9% (9/17)
Site B	47.1% (8/17)
Physician	64.7% (11/17)
Nurse practitioner	35.3% (6/17)
Years of practice	
<5	17.6% (3/17)
6–10	17.6% (3/17)
11–20	29.4% (5/17)
More than 20	35.3% (6/17)
No. of surveys completed	15.8 (16.5)
Half days/week	
1–2	17.6% (3/17)
3–5	41.2% (7/17)
6 or more	41.2% (7/17)
% Clinicians who were not present for the entire study period	29.4% (5/17)

In-depth interviews were conducted with 13 of the 17 clinicians participating in the study. Only one clinician did not take part in either a survey or an interview; 64.7% of clinicians were physicians and 35.3% were nurse practitioners. Most (82.4%) had been in practice for at least five years. More than half (58.8%) worked five or fewer half-days in clinic each week. Five of the 17 clinicians were unable to participate for the total duration of the study, as 3 discontinued work at the associated health center and 2 started in midcourse.

Clinician Experience

Both the quantitative and qualitative findings indicate that health coaches improved clinician work experience. Clinicians rated visits with patients assigned health coaches as less demanding than visits with usual care patients (2.44 vs. 3.06, $p < .001$). Clinicians were also more likely to report that they were able to spend sufficient time during the medical visit with patients assigned health coaches compared to usual care (3.96 vs. 3.57, $p < .001$). Clinician satisfaction with the medical encounter and overall rating on the 6-item scale trended toward being significantly better for health-coached patients compared to usual care patients (4.02 vs. 3.87, $p = .08$ and 4.08 vs. 3.94, $p = .07$, respectively). Clinicians also rated their experiences with health-coached patients more positively for all remaining items, although these differences were not statistically significant (see Table 3).

Qualitative findings strengthened these results and provided more insight into why clinicians were more likely to feel that they had sufficient time with health-coached patients and why these visits felt less demanding. Based on our interviews, health coaches improved clinician work experience through two main avenues (see Table 4). First, health coaches enabled clinicians to get the most out of the medical visit, freeing them from tasks such as medication reconciliation (which was done by health coaches) and allowing them

Table 2
Comparison of Characteristics of Patients Included in the Analysis by Study Arm

Patient characteristics at baseline	Health coaching arm (n = 165)	Usual care arm (n = 104)	p value
Female (%)	54.6% (90/165)	58.7% (61/104)	.51
Married/long term relationship (%)	49.1% (81/165)	58.7% (61/104)	.13
Latino (%)	73.9% (122/165)	73.1% (76/104)	.88
Education less than high school (%)	57.6% (95/165)	64.4% (67/104)	.26
Working (%)	43.6% (72/165)	41.4% (43/104)	.71
Income <$10,000 (%)	60.0% (99/165)	52.9% (55/104)	.25
Months at clinic (mean)	112.2 (99.6)	123.0 (110.9)	.41
BMI (mean)	31.7 (7.1)	30.9 (5.1)	.28
SBP (mean)	158.2 (14.7)	160.1 (15.2)	.49
A1c (mean)	9.7 (1.5)	9.7 (1.4)	.99
LDL (mean)	141.8 (33.0)	143.2 (31.7)	.82

time in the visit to address additional patient questions, conduct a better physical exam, or simply reconnect with patients. One clinician elucidated this benefit of working with health coaches, explaining:

> I can be more focused on the history of the medical problem and also I actually have a little more time to do a better physical exam because if I'm not pinned down doing data entry or recording medications and stuff, then that's Time I can actually be standing up at the bedside, examining somebody's tummy, head, and neck or chest.

Second, clinicians perceived that the ability to delegate specific patient tasks to health coaches increased the likelihood that "things would be done." One clinician explained this utility by comparing his experiences working with health coaches to working with other medical assistants:

> If I were to (ask for help following up with a patient from) the MA of the day . . . I have no idea what is going to happen. But I know that with a health coach . . . I have complete confidence that whatever follow-up needed to get done or phone call needed to get made or appointment needed to get achieved, or whatever, will be done.

Both the survey and interviews explored the impact of health coaches on clinician

Table 3
Clinician Survey Results by Study Arm (n = 269)

Survey	Health coaching arm (n = 163–165)	Usual care arm (n = 104)	Adjusted sig, using GEE to account for clustering by clinician
Kravitz (1 = *Far less demanding*; 5 = *Far more demanding*)			
Compared with your average patient visit, how *demanding* would you rate *this visit* in terms of the amount of effort required?	2.44 (.178)	3.06 (.123)	<.001
Probst (1 = *Strongly disagree*; 5 = *Strongly agree*)			
The patient understood my explanations and recommendations.	4.06 (.094)	3.96 (.108)	.20
I found this patient easy to interact with.	4.16 (.074)	4.08 (.096)	.33
The patient seemed satisfied with the visit.	4.10 (.104)	4.03 (.089)	.43
I was able to spend enough time with the patient during this visit without feeling rushed.	3.96 (.069)	3.57 (.121)	.001
I felt comfortable dealing with this patient's problems.	4.20 (.104)	4.14 (.138)	.73
I left the exam room feeling satisfied with the encounter	4.02 (.092)	3.87 (.106)	.08
Scale of all 6 items (Probst only)			
6-item scale α = .94	4.08 (.081)	3.94 (.084)	.07

Table 4
Clinician Qualitative Interview Results (n = 13)

Theme	Proportion (*n*)
Health coaches empower patients by offering self-management support.	100% (13/13)
The ability to delegate specific patient tasks to health coaches increased the likelihood that patient care tasks would be done.	84.6% (11/13)
Health coaches bridge communication gaps between clinicians and patients.	84.6% (11/13)
Health coaches enabled clinicians to get the most out of the medical visit, freeing them from tasks like medication reconciliation.	69.2% (9/13)
Health coaches assist patients in navigating the health care system.	69.2% (9/13)
Health coaches act as a point of contact for the patient.	61.5% (8/13)

time. Although clinicians who worked with health coaches reported that they had more time in the medical visit to accomplish their patient care goals and that they did not feel rushed, some clinicians (4/13) reported that additional time was required between visits to communicate with health coaches. However, additional time spent between visits was weighed against the benefits of improved patient care. For example, one clinician explained that when patients work with health coaches,

> Other issues arise and then we can intervene. That doesn't really save me time. It's something that I wouldn't have had to deal with and now I do. It cost me a little bit of time. But in terms of benefit for the patient, you know, it's superb.

When asked about the net time impact of coaches, almost all clinicians (12/13) reported that health coaches either had no overall impact on clinician time or that they saved time overall.

Clinician Perception of Patient Care

Clinicians rated their health coach visits more highly with regard to patient understanding of their recommendations and patient satisfaction with the medical encounter, although these ratings did not reach statistical significance. Qualitative findings revealed that clinician perceptions of improvements in patient care resulted from the ability of health coaches to provide more attention to patients and build rapport. Through these relationships built on consistency and trust, the health coaches were able to (a) empower patients by offering self-management support, (b) bridge communication gaps between clinicians and patients, (c) assist patients in navigating the health care system, and (d) act as a point of contact for the patient (see Table 3).

Clinicians reported that health coaches were able to engage patients in their care plan, and in doing so, empower them to take an active role in their care. Many clinicians acknowledged that they do not always have the time to work with patients at this level, and they appreciated that the health coaches were able to help patients develop self-management skills. One clinician noted that the health coach made "more of a personal connection (with the patients)" which "was a really key part of (the patients) being engaged in the care." Clinicians also recognized positive health outcomes associated with these improved self-management skills, particularly with regard to regular and appropriate use of prescription medications. Another clinician, describing a patient that he had been "dealing with for years" who had multiple complex care needs, including "amazingly high blood pressure, history of CHF, [and a] history of skin ulcers," stated that after working with a health coach to care for this patient:

> In the course of five visits . . . we actually got her blood pressure under control, which was amazing . . .. I think the health coach was able to get her a little more active, get her talking about medicines that she didn't want to take . . . talk about med side effects and do some intervisit work. It was quite helpful.

Health coaches also acted as a bridge, improving communication between the patient and the provider. Clinicians asserted that some patients were more likely to disclose things that affect their health and well-being to the health coach rather than to their clinician. For example, one clinician explained: "medicine is very hierarchical. In some sense it needs to be and in some sense, it's just historical roots. And there's also a class differential." He described how these issues impact the medical visit:

> [Primary care clinicians] hardly ask about herbal medicines . . . and that's a big part of our patients' cultures and what they believe in . . . And there are ways in which I think patients will not reveal nonadherence to a medical provider . . . but I think health coaches who come from the same culture can help assess that.

Another clinician stated that health coaches contributed by "just coming into the visit with a better understanding of where a patient really is." He further specified that:

> It's definitely possible for there to be kind of a disconnect between the provider and the patient, where you think the patient's taking all the medicines and they're really not, or there are things going on that [the provider doesn't] really catch, depression and things going on in the family. And sometimes the health coaches were able to pick up on these things that I probably would've missed.

Additionally, clinicians reported that the health coaches were sometimes able to explain the care plan in a way that the patients were better able to understand. Many clinicians acknowledged the benefit to having the health coach review the care plan with the patient.

One clinician described more specifically that

> Diabetes is complicated . . . and so there are a number of our patients for whom it's frustrating 'cause you try and you try and you feel like you just, you get nowhere. . . . And the health coaches were a real boon. I mean, they were really the extra factor that allowed some improvement where there had not been before. And that's because of being able to reinforce the message after, between visits . . . outreach in a way that I would never have time to do.

A third advantage to the health coaching model involved helping patients navigate the health care system by assisting with forms, appointment scheduling, referrals, and other follow-up tasks. One clinician explained:

> after the exam session, most patients who don't come in with a health coach are kind of on their own. You . . . say "you're going to take this to the front, get this done, that done, the other thing" . . . And they either do it or they don't.

The same clinician compared the patient experience of navigating the health care system when working with a health coach:

> The coach actually did the closing-the-loop [checking for patient understanding] part of the interview after I left the room . . . You know, if there was an appointment that needed to be made or a follow-up that needed to be done, or some between-visit task, much more reliably accomplished with the health coach.

Lastly, clinicians expressed that the health coaches were able to improve patient care by acting as a point person who could be easily reached between primary care visits to answer patient questions. One clinician explained that "the health coach feels to the patient like part of the care team . . . a kind of point person where they really can bring up their complaints."

Another clinician stated

> [My patients] can call the health coach and the health coach can talk to them like usually within the same day. [The health coach] checks her messages a lot so she's available, which makes people feel like they're cared about, and I think that people need to feel important and cared about in order for them to be healthier. They have to feel valued and I think that's what [the health coach] does.

Even though clinicians were specifically asked to recall a time where health coaches detracted from patient care, no clinician mentioned any downsides of the health coach model with regard to patient care.

Discussion

The clinicians in this study identified several benefits of working with medical assistant health coaches as part of the patient care team. They rated medical visits with health-coached patients as less demanding and reported that they were more able to spend sufficient time with health-coached patients during the medical visit. Qualitative data expanded these findings, demonstrating that health coaches were able to relieve clinicians of some patient care tasks. Qualitative data also demonstrated a perception of improved patient care through patient empowerment, improved self-management support, more horizontal communication, and easier navigation of the health care system.

The clinician perception of improved patient care is supported by the RCT findings which demonstrate that health-coached patients have improved glycemic and cardiovascular health outcomes as well as increased trust in their primary care clinicians compared to usual care patients (Thom, Hessler, et al., 2014; Willard-Grace et al., in press). Moreover, there is a growing body of research that links health coaching to positive health outcomes such as improved glycemic control, blood pressure, and cholesterol (Nelson et al., 2010; Thom et al., 2013; Leung et al., 2012; Vale et al., 2003). Our findings suggest that the foundation for this improvement in patient care is the consistent and prolonged relationship that health coaches maintain with the patients. This concept is supported by previous research indicating that regular follow-up is necessary to sustain improved

chronic disease outcomes (Bodenheimer & Laing, 2007), and that clinicians perceive the high frequency of coach-patient visits as valuable (Scott & Dana, 2008; Margolius et al., 2012). In addition, perceptions that health coaches can function as a bridge between patients and clinicians, as health care system navigators, and as a point of contact are strikingly similar to previous research describing health coach self-assessments of their roles (Saba et al., 2011). This alignment of clinician and health coach perceptions indicates a shared understanding of the benefits of health coaches and the ability of clinicians and health coaches to work together productively.

During the interviews, clinicians were not able to recall a time in which health coaches detracted from patient care. However, several of the quantitative survey items lacked statistical significance, indicating that clinicians did not consider their visits with health coaches better in every aspect of care. Although survey items demonstrate that clinicians found their visits with health coaches to be less demanding and felt that they were more able to spend enough time with health-coached patients during the medical visit, they did not report a statistical difference in their perception of patient understanding of their explanations and recommendations, ease of interaction with the patient, satisfaction with the visit, or personal comfort with the visit with health-coached versus usual care patients. These findings suggest that clinician perceptions of patient care are influenced by a multitude of factors including comorbid conditions, psychosocial issues, and limited time in patient visits, which cannot be addressed by health coaching alone.

Clinician buy-in is not the only challenge that practices face when considering the health coach model. Paying for additional staff is a challenge for practices, even though a growing number of team-based models of care have demonstrated cost neutrality or savings through increased clinician productivity, panel size (HPI, 2008) or a reduction in high cost services such as hospitalizations (Nelson et al., 2010). Financial sustainability of the model could be spurred through payment reform and a move toward global or capitated payments (Bodenheimer & Laing, 2007).

Our study had several limitations. We focused on clinicians working in two safety-net practices in San Francisco, and our findings may not be generalizable to other settings or regions of the country. In addition, clinicians were not blinded to study arm assignment and could have been biased in their responses. Although patients in both study arms were similar with regard to baseline characteristics, the differential participation in the survey could potentially bias the results toward either overestimating or underestimating the true difference between clinician perceptions of visits with health coaches versus usual care patients. Moreover, because this study was part of an RCT, it does not fully capture the experience of integrating health coaches into a medical practice outside of a study environment. Future research implementing a time motion component could add to our knowledge about implementation or potential barriers to uptake of the health-coaching model.

Notwithstanding these limitations, primary care clinicians working with medical assistant health coaches reported improved work experience and perceived that patient care was enhanced through this team-based care approach. Considering the prevalence of primary care clinician burnout (Shanafelt et al., 2012), and the well-established relationship between clinician burnout and poor patient care (Willard-Grace et al., 2014), improvements to primary care clinician work experience are imperative.

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