

Providers' Experience with an Organizational Redesign Initiative to Promote Patient-Centered Access: A Qualitative Study

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BACKGROUND: Patient-centered access is a philosophy and a method that supports efforts to redesign health-care delivery systems to deliver higher quality care and to better meet the needs and preferences of patients. Since mid-2000, Group Health Cooperative has pursued an ensemble of strategic initiatives aimed at promoting patient-centered access, referred to as the Access Initiative. In support of this strategy, Group Health has also engaged in enterprise implementation of an electronic medical record and clinical information system that is integrated with their patient Web site, MyGroupHealth.

OBJECTIVE: To elicit, describe, and characterize providers' perceptions of the effects of the Access Initiative, an information technology-enabled organizational redesign initiative intended to promote patient-centered access.

DESIGN: Thematic analysis of semi-structured in-depth interviews.

PARTICIPANTS: Twenty-two care providers representing 14 primary care, medical, and surgical specialties at Group Health Cooperative, an integrated health-care system based in Seattle, Washington.

FINDINGS: Analyses of the interview transcripts revealed nine emergent themes, five of which have particular relevance for health-care organizations pursuing patient-centered access: the Access Initiative improved patient satisfaction, improved the quality of encounter-based care, compromised providers' focus on population health, created additional work for providers, and decreased job satisfaction for primary care providers and some medical specialists.

CONCLUSIONS: Providers like that the Access Initiative is mostly good for their patients, but dislike the negative effects on their own quality of life – especially in primary care. These reforms may not be sustainable under current models of organization and financing.

KEY WORDS: patient-centered access; information technology; qualitative evaluation; organizational redesign; informatics.

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INTRODUCTION

Patient-centered access is a philosophy and a method that supports efforts to redesign health-care delivery systems to deliver higher quality care and to better meet the needs and preferences of patients. Providing patients with access to the health services, information, and resources they desire when they desire them honors patient choice and may yield higher quality care and better health outcomes¹.

Successful implementation of patient-centered access requires care providers to adopt three organizing principles in pursuing their reform efforts: providers should work at the high end of their expertise, care should be aligned with both patient need and preference, and providers should serve when service is needed². Information and communication technologies (ICT) may enable each of these organizing principles. Advocates of patient-centered access specifically call for the use of electronic medical records and computerized clinical decision support, examination room terminals, and online patient-provider communication (e.g., e-mail) in promoting patient-centered access reforms².

Successful implementation of these technologies requires substantial organizational redesign in order to support their integration into providers' routine systems of work^{3–5}. The challenges associated with catalyzing and sustaining providers' willingness to engage in these changes are often cited as the key determinants of success or failure of ICT implementations^{6,7}. Understanding the impact on care providers and their relationships with patients will be fundamental to achieving the goals of widespread health-care ICT adoption, patient-centered access, and other pressing health-care quality and safety reforms.

The overall objective of this research is to elicit, describe, and characterize the effects of a 6-year ICT-enabled patient-centered access improvement strategy from the care providers' perspective. This strategy was pursued by Group Health Cooperative (Group Health), an integrated health-care financing and delivery system based in Seattle, Washington.

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SETTING, PARTICIPANTS, AND METHODS

Study Context and Setting

Since mid-2000, Group Health has pursued an ensemble of strategic initiatives aimed at promoting patient-centered system reform and improved patient access. This organizational redesign strategy, referred to throughout this paper as the Access Initiative^{8,9}, is comprised of five components implemented in phases during the 2000–2005 timeframe (see Table 1).

During this same time, Group Health was also engaged in enterprise implementation of a commercial electronic medical record and clinical information system (CIS) that was integrated with their patient Web site, MyGroupHealth.

Participant Sampling

Twenty-two care providers representing 14 medical specialties were recruited from 7 purposively selected Group Health practice sites, representing a 23% rate of participation among eligible providers solicited via interoffice mail. Participants worked at least 50% time performing direct patient care activities. Participants had at least 5 years of tenure with Group Health to ensure they had direct experience with the Access Initiative. The practice sites were purposively selected to maximize diversity of clinic and patient characteristics. Parameters used for purposive sampling of practice sites included urban versus suburban location and the presence or absence of specialty and primary care provider co-location within the given clinic facilities. Sites were also purposively sampled to ensure diversity of patient socioeconomic and

demographic traits. Participants included 11 primary care physicians, 5 medical specialists, 5 surgeons, and 1 physical therapist.

Data Collection

Author JTT conducted in-depth, semi-structured interviews in participants’ offices or homes between November 2005 and March 2006. Interviews aimed to elicit providers’ personal views of and experiences with the Access Initiative. A diagram illustrating the components of the Access Initiative and the CIS implementation and their respective timelines was used to facilitate discussion, along with a standardized interview guide comprised of ten open-ended questions (see Table 2). Interviews averaged 45–60 min in duration and were recorded and transcribed verbatim to enable analyses using the AnSWR software application¹⁰.

Analysis

The verbatim interview transcripts were subjected to thematic analysis¹¹. Open coding by the authors yielded 32 unique emergent concepts, which were clustered to form 11 concept classes or “emergent themes.” Each of these themes was assigned a unique code definition and explicit rules for application to transcript text segments (i.e., segment inclusion and exclusion criteria). The emergent theme codes were independently applied to each of the transcripts by JTT and JDR, who met repeatedly to compare results, discuss discrepancies, and refine code definitions and application rules. Themes were reviewed and clarified with six participants randomly selected from three purposively selected practice specialty categories – two primary care providers, two medical specialists, and two surgeons.

Table 1. The Access Initiative Defined

Access Initiative Component	Description
Patient web access (via MyGroupHealth)	<ul style="list-style-type: none"> • Access to medical record components of the CIS • Secure e-mail with providers • Medication refills • Appointment requests • Discussion groups • Health promotion information
Advanced access (aka open access)	<ul style="list-style-type: none"> • Appointments with a patient’s primary care physician at the patient’s preferred time • Reduced patient wait times (on the phone and during encounters)
Primary care redesign	<ul style="list-style-type: none"> • Reduced variation in physician productivity • Team members to work at high end of expertise • Increased physician influence over and accountability for daily practice environment
Direct access	Elimination of primary care referral (aka “gate keeping”) requirements, enabling direct patient access to specialist physicians (16 specialties)
Physician payment reform	• Variable compensation (80% to 120% of baseline salary) dependent on patient satisfaction, physician productivity, and coding accuracy

FINDINGS

The five emergent themes most relevant to provider organizations considering ICT-enabled patient-centered access reforms are presented. These themes apply across all clinic locations and provider types (i.e., surgeons, medical specialists, and primary care providers), and represent the participants’ perspectives on the effects of the Access Initiative in aggregate. Cases in which themes are more strongly attributed to particular components of the Access Initiative are noted.

Improved Patient Satisfaction

Providers reported that the Access Initiative improved patient satisfaction. Advanced Access and Patient Web Access were cited as particularly effective in achieving this outcome.

“I think patients are really happy with the access. I hear that a lot. They’re surprised that they could get in when they wanted to...And then the patients that use the Web system have in general really been pleased with it, very happy with it.” –PCP

Many participants suggested that fundamental changes in the patient-provider relationship resulting from the

Table 2. Sample Interview Questions

Sample Interview Questions
1. How does this diagram agree with your views of what Group Health has done to promote patient access in the past 5 years?
2. What is your opinion of the Access Initiative? What parts of it have worked well, and what parts have not worked well?
3. How do you think the Access Initiative has affected your patients?
4. Is the Access Initiative in line with your philosophy of care?
5. What elements of the Initiative have affected you as a provider?
6. What is the net effect of all of these changes on your work life?

Access Initiative contributed to the improvements in patient satisfaction.

“Advanced access to primary care and access to specialists I think has made them feel empowered.” –Surgeon

Furthermore, participants commented on the strategic impact on the organization associated with these improvements in patient satisfaction.

“I know patients are happier, they’re more satisfied. And we are more competitive in the marketplace.” –Surgeon

Improved Quality of Care

Providers believe that the Access Initiative improved the clinical quality of patient care. Specifically, providers reported that their use of the CIS enables them to better coordinate care and to provide more effective care during patient encounters.

“...the way in which [the CIS] can help me organize care for my patients is a major leap in primary care. It is significant as far as my ability to give a lot better care to folks.” –PCP

Even among providers who were particularly critical of the CIS (which included surgeons, medical specialists, and primary care physicians), none advocated for abandoning the system or “going back” to paper-based systems when explicitly questioned in this regard.

Compromised Population Health Focus

Providers from all specialties expressed concern that pursuit of the Access Initiative compromised their ability to provide effective population-based preventive and chronic care.

“Population-based care generally gets lost I think. ...I think the support and incentives aren’t there to do really good population-based care. ...It almost has to be a hobby, your hobby to do it.” –Medical Specialist

Because population health management has traditionally been a strength of Group Health and a fundamental facet of its organizational culture, for many of the study participants this

was a particularly troubling and personally dissatisfying consequence of pursuing the Access Initiative.

Provider Workload Increase and Inhibited Pace of Work

The Advanced Access and Primary Care Redesign components of the Access Initiative explicitly called for increases in primary care provider productivity in terms of daily patient encounters. However, participants commented that the Access Initiative also increased their workload in other ways. Providers reported that their use of the CIS and secure messaging created significant volumes of new work for them (e.g., data entry, documentation, managing the message inbox), slowed them down during patient encounters, and ultimately extended their work days.

“There’s nothing I do now that wasn’t faster with paper.” –PCP

“[The CIS] slows me down.” –Surgeon

“[Secure messaging] is just more work you didn’t have to do before. ...I mean some of it saves visits or saves phone calls because the people may have called otherwise. But there certainly is a proportion of it that people do because it’s so convenient. They wouldn’t have otherwise picked up the phone or otherwise made an appointment.” –PCP

Some participants also commented that this was not a transitional phenomenon attributable to a technology-use learning curve and that a certain degree of ICT-associated provider productivity burden might be unavoidable.

“I had our CIS guy come and follow me around 1 day. I said ‘There’s gotta be something that I can do better because this is ridiculous. A year into this now I should know what I’m doing.’ And he said, ‘Well, you’re using a lot more tricks than most people, you’ve got good preference lists.’ So that for like a hypertension visit for the first time I’ve got a whole list of things that I can go click, click, click, and so I can sort of do those quickly. ... So that’s part of what I can’t figure out is, there are things that clearly save steps, where clearly it’s so much faster. So why am I working 2 hours extra a day, literally? ...I’m probably doing 13–15 hours more per week at home on the computer.” –PCP

DECREASED PROVIDER JOB SATISFACTION

Interviews also revealed that provider job satisfaction suffered in primary care and some medical subspecialties due in large part to the workload increases and productivity pressures cited above.

“I would take a salary cut, if I could get home at 7:30 at night and not have to do extra work. ...I think a 12-hour day is just a typical day, that’s what you

sort of expect - I'm not happy with it being routinely 15 hours." - PCP

"If you're only looking at it from the patients' standpoint, it's good, good, good. They get you by beeper, e-mail, phone, a million ways to get you. But I think what Group Health is overlooking is the impact on the providers, what's their satisfaction?" -Medical Specialist

"The professional model for physicians always involved giving extra, and I don't begrudge that. It's just I can't do it every day all the time. It has been a couple of years since I've had lunch. I eat at my computer while I'm doing my charting or looking through my results or other in-basket functions, and that's pretty much the way it goes. Sometimes I'm lucky to empty my bladder before I have to run out to catch my bus at the end of the day, and that's really not okay." -PCP

Primary care providers also mentioned the long hours of constant interaction with ICT as a source of frustration and job dissatisfaction.

"The [CIS] inbox... you've got this red flag all the time, I think that's part of the burnout for folks, which is you're constantly on alert as the stuff is coming at you. And we don't let air traffic controllers work for longer than X number of hours in that sort of environment, and they get set breaks that are there, but we don't do that in medicine. And so you get people who are doing that for 10 and 12 hours a day now, coming home and doing it on their home computer, and there's this absolute exhaustion that occurs with that, that with just sleep or even breaks or rest, you do not recover from." - PCP

Participants cited a variety of personally dissatisfying unintended consequences associated with implementation of the Access Initiative. Perceived tradeoffs associated with short-term provider productivity and patient access gains included stagnation of providers' clinical knowledge and erosion in the quality of clinical documentation resulting from over-automation of electronic data entry.

"I don't read medicine anymore. I don't have time." -PCP

"Certainly we're losing some information. ...A lot of the cutting and pasting is really to make sure there's adequate documentation, but it really doesn't help the next physician." -Medical Specialist

In the context of discussing the impact of the Access Initiative on provider satisfaction, many participants also expressed concern about the sustainability of patient-centered access, and of primary care medicine in general.

"Yeah, we chose [our profession], but there has to be some balance. ...They're [PCP's] not going to do more practice sharing later on because screw it, they're burned out,

they can't do it. ...No, I don't think it is [sustainable]." -Medical Specialist

"No, I would not want to go back, but that doesn't mean that things are okay as they are. The burnout rate among my colleagues is huge and I think that those of us that have managed to retain some semblance of balance do it by almost unacceptable levels of compromise, either for ourselves and our personal time, or what we define as good enough care." -PCP

Participant opinions varied about the likelihood of reversing these trends via additional organizational change efforts. While some expressed hope that further changes required to sustain primary care and patient-centered access were imminent, others expressed more pessimistic views.

"...the way in which [patient care] is structured it has shifted such an increased amount of work onto primary care that it is not sustainable at all, so I'm actually looking to get out of primary care because I can no longer work at that pace." -PCP

Other Emergent Themes

Four other themes emerged from the analyses. We provide an overview of these themes but do not discuss them further. Three of the nine themes offer limited originality or limited relevance to provider organizations attempting to implement patient-centered access. These include: (1) some components of the Access Initiative represented good ideas and strategically sound concepts that suffered from sub-optimal implementation; (2) some components of the Access Initiative were inherently bad ideas - most notably the productivity-oriented variable compensation model for primary care physicians; and (3) the Access Initiative yielded several negative consequences that must be addressed in order to sustain the realized gains and continue progress towards achieving the Initiative's objectives. The fourth emergent theme was the impact of the Access Initiative on patient-provider communication and the patient-provider relationship. This theme requires more refined explication than current interview data support.

DISCUSSION

Providers were clearly pleased that patients noticed and appreciated the improvements in access due to the Access Initiative. They also expressed feelings of satisfaction and fulfillment with their abilities to provide higher quality patient care primarily as a result of using the aforementioned ICT. However, the results of this study also bring into question the long-term sustainability of ICT-enabled patient-centered access without further organizational redesign. For example, patient-provider secure messaging may not offer the efficiency gains and visit substitution potential its proponents claim. Integration of secure messaging, phone visits, and other electronic patient-provider interactions will require new pro-

vider productivity metrics and compensation methods. Fundamentally different staffing models and scheduling methods may also be required to accommodate new demands for these alternative forms of ICT-enabled patient access.

Our findings also indicate stronger effects of the Access Initiative on the work and satisfaction of primary care providers than on specialists. Specific components of the Access Initiative called for increases in primary care provider productivity without a change to total scheduled in-person patient contact time. When combined with using new ICT, each primary care provider's job required more working hours outside of direct patient contact. This study reveals providers' perspectives on meeting these new productivity expectations in the context of ICT use.

Provider organizations pursuing ICT-enabled patient-centered access might be increasing primary care physician attrition and/or exacerbating provider recruiting challenges. This is particularly concerning given the current and projected shortages of primary care physicians in the US¹² and some of the prominent national perspectives on the value¹³ yet questionable long-term viability of primary care medicine^{14,15}. The perspectives of our study participants offer supporting rationale for demonstration studies and pilot implementations of alternative models of care team staffing, clinical ICT configuration, and health services financing. Examples include the Society of General Internal Medicine's Coordinated Care Model¹⁶ and the medical home models jointly proposed by the American College of Physicians, the American Academy of Family Physicians, the American Academy of Pediatrics, and the American Osteopathic Association¹⁷. Several organizations, including Group Health, are pilot testing these new models to evaluate their potential to better serve the needs of both patients and providers in a sustainable fashion.

STUDY LIMITATIONS

Single interviews with participants occurring over a 4-month time period have provided a cross-sectional "snapshot" view of provider perspectives on their first 5 years of experience with a long-term organizational change initiative. As such, significant shifts in participants' perspectives that may occur beyond their fifth year of experience with the Access Initiative (i.e., after March 2006) have not been captured.

Also, despite the purposive sampling strategy, self-selection biases may have affected results given the strictly voluntary nature of participation. Providers with relatively stronger opinions about the Access Initiative – both positive and negative – may have been more likely to volunteer for the interviews.

The low participation rate was likely due to several factors. Because no productivity credit was offered to participants who agreed to interviews during regular clinic hours, providers experiencing a comparatively greater sense of productivity pressure may have been less likely to volunteer an hour of their scarce personal time to participate in this study. Participation in this study required providers to volunteer an uninterrupted hour of their time during regular work hours for a face-to-face interview. Given the time-constrained and interrupt-driven nature of the participants' work environments, participation in this study required a significant

sacrifice. The protocol also limited direct contact for recruitment to one telephone call or e-mail following a solicitation letter. No repeat follow-up calls or e-mails were placed to non-respondents.

CONCLUSIONS

The success of Group Health in achieving gains in patient satisfaction and care quality as reported by physicians speaks to the ability of provider organizations to undergo fundamental changes in structure, process, and culture in order to satisfy the unmet needs of patients. Providers liked that these reforms are mostly good for their patients, but disliked the negative impacts on their own quality of life – especially in primary care. Further changes and enhancements may be required to sustain ICT-enabled patient-centered access. In the words of one primary care provider:

"I'm exhausted... Something's gotta give somewhere." – PCP

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