The Policy Context of Patient Centered Medical Homes: Perspectives of Primary Care Providers

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BACKGROUND: Interest in the patient centered medical home (PCMH) model has increased significantly in recent years. Despite this attention, information is limited regarding the influence of policy context on implementation of the PCMH model. Using comparative, qualitative data, we identify several key policy impediments to PCMH implementation, and propose practical guidelines for addressing these issues.

RESEARCH DESIGN: Qualitative, semi-structured in-person interviews with representatives of physician organizations and primary care practices pursuing PCMH.

PARTICIPANTS: Practitioners and staff at 16 physician practices in Michigan, as well as key leaders of physician organizations.

KEY RESULTS: We identified five primary policy issues cited by physicians and physician organization leaders as most impactful on their efforts to adopt PCMH: misalignment of current reimbursement schemes, administrative burden, conflicting criteria for PCMH designation, workforce policy issues, and uncertainty of health care reform. These policies were largely seen as barriers to their ability to implement PCMH.

CONCLUSIONS: Providers' motivation to embrace PCMH, and their level of confidence regarding the results of such change, are greatly influenced by their perception of the external environment and the control they believe they have over this environment. Having policies in place that shape the path to PCMH in a manner that makes it as easy as possible for providers to accomplish the desired changes could well make the difference in whether successful transformation is achieved.

KEY WORDS: patient centered medical home (PCMH); policy; qualitative; health reform.

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“Come in the trenches. Just come and take a peek. I think oftentimes decisions, while very well intended, really lack understanding of the downstream consequences and figuring out where we have to get to.”
Physician

The patient centered medical home (PCMH) is described by joint principles agreed upon by several professional societies. These include: (1) *A personal physician*; (2) *Physician-directed medical practice*; (3) *Whole-person orientation*; (4) *Coordinated/integrated care*; (5) *Quality and safety*; (6) *Improved access*; and (7) *Payment*.¹ Medical home models vary in practice and structure, but their success is assumed to rest fundamentally on the ability to focus the work of a defined team on the needs of a patient or family, recruiting social services, specialty medical services, and patient capabilities to solve problems and coordinate care.

Efforts to implement the PCMH model of primary care are underway in a variety of practice settings across the country.² While enthusiasm to rapidly implement the PCMH model is high among policy makers and national healthcare thought leaders,^{2–4} and is supported by the Patient Protection and Affordable Care Act (HR3590), it is not clear whether primary care practices are prepared to take on such transformational change and what types of policy support are necessary to incentivize and sustain their efforts.

The literature on PCMH implementation has focused primarily on internal characteristics of primary care practices,^{5–8} but organization theory suggests that delivery system changes such as PCMH occur within a broader context, and involve interactions and relationships between the organization and external political actors, stakeholders, markets, historical and cultural milieus, etc.⁹

Table 1. Sampling Design

		ORGANIZATIONAL STRUCTURE	
		Hospital-Affiliated/owned	Independent Practice Association
PCMH IMPLEMENTATION SCORE	High	4 randomly selected practices 2 small practices 2 large practices	4 randomly selected practices 2 small practices 2 large practices
	Low	4 randomly selected practices 2 small practices 2 large practices	4 randomly selected practices 2 small practices 2 large practices

Literature on the role of such contextual factors on PCMH implementation is limited and largely non-empirical.^{10–14} We argue that the effectiveness of PCMH initiatives will be largely determined by how primary care physicians and the practice team understand, interpret and react to external context as it impacts PCMH implementation. Such perceptions have been shown to be related to both the motivation and capability to undertake transformational change.^{15–17}

The current study uses qualitative data collected from individuals working in primary care practices and physician organizations in Michigan to identify the connections between providers' perceptions of health care policy context and the challenges that primary care practices face in implementing the PCMH. We define policy context as practice members' perspectives on systematic factors external to the physician practice that are amenable to change, and which potentially impact the adoption and/or implementation of PCMH. Such factors might include, but are not limited to, regulation, reimbursement schemes, labor supply, and/or alignment of incentives at the national, state or local level.

RESEARCH DESIGN AND METHODS

Methods

Data for this study were collected from 16 randomly selected primary care physician practices participating in both Blue Cross Blue Shield of Michigan's (BCBSM) Physician Group Incentive Program (PGIP) and the Robert Wood Johnson Foundation's 'Aligning Forces for Quality' initiative (AF4Q). Participating PGIP practices represent the majority of primary care practices and physicians in the state (2,494 primary care physician practices and 5,750 primary care physicians, or 65 % of all primary care physicians practicing in Michigan). Participation in PGIP requires that a practice be a member of a Physician Organization (PO), which may be anything from a set of practices owned by a hospital to a loose association of

independent practices formed for the purpose of joining PGIP.

Each primary care practice participating in PGIP completed a self-assessment form detailing current PCMH capabilities with regard to seven domains of function, and specific tasks within each domain. A scoring system was applied to the PCMH self-assessment responses. PCMH practices were then sorted by quartile on their PCMH implementation score.

Our sampling strategy was designed to ensure variation on the key attributes of implementation progress, hospital affiliation, practice size, and location, and to avoid potentially misleading results from examining only high performers. Using the PGIP membership list as the sampling frame and as illustrated in Table 1, we sampled primary care practices randomly within the following strata: 1. location in one of the two AF4Q market areas (Detroit and Western Michigan), 2. implementation score based on the BCBSM PCMH self-assessment, 3. hospital versus independent affiliation, and 4. practice size. For example, within the group of practices that were in the upper quartile of PCMH implementation scores, we randomly sampled within strata to ensure representation by hospital-affiliated and non-hospital-affiliated, and large and small practices. The process was repeated for practices in the lower quartile of the PCMH implementation scores. If a recruited practice was unavailable for a site visit, the process of selection was repeated from the remaining practices in the relevant stratum.

Sample and Data Collection

We conducted sixty-six semi-structured, face-to-face interviews at the 16 study practices over an eight-month period during winter of 2009 through the summer of 2010. (A copy of the full interview protocol is contained in the [on-line appendix](#).) On average, we interviewed four to five key informants at each practice, as well as the key leaders at the associated PO. The respondents included physicians, practice managers,

Table 2. PCMH Context Themes and Issues

Theme	Issue	Issue	Issue
Misalignment of Current Reimbursement Schemes and PCMH	Physician payment tied to face-to-face patient encounters and volume of patients	PCMH reimbursement levels/ incentives too low to motivate physicians and practices to undertake and sustain the PCMH	Patients not reimbursed for engaging in healthy behaviors, regular provider visits, or preventive care
Administrative Burden of PCMH	Time-intensive administrative requirements of medical practice as a barrier to engaging with PCMH requirements	PCMH reporting adds another layer for each program offering payment for PCMH	
Conflicting Criteria for PCMH Designation	Payers' inconsistent criteria for defining components of the PCMH pose challenge to their implementation	Conflicting standards inspire doubt in the overall credibility of the PCMH initiative.	Because not all payers support PCMH, and those that do have different requirements, practices are not universally reimbursed for their activities
Workforce Policy Issues Affecting PCMH	Competition for nursing staff, exacerbated by inadequate supply and better employment opportunities outside primary care.	PCMH unsustainable without changes in medical education and reallocation of resources and support between specialists and primary care	Constraints imposed by rigid requirements for practices to employ staff with certain levels of training or education as members of PCMH care teams
The Promise and Uncertainty of Health Care Reform	Uncertainty about how health care reform will address the undervaluing of primary care in current reimbursement schemes	Skepticism about how proposed payment reform would be funded.	PCMH affected by attitudes toward previous, government sponsored programs – seen as inefficient and out of touch with needs of working physicians and medical practices

nurses, and medical assistants. Each interview lasted approximately 30 minutes and was recorded and transcribed for data coding and analysis.

Analysis

The research team created a list of codes with detailed definitions reflecting issues related to policy context, among other topics. Two researchers reviewed transcript sections coded as relevant to the PCMH policy context, and independently identified key themes affecting respondents' perceptions of PCMH and practice transformation efforts. The researchers reviewed each others' proposed themes and identified unique policy issues, which the other members of the research team validated by reading the coded sections of the transcript and a draft of the results. Because the themes were brought up consistently across the four practice categories, we collapsed these groupings and analyzed results across respondents as a whole. Providers' perceptions of the five most salient PCMH policy themes are reported, followed by a discussion of these issues in relation to key dimensions of the PCMH model. Table 2 presents in summary form the five policy themes and the specific issues under each theme as they affect PCMH implementation.

KEY RESULTS

Misalignment of Current Reimbursement Schemes

"Reimbursement has always been built on what the physician did in terms of a tool in his hand — not what was between his ears, or her ears." Practice Manager

Respondents in our study consistently cited a misalignment between current payment systems and PCMH goals. Specifically, they noted that physician payment is tied to procedures and volume of face-to-face patient visits under current reimbursement systems.

Respondents often expressed support for the principles of the PCMH, but pessimism about putting the model into practice because of these conflicting incentives. As one PO leader relayed: "...when you're trying to make massive changes like this, [you] get these challenges on, 'Yeah, but if I'm going to meet to work on process improvement, that's taking away from my billable hours, and that's taking away from my salary.'" One office manager noted, "... so many times the work that goes on happens outside of the office. It's on the phone, it's over the computer, it's in diabetic classes, like this — it's all those incremental things that actually help move someone from a hemoglobin A1C of ten, to seven..."

Another dimension of the reimbursement problem cited by respondents was that most current policy discussions of reimbursement were aimed exclusively at health care providers, despite the PCMH model assuming that the patient is an active partner in the care process. Respondents indicated that patients are currently not reimbursed for engaging in healthy behaviors, regular provider visits, or preventive care. Rather, like physicians, current reimbursement schemes are oriented toward “rescue” care rather than incentivizing patients for behaviors that keep them healthy or encourage active engagement with their health care provider.

A third issue discussed by respondents centered on the level of reimbursement currently provided for PCMH implementation. They noted that PCMH incentives often take the form of a bonus payment from health plans, such as the recently enacted Medicare demonstration projects for PCMH, which pay designated practices a small per-member-per-month supplement. Many respondents indicated that reimbursement levels need to be considerably higher to motivate physicians and practices to undertake and sustain the scope of change required under the PCMH model.

Finally, several respondents viewed reimbursement for PCMH as a zero sum game in which any dollars applied toward PCMH and primary care were necessarily dollars taken away from reimbursing specialty care or hospital services. This “winners and losers” scenario was perceived to exacerbate existing tensions between primary care and specialists antithetical to the PCMH tenet of improved coordination across care providers. Such structural issues were also seen as major barriers to realignment of patient care resources, given the entrenched financial interests of those competing for the same patient care dollars.

Administrative Burden

“I agree with all the basic tenets [of PCMH]; again, it’s just how do you get there? ...I guess I see the paperwork as the major stumbling block.” Physician

Several respondents commented on the significant administrative duties of medical practice as a barrier to engaging with PCMH requirements. Health plan coding rules, drug formularies, and prior authorization requirements were particular points of contention among respondents. One physician implored, “*My precious five minutes [should not] be spent figuring out which diabetic code is going to be the appropriate one so I can get paid and not go to jail,*” a sentiment echoed by many others.

Respondents felt that proving to payers that components of the PCMH are in place took time and resources away from care delivery. Moreover, based on the concerns expressed by participating practices, the additional administrative burden

sometimes discouraged those practices questioning the value proposition of PCMH from trying altogether.

Conflicting Criteria for PCMH Designation

“It makes me totally crazy, that in this state, the insurers cannot get together and have one form of credentialing for PCMH.” PO Leader

Respondents often commented on payers’ inconsistent criteria for evaluating PCMH as a challenge to their implementation. Although the seven joint principles characterize the basic tenets of the PCMH model, respondents cited lack of coherence in how payers operationalize these standards. Different standards created several burdens for practitioners and practice staff seeking to implement PCMH. Variation in program structure produced “*a bureaucratic mess,*” as one physician stated. A PO respondent similarly felt that program differences were vast, commenting “*everybody has their own twist on what it takes to be designated as a PCMH, and they all don’t recognize each other’s capabilities.*”

Respondents also emphasized that not all payers support PCMH, and therefore they are not universally reimbursed for PCMH activities. As a physician noted, “*[if] 50 percent of your payers are reimbursing you for the extra changes you’ve made, that means 50 percent aren’t. You can’t really do PCMH well with selective patients.*”

A final challenge related to payers’ different criteria was more philosophical: respondents felt that conflicting standards inspired doubt in the overall credibility of the PCMH initiative. If payers could not agree on what a PCMH was, they questioned why practices should pursue transformative change to meet those ends.

Workforce Policy Issues

“I just think that we’re trying to do it with an ever-shrinking group of people, and I see it shrinking even faster than what I read because I’m down there training residents. In every class, they are all going into anything other than primary care.” - Physician

Respondents indicated that the availability of primary care physicians (or lack thereof) was a major threat to the PCMH. They argued that because of increasing differentials in income and working conditions, fewer medical students were opting to go into primary care, choosing instead specialties that provide greater income potential and less demanding work hours. To draw a sufficient number and

quality of physicians to primary care (and by extension PCMH), respondents cited the need for policy changes aimed at closing the primary care–specialist gap. Almost all respondents viewed new models of care such as PCMH as unsustainable without significant upstream changes in medical education and reallocation of resources between specialists and primary care.

A second concern expressed by respondents centered on what they perceived to be the overly rigid requirements for PCMH designation. In general, these concerns took the form of requirements for practices to employ staff with certain levels of training or education as members of PCMH care teams; one physician explained, *"We have several of them who have been doing it for 20 years, who are not LPNs or RNs. So for us to be a PCMH [we have to have LPNs or RNs]... So you're stuck following the rules or else you don't get a thing. I have some very good people that I can't use in the spot that I'd like to use them."* Respondents felt that such requirements were punishing practices that were unable to afford to hire these staff, but whose existing staff were capable of fulfilling these roles.

The third workforce issue revealed by respondents was the perceived competition for more highly trained staff, which they noted was exacerbated by inadequate supply and better employment opportunities outside primary care. Respondents recognized the importance of team-based care under the PCMH model but felt that qualified primary care nurses (much like physicians) were in short supply and even when hired, experienced high rates of turnover because of opportunities elsewhere. As one physician explained, *"Our major problem right now is finding a case manager nurse to work in our clinic. The people we feel are qualified would necessarily have to take a salary cut to come and work in primary care"*.

The Promise and Uncertainty of Health Care Reform

"I think one of the big looming things is the healthcare reform that Obama has presented. I don't understand a lot of it. I wish they would come into the offices and see what it's really like." Practice Manager

Respondents raised questions about the financial implications of health care reform for both primary care physicians and patients. These individuals were unclear about how payment reform was going to affect them directly in the pocketbook; one medical assistant described: *"[insurance premiums] keep going up and up and people are paying more and more deductibles. Are all the patients*

going to have insurance one day? Are they all going to be able to go [to the physician's office]?" These and other financial and reimbursement questions raised about health care reform appeared to exacerbate, not assuage, the general concerns that primary care practitioners expressed about the undervaluing of primary care in current reimbursement schemes.

Several respondents were skeptical about how payment reform would be funded. Despite acknowledging that health care reform was attempting to address the inequities in current reimbursement schemes, the means for supporting a shift in reimbursement practices was not clear, or was viewed with some skepticism. One respondent commented *"When ACOs [Accountable Care Organizations] come, the hardest thing is going to be how [you] develop a formula where the hospitals and the specialists and primary care all feel like they're adequately compensated."*

Similar skepticism was centered on the feeling that previous, government sponsored programs were inefficient and out of touch with the needs of working physician and medical practices. For example, one physician explained that there was *"fear [because] a lot of government run programs we've seen in the past [have] been managed so poorly and so inefficiently that I just can't imagine how this is going to work and where the money is going to come from to pay for all this"*.

DISCUSSION

In this study, we have identified five contextual themes that providers cited as critical to the implementation of the PCMH. Two themes, alignment of incentives with desired goals and reducing the burden of making the desired changes, are common across many change management initiatives, although the issues identified by respondents are largely PCMH specific. Three themes, multiple criteria for PCMH designation, health care reform, and workforce issues, are specific to PCMH implementation, and hence require health management and health policy expertise in formulating solutions. Providers' motivation to embrace the PCMH and their level of confidence regarding the results of such change are greatly influenced by their perception of the policy environment.

Our results indicate that providers perceive the misaligned incentives of the current payment structure as one of the most important policy problems affecting implementation of PCMH. We observed that misalignment of reimbursement and PCMH goals has the effect of discouraging implementation, regardless of how attractive PCMH might appear as a model of care. Put simply, respondents will not embrace PCMH if their livelihood must be sacrificed to do so. Reinforcing this point, some described current policy efforts to support PCMH as useful, but not sustainable in

the long term if reimbursement practices were not realigned with PCMH goals. Equally important is the need to increase the transparency of funding sources to the provider community, since confusion about the derivation of PCMH incentive payments may impede implementation.

Provider practices also identified the burdensome documentation requirements as a barrier. As described by its proponents, each of the PCMH tenets should support a practice environment where providers are able to understand their patients' problems and work with others in health care and in the community to address their patients' needs. Through appointment of a personal physician, improved care coordination and team-based care, medical homes are designed to spend the majority of their time planning for and providing care at both the patient level and the population level. Respondents noted, however, that specific processes required for achieving PCMH designation — and thus payment — take a lot of time and increase their administrative burden.

Respondents further indicated, and we confirmed, that while many of the PCMH domains are similar, the specific criteria are often distinct. For example, while BCBSM requires “24-hour patient access to clinical decision-maker by phone, after-hours urgent care access, and advanced access” as well as a “demonstration that practices have extended access processes and patient-education materials during site visits,” the National Committee for Quality Assurance requires that practices have “written standards for patient access and patient communication” and proof that they meet “standards for patient access and communication.”¹⁸ In this specific instance, the two guidelines not only require practices to provide means for communication after hours, but also to compose protocols for appropriate communication and formalize these standards. While these measures seem largely coherent, they nonetheless require additional effort for practices to validate. Research has demonstrated that physicians spend significant time interacting and negotiating with health plans — nearly three weeks a year for the average physician according to one estimate, not including time spent by other members of the practice team.¹⁹ The burden of answering to multiple different payers can be significant.²⁰ Policies that support validation and recognition of multiple PCMH designation programs could minimize these negative side effects. Consideration should be given to creating a national body that authenticates the variety of PCMH programs in existence, allowing providers to receive PCMH recognition from all payers, regardless of which authorized program provides that designation. This is currently the approach taken in the Michigan Primary Care Transformation demonstration.²¹

Respondents expressed considerable uncertainty about the specifics of health care reform and what it would mean for primary care practices, despite the fact that PCMH has

been included in health care reform legislation in several ways, such as PCMH models targeting high-need individuals²² and grants or contracts with community-based entities to establish interdisciplinary, inter-professional teams to support PCMH implementation in small practices.²³ Study respondents also expressed frustration over inadequate coordination of the requirements for the multiple transformation programs included in recent health reform legislation, particularly ACOs and meaningful use of information technology. This uncertainty often manifested as a reluctance to embrace PCMH changes when the broad landscape of health care was in a state of significant flux. As policymakers further advance programs to support transformation in healthcare, processes should be put in place to assure that the various incentives within independent initiatives are aligned with each other and support the same overall outcomes.

Workforce issues received less attention relative to reimbursement and incentives, although providers consider these key to successful implementation efforts. Policies for medical home transformation should be sensitive to the resource constraints in many primary care settings that restrict the staff they are able to hire for completing certain PCMH processes. Current policy discussions addressing these gaps are centered on educational subsidies, reorganization of reimbursement systems, or loan forgiveness programs.²⁴ Setting unattainable goals regarding the types of medical professionals performing certain tasks may limit the number of practices willing to pursue PCMH, even if they were otherwise motivated to pursue it.

While the principles of the PCMH were created and promoted by professional societies of the provider community, they are being operationalized and incentivized by external payers and agencies. Attempts to translate the concepts of PCMH into practical processes will naturally involve some short term missteps. Policies should anticipate this natural evolution by supporting ongoing participation and feedback. For example, the models for engaging the provider community to this point have ignored the inherent tensions between making successful transformation in clinical practice, and meeting the ongoing demands of patient care while sustaining financial viability. Reasonable time-frames with multiple learning modules and a strong platform for communicating successes and learning from failures should be included in any policy approach to PCMH.

LIMITATIONS

We have highlighted several policy areas that practicing primary care providers and other health care professionals identified as affecting their efforts and motivation to implement the PCMH. Because of the qualitative research

design and limited sample size, these perspectives were influenced by providers' experiences in a single state — Michigan. Caution should be exercised in extending these findings to other states, or in assuming that these are an exhaustive representation of all policy issues affecting PCMH implementation. We have attempted to address these limitations by focusing on issues that are not specific to any locale, interviewing multiple individuals from a range of practice types and settings, and having multiple investigators review the interview transcripts and themes to ensure consistency and avoid bias in interpretation.

CONCLUSION

The transformational changes required for PCMH designation are daunting for many primary care providers and their practice teams. Previous research on this topic has focused primarily on internal organizational processes that facilitate or impede change, or alternatively, on policy initiatives to promote PCMH. Our research has attempted to bridge the two areas of inquiry by identifying how policy context is interpreted and understood by providers, and the potential consequences for PCMH implementation. Having policies in place that shape the path to PCMH in a manner that is consistent with the realities of primary care practice could well make the difference in whether successful transformation is achieved.²⁵ Shaping the path is a task for the policy sphere, and will be greatly enhanced by ongoing dialogue between policymakers and the provider community.

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REFERENCES

1. Patient-Centered Primary Care Collaborative. Joint Principles of the Patient-Centered Medical Home. Washington: Patient-Centered Primary Care Collaborative; 2007.
2. Patient-Centered Primary Care Collaborative. Proof in Practice: A Compilation of Patient Centered Medical Home Pilot and Demonstration Projects. Washington: Patient-Centered Primary Care Collaborative; 2009.
3. Fields D, Leshen E, Patel K. Analysis & commentary driving quality gains and cost savings through adoption of medical homes. *Health Aff.* 2010;29(5):819–826.
4. The Commonwealth Fund. Patient-Centered Coordinated Care Program. New York: The Commonwealth Fund; 2011.
5. Nutting PA, Miller WL, Crabtree BF, et al. Initial lessons from the First National Demonstration Project on practice transformation to a patient-centered medical home. *Ann Fam Med.* 2009;7(3):254–260.
6. Reid RJ, Fishman PA, Yu O, et al. Patient-centered medical home demonstration: a prospective, quasi-experimental, before and after evaluation. *Am J of Manag Care.* 2009;15(9):71–87.
7. Marsteller JA, Woodward P, Underwood WS, Hsiao CJ, Barr MS. Design of a quality and performance improvement project for small primary care practices: Reflections on the Center for Practice Innovation. *Quality in Primary Care.* 2011;19(1):49–57.
8. Bitton A, Martin C, Landon BE. A nationwide survey of patient centered medical home demonstration projects. *J Gen Intern Med.* 2010;25(6):584–592.
9. Scott WR, Davis G. Organizations and Organizing: Rational, Natural, and Open Systems Perspectives. Englewood Cliffs: Prentice-Hall; 2007.
10. Landon BE, Gill JM, Antonelli RC, Rich EC. Prospects for rebuilding primary care using the patient-centered medical home. *Health Aff.* 2010;29(5):827–834.
11. Rittenhouse D, Thom D, Schmittiel J. Developing a policy-relevant research agenda for the patient-centered medical home: a focus on outcomes. *J Gen Intern Med.* 2010;25(6):593–600.
12. Sandy LG, Bodenheimer T, Pawlson LG, Starfield B. 2009. The political economy of U.S. primary care. *Health Aff.* 2009;28(4):1136–1145.
13. Rosenthal MB. Beyond pay for performance – Emerging models of provider-payment reform. *N Engl J Med.* 2008;359(12):1197–1200.
14. Abrams M, Schor EL, Schoenbaum S. How physician practices could share personnel and resources to support medical homes. *Health Aff.* 2010;29(6):1194–1199.
15. Weiner BJ, Amick H, Lee SD. Review: Conceptualization and Measurement of Organizational Readiness for Change: A Review of the Literature in Health Services Research and Other Fields. *Med Care Res Rev.* 2008;65:379–436.
16. Pettigrew AM, Woodman R, Cameron K. Studying organizational change and development: Challenges for future research. *Acad Manag J.* 2001;44(4):697–713.
17. Wanberg CR, Banas JT. Predictors and outcomes of openness to changes in a reorganizing workplace. *J App Psych.* 2000;85(1):132–142.
18. Michigan Primary Care Consortium. Patient-Centered Medical Home Toolkit: Other Validation Programs. Lansing: Michigan Primary Care Consortium; 2011.
19. Casalino LP, Nicholson S, Gans DN, et al. What does it cost physician practices to interact with health insurance plans? *Health Aff.* 2009;28(4):w533–w543.
20. Blanchfield BB, Heffernan JL, Osgood B, Sheehan RR, Meyer GS. Saving billions of dollars—and physicians' time—by streamlining billing practices. *Health Aff.* 2010;29(6):1248–1254.
21. Michigan Primary Care Transformation Demo (CMS) Web site. Available at : <http://www.mipcc.org/what-were-doing/michigan-primary-care-transformation-demo-cms>. Accessed May 30, 2012.
22. Abrams MK, Nuzum R, Mika S, Lawlor G. Realizing health reform's potential: How the affordable care act will strengthen primary care and benefit patients, providers, and payers. The Commonwealth Fund, January 2011
23. Health Reform GPS. Center for medicare and medicaid innovation. <http://www.healthreformgps.org/resources/center-for-medicare-and-medicare-innovation/> 2010. Accessed May 30, 2012.
24. Kaiser Family Foundation. "Summary of New Health Reform Law." in Focus on Health Reform. Menlo Park, CA: The Kaiser Family Foundation. 2010.
25. Heath C, Switch HD. How to Change Things When Change is Hard. New York: Crown Business; 2010.