

HEALTH POLICY

Policy Challenges in Building the Medical Home: Do We Have a Shared Blueprint?

Robert J. Stenger, MD, MPH, and Jennifer E. DeVoe, MD, DPhil

Background: The notion of a patient-centered medical home features prominently in policy reform initiatives across the country, with both state and federal legislation focusing on this new model. We sought to understand the views of key stakeholders and to examine the challenging landscape facing policymakers and practitioners as they attempt to translate the medical home concept into widespread practice change.

Methods: We reviewed legislative documents from state legislative sessions in the year 2007 to identify pieces of legislation that included the medical home concept. Concurrently we conducted an in-depth qualitative analysis of de-identified field notes from a purposeful sample of semistructured interviews conducted with key stakeholders in Oregon after the passage of health reform legislation in 2007.

Results: Legislation that further defined and expounded on the medical home concept was introduced in states across the country in 2007, and some federal and state demonstration projects were already underway. However, we identified a number of barriers to widespread implementation of the medical home, most notably lack of a clear operational definition. Key stakeholders had widely disparate views about elements central to the success of medical home demonstrations, including delivery system reform, payment reform, and performance incentives for providers.

Conclusions: Since 2007 the concept of the medical home has gained increasing attention in health care reform debates. Our findings suggest that translating this concept into successful, widespread reform will require that policymakers build further consensus among key stakeholders and require them to address critical barriers to avoid repeating pitfalls of past reform efforts. (J Am Board Fam Med 2010;23:384–392.)

Keywords: Health Policy, Health Care Economics, Health Care Systems, Primary Health Care, Medical Home, Patient-Centered Care

The term “medical home” was introduced in the pediatric literature in 1967.^{1,2} As the concept evolved, the American Academy of Pediatrics issued policy statements specifying the essential features of a medical home and providing some operational definitions.^{3,4} In 2007, the American

Academy of Family Physicians (AAFP), the American Academy of Pediatrics, the American College of Physicians, and the American Osteopathic Association announced a joint set of principles defining the “patient-centered medical home” (Table 1).⁵ The medical home concept has become a central focus of health care reform advocacy efforts by the primary care community.^{6,7} However, despite an intense national focus on the medical home, this new buzzword remains unfamiliar to most Americans, including key policymakers and rank-and-file primary care practitioners. In this study we aimed to describe the incorporation of the medical home concept into legislation across the country and to better understand the views held by critical local stakeholders regarding issues key to the successful implementation of medical home concepts.

This article was externally peer reviewed.

Submitted 3 June 2009; revised 19 August 2009; accepted 24 August 2009.

From the Department of Family Medicine, Oregon Health and Science University, Portland.

Funding: This project was partially supported by grant numbers 5-F32-HS014645 and 1-K08-HS16181 from the Agency for Healthcare Research and Quality (JED) and by the Oregon Health and Science University Department of Family Medicine.

Conflict of interest: none declared.

Corresponding author: Jennifer E. DeVoe, MD, DPhil, Department of Family Medicine, Oregon Health and Science University, 3181 Sam Jackson Rd, Portland, OR 97239 (E-mail: devoej@ohsu.edu).

Table 1. Joint Policy Statement: Patient-Centered Medical Home Principles*

Personal physician	<ul style="list-style-type: none"> ● Patients have an ongoing relationship with a personal physician ● First contact, continuous and comprehensive care
Physician-directed medical practice	<ul style="list-style-type: none"> ● Personal physician leads a team of individuals at the practice level ● Collective responsibility for the ongoing care of patients
Whole-person orientation	<ul style="list-style-type: none"> ● Medical home provides for all the patient's health care needs or appropriately arranges care with other qualified professionals ● Care for all stages of life: acute care, chronic care, preventive services, and end-of-life care
Care is coordinated and/or integrated	<ul style="list-style-type: none"> ● Coordination of care across the health care system and patient's community ● Care is facilitated by registries, information technology, health information exchange, use of interpreters, and other means
Quality and safety	<ul style="list-style-type: none"> ● Quality and safety improvement are hallmarks of the medical home ● Specific activities could include individualized care plans, evidence-based decision support tools, collection and reporting of quality improvement data, use of information technology, and voluntary certification of practices as medical homes
Enhanced access	<ul style="list-style-type: none"> ● Patients can easily access health care via their medical home ● Specific improvements could include open access scheduling, expanded hours, and enhanced phone or e-mail communication
Payment	<ul style="list-style-type: none"> ● Increased payments support the added level of service and value provided to patients who receive care from a medical home

*Issued jointly by the American Academy of Family Physicians, American College of Physicians, the American Academy of Pediatrics, and the American Osteopathic Association.

Methods

We used 2 major study methodologies: (1) a critical review of state and federal legislation referencing the medical home in 2007 and (2) an in-depth case study analysis of secondary qualitative data collected from key informant interviews during Oregon's 2007 legislative session. Our primary goals included (1) to determine how the medical home concept was incorporated into major pieces of health care reform legislation across the United States in 2007; (2) to highlight the political milieu surrounding the medical home; and (3) to better understand likely challenges inherent in the implementation of medical home concepts, primarily the need to find common ground among diverse stakeholders.

National Legislative Document Review

We obtained a summary list of state and federal legislation introduced in 2007 that contained some reference to the medical home (G. Martin, AAFP, personal communication). We then systematically reviewed the complete text of each separate piece of legislation (one Federal and 58 state bills) using a search on the keywords "medical home." Though all pieces were reviewed, we chose not to report on bills that failed to pass, those without detailed language defining the "medical home," and those

without information specific to how a new law would shape the creation of medical homes. Table 2 presents the enacted bills that included broader legislative definitions and characterized the breadth and scope of how the medical home concept would be implemented.

State Case Study

With the implementation of the Oregon Health Plan in 1993, Oregon has long been a leader in health policy reform.^{8,9} Like most states, Oregon continues to grapple with health care reform, including the challenge of ensuring access to primary care for its citizens. In 2007, the Oregon Legislative Assembly passed the "Healthy Oregon Act," which called for expanded health insurance coverage and a "medical home" for all public insurance enrollees.¹⁰ While serving as an intern at the Oregon Office for Health Policy and Research (OHPR), the first author (RJS) was asked to conduct semistructured interviews with a purposeful sample of key interviewees. This study started with a purposeful sample of 10 key stakeholders identified by policy leaders at OHPR and then used snowball sampling techniques to identify 5 additional interviewees to broaden the range of informant perspectives from primary care clinicians and clinic staff. The interviewees included a state public

Table 2. Summary of Selected State and Federal Enacted Legislation Referencing the Medical Home

Entity	Medical Home Definition and Attributes	Impact of Legislation
US Congress PL 109-432 (12/20/2006)	<ul style="list-style-type: none"> ● Care planning and coordination ● Use of health information technology ● Personal physician within a medical home practice ● Individual health assessment and management plans ● Prospective care management fee 	<ul style="list-style-type: none"> ● 3-year medical home demonstration for “high need” Medicare beneficiaries ● Demonstration to run in 8 states with mix of practice types and locations ● Requires CMS to create care management fee codes and provide a prospective fee for care management
California SL Ch. 483 (10/11/2007)	Defines medical home as “a single provider or facility that maintains all of an individual’s medical information. The...provider shall be a provider from which the enrollee can access primary and preventive care.”	Establishes the availability of medical homes as one of 10 criteria to judge local government proposals for insurance coverage expansion under an existing Medicaid waiver demonstration project
Idaho H 168 (7/1/2007)	Defines medical home as a primary care case manager	<ul style="list-style-type: none"> ● Requires all Medicaid applicants to receive information about primary care case management ● Allows the state HHS Director to require Medicaid enrollees to designate a primary care case manager
Louisiana Act 243 (8/15/2007)	Defines medical home “system of care” that includes: <ul style="list-style-type: none"> ● PCP-directed, patient-centered care ● Coordination of preventive and primary care ● Integrated system of PCPs, specialists and hospitals ● PCPs must have EMR 	<ul style="list-style-type: none"> ● Requires the state department of health to develop, implement, and evaluate a medical home system of care for Medicaid and low-income uninsured ● Requires the state department of health to develop an “enhanced Medicaid reimbursement methodology” for participating providers
Minnesota H 1078, SL 147 (7/1/2007)	Primary care medical homes must include the following attributes: <ul style="list-style-type: none"> ● Comprehensive care, including chronic disease management ● Coordination of care ● Longitudinal care ● 24-hour access (via phone) ● Systematic process for quality improvement 	<ul style="list-style-type: none"> ● Requires the state human services commissioner to develop at least 4 primary care medical home pilot projects for Medicaid-enrolled children or adults with complex medical needs ● Requires an evaluation of the pilot projects ● Appropriation of about \$1.7 million over 2 years (2009 and 2010)
Vermont Act 0071 (6/5/2007)	Defines medical home as a primary care practice that provides access to personal health information, individualized health assessments, and training for office staff in care management. Medical home PCPs shall provide: <ul style="list-style-type: none"> ● Care coordination, integration and oversight ● Point-of-care EBM and decision support tools ● Use of health information technology ● Patient self-management tools 	<ul style="list-style-type: none"> ● Funds a medical home demonstration project for Medicaid, Catamount Health, and State Employee Health Plan enrollees ● Requires the state DHS to develop a care management fee schedule and performance-based incentive payment structure for demonstration sites ● Establishes community-based care coordination teams that will work with medical home practices to coordinate care and promote the medical home
Washington PL Ch 259 (7/22/2007)	Defines medical home as “a site of care that provides comprehensive preventive and coordinated care centered on the patient’s needs and assures high-quality, accessible, and efficient care”	<ul style="list-style-type: none"> ● Requires the state department of health to develop a 5-year plan to provide a medical home to all enrollees of state health plans ● Requires the state DOH to design and implement medical homes for aging, blind, and disabled clients ● Payment reform emphasized, with the goal of allowing primary care providers to remain in practice and better coordinate chronic disease care.

CMS, Centers for Medicare and Medicaid Services; HHS, Health and Human Services; DOH, Department of Health; PCP, primary care provider; EMR, electronic medical record; EBM, evidence-based medicine; DHS, Department of Human Services.

employee benefits manager, a managed care medical director, health system medical directors, clinic managers and medical directors, directors of state medical professional associations, primary care cli-

nicians and staff at a clinic participating in a medical home demonstration, local health policy experts, state bureaucrats, and additional primary care physicians not participating in demonstrations.

To obtain access to and frankness from this diverse group of key informants, interviews were not recorded and all interviewees were guaranteed complete anonymity. Detailed anonymous field notes were collected for the purposes of a policy document prepared for the OHPR.

For this study, we conducted a secondary analysis of these de-identified field notes using qualitative research techniques. Both authors independently read all comments, met together on several occasions to discuss and reach consensus agreement on the 4 stakeholder categories. Then a common codebook of themes was discussed and decided upon using a standard iterative process that was guided by the joint set of principles defining the “patient-centered medical home” described in Table 1. Individual reviews were repeated with codebook guidance and we then met to conduct a series of immersion/crystallization cycles.¹¹ During these subsequent meetings, specific comments were grouped into more general categories. We then developed a weighted compilation of themes most important to each stakeholder group. The final summaries reflect consensus reached after reconciling the differing interpretations of both authors. Complete results of our legislative review are available upon request to the corresponding author (JED).

Results

State and Federal Medical Home Legislation

The medical home concept has been adopted by policymakers at multiple levels, and several medical home demonstration projects—both public and private—are already planned or underway, including the Centers for Medicare and Medicaid Services’s 3-year demonstration project mandated by the Tax Relief and Health Care Act of 2006.^{12–14} At the state level, the phrase “medical home” appeared in at least 58 bills from 22 states during 2007 legislative sessions. Among all 58 bills, only 17 contained a substantive definition of the term “medical home” whereas 41 did not offer legislative definitions. Thirty-three bills failed and 25 were enacted, including 6 that offered substantive definitions of the medical home. Of those 6 bills only 4 explicitly discussed delivery system or payment reform. The 6 State bills plus the Federal bill are presented in Table 2 as examples of how the medical home concept was discussed in 2007 legislative health care reform efforts.^{15–20}

The Oregon Case Study

We catalogued stakeholders into 4 key groups: primary care providers, clinic and health system administrators, insurers/payers, and policymakers. A summary of stakeholder perspectives on medical home principles is presented in Table 3.

Primary Care Providers

Rank-and-file primary care clinicians viewed the medical home concept as ambiguous and lacking evidence. As a group they feared the increased costs associated with a medical home and believed that successful implementation hinged on achieving significant payment reform. One provider commented that the medical home would essentially provide “better payment for what we’ve always done.” Primary care providers identified most strongly with the medical home principles of personal and longitudinal relationships with patients, whole-person orientation, and care coordination. This group viewed the medical home as a means to strengthen the traditional role and values of primary care. Providers focused less on the medical home principles that represent significant departures from the current delivery system. Interviewees expressed confusion and doubt about how to operationalize team-based care, primary care case management, enhanced access to care, quality improvement, and patient safety. The 2 providers participating in ongoing medical home demonstrations also noted the many unexpected challenges associated with developing primary care teams, implementing electronic medical records, and a number of other aspects related to transforming their current practices.

Health System Administrators and Clinic Managers

Health system administrators and clinic managers identified most strongly with the systems aspects of the medical home model. They focused most on the medical home principles of safety and quality improvement, team-based care, and technology issues, such as the implementation of electronic health records. As a group they talked about the medical home in terms of coordinating systems of care, new staffing models for primary care teams, and improving workflows. Most administrators recognized that significant change would be required to transition to a medical home model of care. Administrators tended to agree with providers about the importance of payment reform as a means to achieve lasting change. They also worried

Table 3. Summary of Key Stakeholder Perspectives on Medical Home Principles

	Primary Care Providers	Clinic and Health System Administrators	Insurers and Payers	Policymakers
Personal physician	Familiar concept Highly valued	Familiar concept Not highly valued	Familiar concept Not highly valued	Familiar concept Somewhat valued
Physician-directed medical practice	Foreign concept May be reluctant to participate in team-based care	Good understanding of team dynamics and differing roles of primary care team members	Very limited understanding of team-based primary care	Very limited understanding of primary care teams and roles
Whole-person orientation	Familiar concept Important core value of primary care	Limited understanding of concept Not highly valued	Limited understanding of concept Not highly valued	Some understanding of concept Somewhat valued
Care is coordinated and/or integrated	Limited understanding of care coordination strategies (patient-level focus) Sometimes part of current practice Variable understanding	Limited understanding of care coordination strategies (systems-level focus) Some understanding	Some understanding of concept May not link care coordination to the medical home (caved out services) Highly valued	Some understanding of concept Limited understanding of quality improvement Not valued
Quality and safety	Variable desire to participate in new projects Skeptical of new requirements/oversight	Importance driven by regulatory and licensure requirements	Favor tighter regulation and oversight of primary care to improve quality and safety	Highly valued (regulatory mindset)
Enhanced access	Well understood Limited support because of overwork of providers in current system	Well understood Customer-service mentality	Well understood (emphasis on customer service and costs) May not link to medical home	Well understood Somewhat valued
Payment	Very highly valued, of critical importance Skeptical of pay-for-performance	Very highly valued, of critical importance Skeptical of new payment methodologies	Very sensitive to rising health care costs Likely to demand proof of value/cost savings	Extremely sensitive to overall system costs and impact on health care budgets Supportive of demonstrations

about additional “unfunded mandates” by insurers and public payers who were portrayed by this group as eager to use the medical home concept to reduce costs. Respondents from this stakeholder group wondered how their clinics or health systems would pay for systems changes or cope with alterations in the current fee-for-service payment model. Compared with primary care providers, administrators and managers were less likely to speak about the importance of a personal physician, continuity of care, and whole-person care.

Insurers and Payers

Payers and insurers placed the most emphasis on cost containment. They expressed concern about how to quantify the value of care coordination and were ambivalent about the idea of increasing compensation for quality and safety. They questioned whether these types of improvements should warrant increased payment. Payers did differentiate between the medical home and the current “status quo” primary care system, which is not organized effectively to optimize delivery of preventive care.²¹ Most payers expressed hesitation to assume the financial risk for medical home demonstrations. One payer, however, embraced the medical home concept and had already started funding innovative models. All of them discussed the need to make payment reform contingent on performance improvements and/or cost savings. Payers rarely addressed the medical home principles involving patient care at the individual level, including the personal physician, whole-person care, and enhanced access to care. Though payers were clearly supportive of these aspects, there was no consensus about whether to provide and finance services such as chronic disease management, case management, and access to 24-hour nurse/physician care through the medical home.

Policymakers

As a group, elected and appointed policymakers had the most diverse perspectives about the medical home. Most were supportive of the need to deliver health care at the individual level, including the importance of a personal physician. They also shared concerns about the rising cost of health care and the importance of improving patient safety and quality. Unique to this group was the heightened awareness of the need for efficient and responsible use of public funds. Thus, their discussions about

medical home initiatives tended to focus on how to achieve rigorous evaluation of potential models and to demonstrate successful results before widespread adoption and implementation. This group had a wide range of familiarity with medical home concepts, especially in the way it was described by medical professional organizations. Though one policymaker had significant expertise about the details, the others made few distinctions between a medical home and status quo primary care. Different from the other 3 groups, the policymakers did not discuss the details of building medical homes and expressed no fears or hesitation about the delivery system changes that might be needed to move toward a comprehensive network of medical homes.

Discussion

Our legislative review indicates that across the country in 2007 there was widespread interest among policymakers in the medical home concept. The Oregon case study highlights a number of key potential challenges to implementation at the local and state levels. In this section we will further discuss these challenges, many of which proved to be insurmountable barriers to health reform efforts in the past. Although our case study applies directly to the local Oregon environment, we believe it has national relevance because many issues raised here have broad applicability to those that will need to be addressed in national discussions as the medical home concepts are further developed.

Lessons from the Past: the Legacy of Managed Care

It is difficult to discuss the medical home without drawing a parallel to a prior health reform effort that aimed, in part, to build a stronger primary care base within the health care system. At the outset of the managed care boom, many viewed the growth of managed care as a potential boon to primary care. A 1988 American Medical Association/AAFP report published in the *Journal of the American Medical Association* concluded that managed care “offers new opportunities for providers of primary care” and that “...this orientation in health care delivery is likely to provide an attractive spectrum of opportunities for present and future primary care physicians.”²² Though the theory behind managed care appealed to many primary care providers, its focus on cost containment, control of utilization,

and the use of providers as gatekeepers led to widespread disappointment.²³ Many of the same pressures that contributed to the downfall of managed care still exist and will create similar challenges as states work to develop and implement medical home models.

Potential for the Future: The Patient-Centered Medical Home?

Health care costs have risen substantially since the 1990s. Meanwhile, a robust literature has emerged demonstrating the importance of a strong foundation of primary care in the delivery of efficient, patient-centered care in health systems across the globe.^{24,25} Quality improvement and patient safety have also evolved as central themes in health care reform.^{21,26,27} Finally, one area of consensus among key informants in this study was that payment mechanisms for primary care are broken and unsustainable. In summary, the time is ripe for reform, yet many still question whether the patient-centered medical home will flourish or suffer the same fate as managed care.²⁸ This study provides further insight about key stakeholder conflicts that will probably present many challenges in the years ahead.

Challenges Ahead: Key Stakeholder Conflicts

The absence of detailed medical home language in roughly 75% of state bills enacted in 2007 suggests that the details of the medical home will probably be developed by bureaucrats, administrators, and other stakeholders with little legislative guidance. In this context, it will be critical for those shaping the reforms to understand divergent stakeholder views. Based on our secondary review of qualitative interviews, we identified 3 key challenges to reaching consensus among Oregon medical home stakeholders: payment reform, performance incentives, and delivery system reform.

Payment Reform

Payment reform is perhaps the top policy concern of primary care physicians. Primary care clinics face increasing costs and flat or declining reimbursement. Physicians are not likely to support medical home proposals unless they include—up front—reorganized payment schemes and increased payment to support a higher level of care delivered under the medical home model. Primary care physicians working “on the ground” project that the

medical home will cost more money in the short term and demand that payers must agree to up-front investment, which should lead to cost savings and better population health in the long term. Public and private payers, however, are under extreme pressure to control costs now. Provider demand for more money, coupled with unrealistic expectations of short-term cost-savings on the part of payers, could threaten the success of medical home demonstrations.

The Oregon example shows that some payers may be willing to shoulder start-up costs for medical home demonstrations. However, until cost savings are well established, short-term successes may require that payment reform be taken off the table initially, with medical home demonstrations funded by grants or one-time expenditures. Once proof of concept can be established, policymakers might have more success in reforming the funding mechanisms for medical homes over the longer term. There are many potential models for payment reform that hold promise; for example, the AAFP supports a mixed-payment model that preserves fee-for-service payments and incorporates new prospective payments to support care management and other medical home functions.²⁹ Others have proposed broader reform models, such as comprehensive prospective payments for primary care.³⁰ The particular payment mechanism may not be as important to primary care groups as the reassurance that payments will be stable and sustainable. New payment methodologies must both encourage behavior change among providers and avoid creating unnecessary burdens.

Performance Incentives

Although the central focus of providers is increased payment, payers and policymakers are equally focused on ensuring that an investment in primary care will yield tangible results in terms of cost savings and patient outcomes. Payers will establish new requirements for primary care practices that seek increased payment as medical homes. Providers, on the other hand, are skeptical of performance incentive schemes, especially “pay-for-performance.” As noted above, they prefer to hold out for long-term gains in population health, which exceed waiting times agreeable to most payers. Managing this conflict between payers and providers will be a critical challenge for policymakers. The collaborative development of operational medical home def-

initions, such as medical home standards by the National Committee for Quality Assurance is a potential first step in this process.³¹ However, the current National Committee for Quality Assurance standards have generated some criticism and may not have widespread support among primary care providers.^{32–34} The most effective initial approach may be one of “pay-for-process,” where providers are rewarded for implementing small, incremental changes to the delivery system. If early performance incentives are too onerous, payers run the risk of creating the same discontent with medical home projects that primary care providers felt toward managed care in the 1990s.²³

Delivery System Reform

Delivery system reform is an underappreciated challenge in moving from the current primary care system to the medical home model. Medical home proposals call for significant changes in the routine operations of primary care clinics, such as the adoption of electronic medical records, creation of team-based staffing models, development of systems for prospective patient management, collection and reporting of quality improvement measures, and enhanced patient access to care.

Interestingly, this study reveals that policymakers who are responsible for legislating reform may not acknowledge the complexity of making changes in the delivery system nor realize the controversies that may arise between providers, administrators, and payers with differing interpretations about how to achieve change. Preliminary findings from early medical home demonstrations already suggest that these basic delivery system changes are difficult, even within willing and motivated primary care clinics, and cannot be accomplished quickly.³⁴ Demonstration projects have just begun the critical work of showing that delivery system reform is possible, and they will yield valuable lessons about how policymakers can manage and facilitate broader changes to the delivery system.

Limitations

We recognize that there are significant limitations to our current study. We conducted stakeholder interviews in a single state and limited our consideration of the medical home concept strictly to primary care. Though all groups are also patients within the system, we did not have an explicit patient/consumer group within our sample. In ad-

dition, significant developments have occurred since 2007; the medical home concept continues to be a topic of intense policy debate. Given these limitations, however, we feel that our results bear relevance to current and future policy and practice discussions by many who seek to further refine and advance the medical home concept.

Conclusions

Our review of legislation and key informant interviews does suggest that a number of proposed strategies may be well received by receptive local stakeholders willing to collaborate on testing reform ideas, including innovative financing models, small grants for practice infrastructure improvement, development of learning collaboratives, and financial or educational support for retraining of staff. It is too soon to know, however, whether it will be possible to translate this pioneering work into widespread and sustainable reform because the difficulties encountered by motivated pioneers will only be magnified across the general population. Without stakeholder consensus around a clear operational definition of the medical home, the success and sustainability of medical home projects will be jeopardized.

Because the medical home concept is not being consistently legislated, demonstrations across the country will probably implement very different experiments all bearing the name “medical home.” In the best-case scenario, this diversity of effort will lead to broad experimentation and development of best practices that can be replicated. If successful, these leading experiments will drive changes in the health care system both within and outside of primary care. In the worst case, however, early adopters of modest, short-reaching, or overly restrictive “medical home” models will divide key stakeholders, fail to demonstrate short-term results, and discourage others from considering this new model as a viable strategy for health reform. Policy makers must continue to engage all stakeholders, including primary care organizations, and work toward achieving consensus to provide the best opportunity for success of early medical home projects.

Drs. DeVoe and Stenger have both worked collaboratively with researchers and policymakers in the Office for Oregon Health Policy and Research. We are grateful for the generous mentoring of many individuals from this office throughout this project.

References

1. American Academy of Pediatrics, Council on Pediatric Practice. Records and a "medical home." In: Standards of child care. Evanston, IL: American Academy of Pediatrics; 1967. p. 77–9.
2. Sia C, Tonniges TF, Osterhus E, et al. History of the medical home concept. *Pediatrics* 2004;113:1473–8.
3. Dickens MD, Greene JL, Kohrt AE, et al. The medical home: ad hoc task force of definition of the medical home. *Pediatrics* 1992;90:774.
4. Sia CJ, Antonelli R, Gupta VB, et al. The medical home. *Pediatrics* 2004;110:184–6.
5. Kellerman R, Kirk L. Principles of the patient-centered medical home. *Am Fam Physician* 2007;76:774–5.
6. American College of Physicians. A system in need of change: restructuring payment policies to support patient-centered care. Position Paper of the American College of Physicians. Philadelphia, PA: American College of Physicians; 2006:1–45.
7. American Academy of Family Physicians. AAFP News Now Special Report: Patient-Centered Medical Home. Available at www.aafp.org/online/en/home/publications/news/news-now/pcmh.html. Accessed 30 March 2010.
8. Bodenheimer T. The Oregon Health Plan—lessons for the nation. First of two parts. *N Engl J Med* 1997;337:651–5.
9. Bodenheimer T. The Oregon Health Plan—lessons for the nation. Second of two parts. *N Engl J Med* 1997;337:720–3.
10. Healthy Oregon Act, S 329, 74th Leg, 2007 Regular Sess (Or 2007).
11. Borkan J. Immersion/crystallization. In: Crabtree BF, Miller W (eds.). *Doing qualitative research*. Second ed. Thousand Oaks, CA: Sage Publications; 1999. p. 179–94.
12. Patient-Centered Primary Care Collaborative. Patient-centered medical home: building evidence and momentum: a compilation of PCMH pilot and demonstration projects. Available at http://www.pcpc.net/content/pcpc_pilot_report.pdf. Accessed 18 August 2009.
13. Tax Relief and Health Care Act, 18 USC §204 (2006).
14. Centers for Medicaid and Medicare Services. Medical home demonstration fact sheet. Available at http://www.cms.hhs.gov/demoprojectsevalrpts/downloads/medhome_factsheet.pdf. Accessed 18 August 2009.
15. Health Care Reform Act of 2007, S 1, 2007 Regular Sess (La 2007).
16. Care Coordination Pilot Projects, ch. 147, § 19, 2007 Minn. Laws 338–340.
17. An Act Relating to Public Assistance, HR 168 § 2, 59th Leg, First Regular Sess 2007 (Id 2007).
18. An Act Relating to Providing High Quality, Affordable Health Care to Washingtonians Based on the Recommendations of the Blue Ribbon Commission on Health Care Costs and Access, ch. 259. 2007 Wash. Sess. Laws 6.
19. An Act Relating to Ensuring Success in Health Care Reform, HR 531 § 7, 2007–2008 General Assembly (Vt 2007)
20. Act of October 11, 2007 (SB 1039), ch. 483, § 204. 2007 Cal. Stat 78.
21. McGlynn EA, Asch SM, Adams J, et al. The quality of health care delivered to adults in the United States. *N Engl J Med* 2003;348:2635–45.
22. Gorey T. The future of family practice: implications of the changing environment of medicine. *JAMA* 1988;260:1272–9.
23. Grumbach K. Primary care in the United States—the best of times, the worst of times. *N Engl J Med* 1999;341:2008–10.
24. Starfield B, Shi L, Macinko J. Contributions of primary care to health systems and health. *Milbank Q* 2005;83:456–502.
25. Rosenthal TC. The medical home: growing evidence to support a new approach to primary care. *J Am Board Fam Med* 2008;21:427–40.
26. Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century*. Washington, D.C.: National Academy Press; 2001.
27. Bodenheimer T. The movement for improved quality in health care. *N Engl J Med* 1999;340:488–92.
28. The Robert Graham Center. *The patient-centered medical home: history, seven core features, evidence and transformational change*. Washington, D.C.: The Robert Graham Center; 2007.
29. Spann S. Report on financing the new model of family medicine. *Ann Fam Med* 2004;2(Suppl 3):S1–S21.
30. Goroll AH, Berenson RA, Schoenbaum SC, et al. Fundamental reform of payment for adult primary care: comprehensive payment for comprehensive care. *J Gen Intern Med* 2007;22:410–5.
31. National Committee for Quality Assurance. *Physician practice connections. Patient-centered medical home*. Available at <http://www.ncqa.org/tabid/631/Default.aspx>. Accessed 30 January 2008.
32. Berenson RA, Hammons T, Gans DN, et al. A house is not a home: keeping patients at the center of practice redesign. *Health Aff* 2008;27:1219–30.
33. Kuzel AJ, Skoch EM. Achieving a patient-centered medical home as determined by the NCQA—at what cost, and to what purpose? *Ann Fam Med* 2009;7:85–6.
34. 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;7:254–60