SPECIAL
ARTICLES

A New Foundation for the Delivery and Financing of American Health Care

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BACKGROUND AND OBJECTIVES: For the past decade, primary care practices across America have worked to implement a practice model called the Patient-Centered Medical Home (PCMH) to revitalize practice, better support clinicians and patients, improve efficiency, and facilitate growth in primary care capacity. In spite of substantial progress, this work has not been matched by sufficient change in the payment system to allow these goals to be accomplished. Nevertheless, improving the quality and availability of primary care remains essential to achieving the goals of the Triple Aim (better health care, better population health, and containment of health care costs). For this to occur, the PCMH model of care must be further refined, and the payment system for primary care must be completely restructured. The need for these changes is urgent. In October 2014, the discipline of family medicine announced a comprehensive strategic plan called Family Medicine for America's Health (FMAHealth). FMAHealth proposes to expand the PCMH care model by fully integrating our nation's behavioral/mental health, public health, and primary care systems to create a new foundation for American health care. Accomplishing these ambitious goals will require a broad coalition of private and public interests across the health care disciplines as well as patients, communities, government, and businesses. These changes require additional infrastructure that existing financing systems do not adequately support, so comprehensive payment reform is essential for large-scale dissemination and sustainability of this model. The new payment model must reward value rather than volume of service and must provide a secure financial foundation for practices designed to care for patients and communities at affordable costs.

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Family medicine was recognized as America's 20th medical specialty in 1969 as a result of a broad social process to revitalize traditional general practice with enhanced training, a more standardized scope of services, and better professional recognition for generalists.[1-4] At that time, clinical practices in the new discipline were predominately small businesses with a clinical model based on personal relationships between individual family physicians and patients.[5] Family physicians assumed comprehensive responsibility for the vast majority of patients' medical and surgical needs in practices designed to support the physician's work. They were paid for office visits, procedures, and hospital care on a fee-for-service basis. Information systems were limited to paper charts. The care was focused on patients as individuals.

By the end of the 1990s, family medicine had become one of the largest specialties in American medicine, but significant problems had become apparent with this traditional model.[6] A national fascination with technology and specialty care had eroded family medicine's prestige such that an insufficient number of students were choosing the field for it to meet society's needs. Practice revenues did not provide sufficient funds for investment in innovation. With the evolution of general internal medicine and general pediatrics,

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family medicine became one of several models of primary care rather than the broad, unified foundation of the health system envisioned by its founders.[7]

To address these and other problems, the specialty completed a strategic plan in 2004 called the Future of Family Medicine (FFM) Project that called for a new model of practice based on high-functioning teams in patient-centered medical homes (PCMHs).[6,8] By this time, practices were more likely to be single specialty groups and were often part of networks brought together for contracting purposes. A growing number of family physicians worked in larger health systems or community health centers. Payment no longer came directly from patients but from health insurance plans incentivized to limit the growth of health care spending using strategies that collectively made the delivery system more administratively complex. Paradoxically, this increasing complexity raised administrative costs for both practices and health plans while confusing patients and their families. The traditional primary care delivery system, designed to provide acute care in short duration office visits, was faced with an aging population afflicted with multiple chronic illnesses and was threatened by an insufficient number of new clinicians entering the system.[6]

Several outcomes of the FFM project have positively influenced family medicine as well as the entire primary care system.[9] Internal medicine, pediatrics, and family medicine, along with other clinicians such as physician assistants and nurse practitioners, joined together to support the PCMH movement, and federal, state, and local programs were developed to help practices transform into this new model of care.[10] This practice transformation process was greatly influenced by the rapid adoption of electronic health information systems after a substantial federal investment in this area. Standards were developed to recognize practices adopting the PCMH care model with several levels of recognition depending on the number of medical home attributes present in the practice.[11-13] After the FFM, practices developed patient registries, enhanced access to care including expanded office hours, and electronic communication between clinicians and patients. Interdisciplinary, team-based care became more common, including other health professionals in disciplines such as social work, psychology, and pharmacy. The Preparing the Personal Physician for Practice (P4) Initiative was launched to study how to train family medicine residents to practice in the PCMH care model.[14,15] In addition, the FFM project resulted in creation of a broad coalition of health professionals, business leaders, and consumers (the Patient-Centered Primary Care Collaborative) to advocate for the PCMH model and for changes in primary care reimbursement.[16]

The PCMH model has been widely accepted in theory, but major problems have limited its full implementation. Among these problems, three are particularly noteworthy. First, in spite of considerable evidence about the benefits of strong primary care as the foundation of effective health care, the system of payment for these services has not kept pace with changes in delivery models.[17] As a result, a substantial number of physicians chose not to embrace the PCMH until more robust payment reform would support the transition. Health systems made substantial investments to expand specialty care in areas such as heart disease and cancer care based on an expectation of enhanced hospital revenue from the fee-for-service payment model. Investments in primary care were more limited and were not sustained after the end of the managed care era in the 1990s. Second, an aging population and growth in the number of people seeking care after passage of the Affordable Care Act have increased demand for primary care services, placing added stress on the system.[18] Finally, there has been a serious decline in the primary care workforce as too few medical students are choosing primary care careers, while existing clinicians are leaving practice to pursue early retirement, become hospitalists, or by otherwise limiting their scope of practice.[18] In spite of the FFM project, health care still suffers from excessive cost and poor population health outcomes for the American people. Worse still, the current system has failed to reduce health disparities in our population that undermine social justice.[19] Both the care delivery system and the method by which it is compensated have become increasingly fragmented, leaving patients at risk and primary care clinicians demoralized.[20]

The Foundation for a New Delivery System

While health reform and new information and communication technologies have increased demands on the primary care system, they have also created opportunities to design new delivery models and change the underlying health economy. Compelling evidence exists that a strong and well-funded primary care system is a necessary step to achieve the Triple Aim (better health care, better population health, and containment of health care costs).[21] But there is also growing evidence that primary care as it is currently practiced in the United States is insufficient in both quality and quantity for this to occur.[22]

Over the past decade, at least four divergent models of family medicine have emerged. A growing number of family physicians are now employed by hospital-based delivery systems, sometimes called vertically integrated systems, where they are expected to model their practices to meet larger system priorities and to justify system investments in practice infrastructure.[23] A second group of family physicians have embraced team-based care and population health in the PCMH model while remaining in independent practices or community health centers, but these physicians have struggled to access the capital

investments and enhanced payment needed to pay for electronic health records and to expand services for larger patient populations. A smaller third group has reduced the size of their practices to provide enhanced care for those patients and/or employers willing to pay for it directly. Finally, a fourth group has clung to traditional practice, hoping for a more favorable external environment to emerge. While these four models are no doubt an oversimplification of the complex changes underway in primary care, the growing diversity of practice models has created uncertainty about the role of the family physician. It has created an illusion that physicians must choose between a team approach to caring for larger patient populations or a more personalized approach to caring for individual people in smaller practices. It has also limited family medicine's ability to properly message the specialty's values to patients and other key stakeholders.

The PCMH was originally conceived to expand on a personal model of comprehensive primary care with enhanced tools to improve access and care coordination. But attempts to implement this care model exposed serious problems that currently lie outside of primary care; the model cannot be fully realized without larger system changes. Specifically, the primary care system cannot perform to the required standard without a more secure source of financial support than currently exists, and it cannot function properly in a health system with serious structural weakness in the public health and mental health systems. Finally, it is now recognized that the current system fails most dramatically when patients have complex problems involving multiple settings of care; there is widespread agreement that eliminating care fragmentation is an essential step to achieving the Triple Aim.[20,24-26]

A strong and sustainable health care system will require a robust redesign of all of the delivery system's foundational elements: primary care, mental health, and public health. It is no longer feasible to consider these three systems in isolation from one another. National discussions are underway about closer collaboration between mental health and primary care[27] and between public health and primary care.[28] In some settings, the PCMH concept has already been expanded to incorporate mental health and population health tools. But the current health economy is a major obstacle to this work because it pays for visits and procedures instead of rewarding outcomes and value. Medical care, mental health care, and public health have separate funding streams, none of which are tied to the three elements of the Triple Aim. Reform of the delivery system is now effectively halted by the uncertainty this creates. Health care leaders now have an opportunity to fix this problem; the discipline of family medicine is committed to working with others to build this new foundation. It is for this reason that family medicine (with its traditional strengths in relationship-based care, comprehensiveness, and community-based care) launched FMAHealth.[9]

Elements of the New Model

A new foundation for the delivery system should be based on proven elements and characteristics. From a clinician's point of view, successful primary care is based on its five core attributes; each of these elements must be robustly supported in the new model.[21] Table 1 lists these core attributes and examples of how the PCMH model has expanded on them. However, patients have diverse expectations for their own health care and for the care of their family members, so a care model designed exclusively from the clinician's point of view may fail to adequately address patient demands. Thus, the clinician's perspective and scientific evidence are necessary but insufficient; they should be a starting point and not an end point. A new care model must also adapt to community priorities through enhanced patient and community engagement.

The failures of the current delivery system highlight a need for physicians in the primary care setting who can master and organize the care of the most complex health problems in the communities they serve.[24] Work within the PCMH has taught us that high-performing teams can deliver proven services with improved efficiency. But physicians and other team members are only now beginning to learn how to work together in this new way. Team-based and patient-centered care involves major changes in the day-to-day work of primary care. FMAHealth has clarified the role of family physicians and primary care practices by proposing a new covenant with patients, families, and communities.[9,29] But the past decade has also shown that primary care alone, even when it is done well, may not be sufficient to accomplish the Triple Aim; this is why it is now time to further refine the PCMH model.[30]

Each of the core elements of primary care can be enhanced by fully integrating mental health and public health competencies into a new model. Table 2 outlines examples of how the current PCMH model can be expanded to create a broader and more comprehensive foundation for our delivery system. To accomplish these changes will require a substantial redesign of most existing practices and health systems. This might mean expanding the number of mental/behavioral health clinicians working in the PCMH. It might also mean the establishment of PCMH satellites in community mental health clinics to more effectively care for the physical health needs of those with serious mental illness. Every PCMH will require the skills to use population health data to design more effective care. They also need to be in continuous collaboration with public health agencies, other primary care practices in the community, and with the communities they serve to better match services to changing community and population needs. All of these services do not need to be

Table 1: Core Attributes of Primary Care and the Patient-Centered Medical Home (PCMH)

Care Attributes	Examples of Traditional Primary Care	Examples of Additional Attributes of the PCMH
Accessible care	• Patients have easy access to routine and urgent office appointments • Patients can reach clinicians and access care when the office is closed • Primary care system ensures access to specialty and hospital care when required to meet patient needs	• Patients can communicate with clinicians electronically • Patients can access information from their medical records remotely • Patients have greater access to office care during non-traditional office hours such as evenings and weekends • Patients have access to advice and coaching to make healthy lifestyle choices
Continuous, relationship-based care	• Patients can choose personal clinicians with whom they are comfortable • Patients can access their personal clinician for most care needs • Care provided by other team members is under the direction of the patient's personal clinician • Personal clinicians are involved in care of their patients in settings outside the office such as hospitals and nursing homes	• Each patient has a trusting relationship with everyone on his or her primary care team and has a clear understanding of the role of the physician on these teams • Care systems reliably respect continuity of care between patients and their chosen personal physicians and care teams and are accountable to deliver care consistent with patient choices • Practices measure and improve continuity of care for individual clinicians and teams • Information systems allow clinicians to measure outcomes of care for patients assigned to them by patient choice
Comprehensive scope of care	• Patients can depend on the primary care team to meet the vast majority of their acute, chronic, and preventive care needs without referral • The primary care team uses the best available scientific evidence and modifies care as new evidence becomes available • Practices are capable of caring for any patient in the community regardless of age, gender, or medical problem	• Primary care practices incorporate elements of specialty care based on community prevalence • Practices measure outcomes of care to ensure high quality • Practices measure referral rates and ancillary service use and are accountable for managing care utilization.
Care coordination	• The primary care team provides seamless preventive services to patients who come to the office • The primary care team coordinates the care of chronic conditions to assure standards of care are met for each patient • The primary care team refers patients for specialized care and ensures smooth transitions between primary and specialty care	• Practices use preventive care and chronic disease registries to provide preventive services to every patient in their attributed populations • Patients have access to coaches and/or care coordinators to help them manage chronic illness • Practices use data to measure effectiveness in preventive and chronic disease care • Practices measure outcomes of hospital and specialty care when patients are referred
Patient and community-centered care	• Patients' personal care choices are respected and documented • Medical records contain social, occupational, and family information • Practices are engaged in community activities and utilize community resources	• Patients have a voice in practice decision making • Patients can access care models that promote engagement and informed decision making • Practices measure patient satisfaction and takes steps to continuously improve it • Practices provide written orientation to new patients

delivered in a single setting. Instead, PCMH networks can be connected to community mental health and public health capacity using enhanced communication and information technology. Such a model has been described as "horizontally integrated health care" in contrast to vertically integrated delivery models.[31]

The PCMH model has required primary care practices to build care teams to extend family medicine's traditional care model based on personal relationships.[32] Fully integrating mental health and public health will require an expansion of these care teams and for new competencies to be developed. In addition to physician assistants, nurse practitioners, medical assistants, nurses, social workers, and pharmacists, the new model will require behavioral/mental health professionals, care

Table 2: Expanded Attributes With Behavioral/Mental Health and Public Health Integration

Care Attributes	Examples of Expanded Attributes With Mental Health Integration	Examples of Expanded Attributes With Public Health Integration
Accessible care	• Patients have easy access to basic mental health and counseling services without leaving the practice • Primary care and mental health clinicians share information and jointly develop care plans for applicable patients • Practices screen for mental health and chemical dependency and provide prompt care for patients with these problems	• Practices use community and population health data to design care services • Practices are part of disease surveillance networks to identify and respond to new problems in the community • Practices are actively engaged in helping communities to improve health with local government, schools, and businesses
Continuous, relationship-based care	• Patients can establish and maintain a personal relationship with their mental health team within the PCMH setting or with a primary care team within the mental health setting when serious mental illness is present • Team communication ensures behavioral/mental and physical health needs are met collaboratively • Medication lists and care plans are integrated for mental and physical health	• Practices are actively engaged in reducing and eliminating health disparities in the community • Practices promote health education for both children and adults in the community
Comprehensive scope of care	• Patients can receive most mental health services in their own medical home • Integrated primary care and mental health teams use the best available scientific evidence to provide care and modify that care as new evidence becomes available • Practices are capable of providing behavioral health services for any patient in the community regardless of age, gender, or medical problem	• Practices develop competencies to care for any acute or chronic problem that is common in the community based on accurate and timely population health data • Practices ensure that community resources are used efficiently, including hospital, nursing home, home care, and hospice services
Care coordination	• The primary care and mental health teams manage the care of mental and physical illness in an integrated fashion • The integrated teams extend the integrated care model to patients from the clinic population referred to specialists and hospitals	• Practices measure population health outcomes in the context of community-wide information systems and are accountable for achieving the Triple Aim for patients under their care
Patient-centered, family-oriented, and community-based care	• Patients' mental health care choices are documented and respected • With patient consent, families are involved in the care of patients with mental and physical disabilities	• Practices are engaged in community-based efforts to design health care based on community values

managers, and population health professionals to work collaboratively at the point of care, whether this is within the walls of a single office or in a network of sites working closely together.

This new model will also require new ways for all these professions to work with one another. It will require new training models, new competencies for existing clinicians, expanded information systems, and new relationships with communities. It will place exceptional demands on these teams to continuously improve care and will require leadership from all team members. Each team member will need to deliver the full scope of services for which they are trained with a goal of reducing unnecessary referrals while improving care outcomes and patient and family experiences. The role of the family physician in this new care environment has already been proposed.[29] The roles of other team members must be defined within their own disciplines.[33] A high performing PCMH, fully integrated with this expanded capacity, must be able to care for patients with state-of-the-art quality metrics, efficient specialty referrals, and reduced emergency department and hospital utilization. It must also have the necessary tools and skills to measure care outcomes in all three of the Triple Aim goals.

Creating the Necessary Economic and Political Conditions for the New Model

Now is the time for a broad coalition of partners to accelerate health system redesign. By adopting FMAHealth, family medicine commits itself to achieving this goal by 2020. To do this, we intend to convene a broad coalition that includes community leaders, other health professionals, health insurers, employers, and government leaders.

Strategic steps to build this coalition might include:

1. Family medicine will reach out to other health professionals to seek consensus in support of this new model of care. This should begin with other medical disciplines with direct interests in primary care but must also include physician assistants, nurse practitioners, nurses, behavioral/mental health clinicians, public health professionals, and pharmacists.

2. The PCMH model should be expanded to include additional levels of recognition for practices as they add behavioral health and public health competencies. This will require the development of more sophisticated tools for measuring care outcomes based on the Triple Aim goals.

3. This new model of care depends on a supportive context, sometimes called a medical neighborhood, to be successful. Medical and surgical specialists, hospitals, nursing homes, and home health agencies must be included in the planning process because the Triple Aim is unachievable by primary care alone, even with these enhancements. In fact, efficient health care will require new models of collaboration between primary and specialty care that can only be developed jointly.

4. Community organizations, state and local government agencies, health plans, employers, and educational institutions should be engaged early in the development of the new model.

5. Finally, the process must be driven by patients and families and built to address their specific needs and priorities.

Sporadic efforts at expanding the PCMH model in this way are showing promise, but this effort cannot achieve broad application without a substantial investment in infrastructure as well as major changes in the system by which these services are compensated.[34] The FMA-Health coalition should engage with public and private payers to adopt a uniform and simplified new model of comprehensive payment to realize the full potential of this new model of care. This model should be built on lessons learned from pilot studies and regional efforts that have taken place over the past few years.[35] Essential elements of this payment reform should include:

1. A sufficient increase in payment for primary care, mental health, and public health to fully cover the costs of expanded practice infrastructure.

2. A long-term commitment to a comprehensive payment model that rewards Triple Aim goals rather than office visits and procedures. Pilot programs and short-term commitments alone will not allow a sufficiently stable environment to sustain changes of this magnitude; long-term change is a necessity.

3. The new compensation model cannot be based solely on the hope of savings at the end of the year. Incentives and shared savings could be acceptable parts of the plan, but practices cannot invest in this level of change with an uncertain cash flow.

4. The new comprehensive payment model might contain fee-for-service elements, but it must also support the infrastructure needed to provide services other than office visits and procedures. Specifically, the model must support a team-based approach to care coordination and must be sufficient to cover the added costs of mental health and population health services.

5. Patients need to understand far more about how care is paid for than they currently do. They should be restored to a primary role as responsible consumers of health care, not just passive recipients of benefits. Aggressive engagement of the public, including patient advocacy groups, should be undertaken to overcome political resistance from those invested in the existing care system that is failing our country.

6. Failure to adopt comprehensive payment reform over the past decade has severely eroded trust between payers and clinicians. In the interest of the nation's health, including its economic health, state and federal governments should stand ready to require action if it is not forthcoming with voluntary efforts.

7. Physicians and care teams should take responsibility for outcomes, but the regulatory environment must be as efficient as the delivery system. Current billing system and documentation rules do not enhance the quality or safety of care. They should be streamlined to reduce the administrative burden on practices and lower operating costs.

8. If meaningful payment reform does not take place in the near future, the delivery system should explore models of selling care directly to patients and/or employers as an alternative to the insurance model. Those working on this new model of care need workable alternatives if reform of the health economy languishes. This direct payment model of primary care financing is already growing in popularity in several parts of the country as an example for others to consider.

9. A substantial and stable source of funding must be provided to support research and innovation for this new model of care. Specifically, making care more efficient and accountable will require new technologies to be developed and tested. Valid measurement tools to assess Triple Aim goals at the practice and community levels must be identified and refined. Such innovation cannot occur without explicit and dependable funding.

10. Secure funding must be provided for the educational infrastructure to train current and future clinicians to provide this new model of care.

It is not yet clear what business model will best support the creation of this new foundation for our delivery system. Adding monthly patient management fees to existing fee-for-service payments might be a valid starting point because it ensures that existing payment is augmented and not just replaced. But it is essential that payment is sufficient to

cover expanded infrastructure costs without excessive financial risk to practices. Because all sectors of the health care system have a stake in comprehensive payment reform, it is critical to achieve broad agreement regarding its core principles. Nevertheless, those who are intent on preserving the status quo in the allocation of resources should not be allowed to control this process. Evidence is already accumulating to suggest that large, vertically integrated, hospital-based clinical systems do not perform better than smaller, independent practices.[23,36-38] Most mental health, public health, and community health center funding has traditionally come from public sources outside of the health insurance model. The FMAHealth coalition should be open to considering similar payment models for the expanded PCMH if doing so makes it easier to bring these systems together.

Conclusions

Family medicine has defined a list of care characteristics that patients and communities should expect from family physicians and the practices in which they work.[9,29] We have also committed our discipline to a list of promises to form the foundation of a new social contract with our nation.[9] We fully realize that we cannot accomplish these ambitious goals without help from our partners and team members in practice, specialists and hospitals, our colleagues in mental health and public health, the communities we serve, and the system by which care is financed in America. Family medicine is willing to join with our communities to take responsibility for achieving the Triple Aim for those who entrust us with their care and for the communities in which we live. But payment reform must take place immediately for improved outcomes to occur and for a sufficient number of health professional students to join us in this effort. FMAHealth can be more than a strategic plan for family physicians. With collaboration and payment reform, it should become a roadmap for much needed reform of the American health care delivery system.

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References

1. Folsom MB. Health is a community affair: Report of the National Commission on Community Health Service. Cambridge, MA: Harvard University Press, 1966.
2. Millis JR. The graduate education of physicians: Report of the Citizen's Commission on Graduate Medical Education. Chicago: American Medical Association, 1966.
3. Willard WR. Meeting the challenge of family practice: Ad Hoc Committee on Education for Family Practice. Chicago: American Medical Association, 1966.
4. Saultz JW. An overview and history of the specialty of family practice. In: Saultz JW, ed. Textbook of family medicine. New York: McGraw-Hill, 2000.
5. McWhinney IR. Family medicine in perspective. N Engl J Med 1975;293:176-81.
6. Martin JC, Avant RF, Bowman MA, et al. The future of family medicine: a collaborative project of the family medicine community. Ann Fam Med 2004;2(suppl 1):S3-S32.
7. Stephens GG. The role of the medical school in the development of family practice. In: Stephens GG. The intellectual basis of family practice. Tuscon, AZ: Winter Publishing, 1982.
8. Green LA, Graham R, Bagley B, et al. Report of the Task Force on Patient Expectations, Core Values, Reintegration, and the New Model of Family Medicine. Ann Fam Med 2004;2(suppl 1):S33-S50.
9. Phillips RL, Pugno PA, Saultz JW, et al. Health is primary: family medicine for America's health. Ann Fam Med 2014;12(Suppl 1):S1-S12.
10. http://www.aafp.org/dam/AAFP/documents/practice_management/pcmh/initiatives/PCMH-Joint.pdf. Accessed December 31, 2014.
11. Stange KC, Nutting PA, Miller WL, et al. Defining and measuring the patient-centered medical home. J Gen Intern Med 2010;25(6):601-12.
12. Malouin RA, Starfield B, Sepulveda MJ. Evaluating the tools used to assess the medical home. Managed Care 2009;18:44-8.
13. http://www.mgma.com/store/books/electronic/patient-centered-medical-home-guidelines. Accessed February 27, 2015.
14. Carney PA, Eiff MP, Green LA, et al. Preparing the personal physician for practice (P4): site-specific innovations, hypotheses, and measures at baseline. Fam Med 2011;43(7):464-71.
15. Green LA, Jones SM, Fetter G, Pugno PA. Preparing the personal physician for practice: changing family medicine residency training to enable new model practice. Acad Med 2007;82(12):1220-7.
16. http://www.pcpcc.org/. Accessed December 31, 2014.
17. Goroll AH, Bagley B, Harbrecht M, Kirschner N, Kenkeremath N. Payment reform to support high-performing practice: report of the Payment Reform Task Force. Washington, DC: Patient-Centered Primary Care Collaborative, 2010.
18. Projecting the supply and demand for primary care practitioners through 2020. Washington, DC: Health Resources and Services Administration, Bureau of Health Professions, 2013.
19. Woolf SH, Aron L, eds. US health in international perspective: shorter lives, poorer health. Washington, DC: National Academies Press, 2013.
20. Shih A, Davis K, Schoenbaum SC, Gauthier A, Nuzum R, McCarthy D. Organizing the US delivery system for high performance: Report of the Commission on a High Performing Health System. New York: Commonwealth Fund, 2008.
21. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q 2005;83(3):457-502.
22. Bodenheimer T, Pham HH. Primary care: current problems and proposed solutions. Health Aff 2010;29(5):799-805.
23. Baker LC, Bundorf MK, Kessler DP. Vertical integration: hospital ownership of physician practices is associated with higher prices and spending. Health Aff 2014;33(5):756-63.
24. Bodenheimer T, Berry-Millett R. Management of patients with complex health care needs. Princeton, NJ: Robert Wood Johnson Foundation, 2009.
25. Boling PA. Managing post hospital care transitions for older adults. JAMA 2014;312(13):1303-4.
26. Chokshi DA, Chang JE. Preventing early readmissions. JAMA 2014;312(13):1344-5.
27. Kinman CR, Gilchrist EC, Payne-Murphy JC, Miller BF. Provider and practice-level competencies for integrated behavioral health in primary care. Rockville, MD: Agency for Healthcare Research and Quality, March 2015.
28. Primary care and public health: exploring integration to improve population health. Washington, DC: Institute of Medicine, 2012.
29. Phillips RL, Brungardt S, Lesko SE, et al. The future role of the family physician in the United States: a rigorous exercise in definition. Ann Fam Med 2014;12(3):250-5.
30. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness. JAMA 2002;288(15):1909-14.
31. http://thehealthcareblog.com/blog/2014/04/25/the-way-forward-for-integrated-care-what-weve-learned-from-horizontal-and-vertical-integration-of-physicians/. Accessed February 27, 2015.
32. Saultz JW, Lochner J. Interpersonal continuity of care and care outcomes: a critical review. Ann Fam Med 2005;3(2):159-66.

33. McDaniel SH, Grus CL, Cubic BA, et al. Competencies for psychology practice in primary care. American Psychologist 2014;69(4):409-29.
34. Kathol RG, deGruy F, Rollman BL. Value-based financially sustainable behavioral health components in patient-centered medical homes. Ann Fam Med 2014;12(2):172-5.
35. Burwell SM. Setting value-based payment goals—HHS efforts to improve US health care. N Engl J Med 2015;372(10):897-99.
36. Verhaegh KJ, MacNeil-Vroomen JL, Eslami S, Geerlings SE, de Rooij SE, Buurman BM. Transitional care interventions prevent hospital readmissions for adults with chronic illness. Health Aff 2014;33(9):1531-9.
37. Casalino LP, Pesko MF, Ryan AM, et al. Small primary care physician practices have low rates of preventable readmissions. Health Aff 2014;33(9):1680-8.
38. Robinson JC, Miller K. Total expenditures per patient in hospital-owned and physician-owned physician organizations in California. JAMA 2014;312(16):1663-9.