

COMMENTARY

Are We Learning More about Patient-centered Medical Homes (PCMHs), or Learning More about Primary Care?

Thomas C. Rosenthal, MD

The 1971 report by Millis¹ promoted family medicine as the remedy for an American health care system “designed to cure the acutely ill and available to those who could afford to pay.” More than 40 years later, the annual premium for family health coverage has risen to 34% of the average wage. This issue of the *Journal of the American Board of Family Medicine (JABFM)* includes 9 articles evaluating components of the patient-centered medical home (PCMH) concept and its ability to improve access, quality, and value in American health care.

Though previously a poorly defined package of services, the essential role primary care plays in delivering value in health care has been well established.² In the world of business, employers and insurers are accustomed to purchasing services according to a defined package or contract. The National Committee for Quality Assurance (NCQA) picked up on this need to define the primary care package and adapted the 2006 joint principles of the PCMH issued by the American Academy of Family Physicians, the American College of Physicians, the American Academy of Pediatrics, and the American Osteopathic Association into a recognition process.^{3,4} The 6 elements identified by the NCQA include patient-centered access, team-based care, population health management, care management and support, care coordination and care transitions, and performance measurement and quality improvement. As of 2015, >7000 prac-

tices have become recognized by the NCQA as a PCMH.⁵

The conclusions of the 1971 report by Millis¹ remind us that good primary care has never required an NCQA plaque on the wall. However, in addition to creating a marketable package, the process of recognition provides structure for practice leadership to reorient staff from the tyranny of urgent patient demands to the work of restructuring office services and employee roles.⁶ Significantly, recognition has also been associated with improved reimbursement.

Businesses and payers want to see profit in each quarterly report. The study by Khanna et al⁷ confirms my own experience as a PCMH physician, and as a chief medical executive for a 600-physician network, that quality improvements and cost reductions often are not evident until the third year of PCMH recognition. Cost of care may increase in the first year as reorganized practices improve access, update preventive services, and stabilize chronic disease. This is not unlike studies showing that previously uninsured Medicare enrollees cost more in their first year of enrollment.⁸ In the long run, however, quality costs less.⁹

Two articles recently published in American Medical Association journals unintentionally revealed the delayed payoff from improved primary care. In October 2015, results from one office participating in the Pennsylvania Chronic Care Initiative found that PCMH transition was associated with an increase in primary care visits and fewer specialty visits.¹⁰ Diabetes care and breast cancer screening were improved. Savings were realized from lower rates of all-cause hospitalizations and emergency department visits. This followed a 2014 study that described how the same Pennsylvania Chronic Care Initiative activity in a different Pennsylvania office failed to achieve target outcomes.¹¹ The 2015 article evaluated the program after finan-

From the Department of Family Medicine, University at Buffalo, Buffalo, New York.

Funding: none.

Conflict of interest: none declared.

Corresponding author: Thomas C. Rosenthal, MD, Professor Emeritus, Department of Family Medicine, University at Buffalo, 77 Goodell Street, Buffalo, NY 14203 (E-mail: trosenth@acsu.buffalo.edu).

cial incentives were in place and after nearly 2 years of PCMH activity, whereas the 2014 evaluation analyzed the first year of PCMH experience with fewer supports.

This issue's article by Harder et al¹² validates the methods NCQA uses to award recognition points. The higher a practice's NCQA recognition score, the higher practice services are scored by parents of children who use the practice. Greater external support during transition also was associated with higher NCQA scores and patient ratings.

NCQA has refined and advanced criteria in their 2008, 2011, and 2014 directives. Level 3 NCQA recognition is a heavy lift; it now requires passing scores in all 6 elements. The study by Halladay et al¹³ calculates a cost of \$13,700 per physician just to prepare the practice for application. The cost of maintaining PCMH services averages \$34 per patient visit, or \$4.35 per patient per month.¹⁴ Carrying the math one step further, the added services demanded of a PCMH could increase primary care costs by about 30%. Primary care consumes 6% of the total health care budget. The 30% investment demanded to support PCMH increases primary care costs to 7.8% of the health care budget. Savings are realized in the 30% reduction in nonprimary care expenditures, the other 94% of the total budget. That is 30% of a much higher number and a good investment.¹⁵ It also becomes obvious that financial support for a PCMH must exceed 30% to create the margin needed for a PCMH to flourish.

In addition, in this issue Kano et al¹⁶ single out the lesbian/gay/bisexual/trans/queer population and demonstrates the impact of moving from a one-size-fits-all model of primary care to a population-driven design meant to be accessed by specific segments of the community. Thinking through the needs of specific populations not only achieves better quality care but engenders a patient's perception of better service. Having now visited >100 primary care practices, I recognize that some population design is inherent in that each practice has its character and attracts its own unique patients. The PCMH concept moves this to population by design.

Bodenheimer and Willard-Grace¹⁷ show us the alternative to simply working harder and longer. They review the commitment needed for team care to work. Team management is a skill in itself. The first step is to schedule time to coordinate care with all team members present. When properly led,

teams expand service availability and the practice's range of skills, and patients report a greater sense of continuity.

Three studies lend insight to specific team functions. Though it lacks a control group, the study by Loskutova et al¹⁸ shows how nonprofessional patient navigators, using only telephone contact, promoted linkages between the primary care physician's office, community programs, and patients with type 2 diabetes. Ninety-two percent of patients embraced the program and A1C levels improved by 0.6 in 9 months, an improvement equivalent to putting each patient on another oral agent. Freidman et al¹⁹ find that care coordinators are most effective when they are fully integrated in the practice, particularly if the model includes integrated mental health services. The main challenge is identifying specific patients who might benefit from services. Our network experience has shown that physicians are not good at recognizing and referring patients who would benefit from a care manager. When we embedded managers within a practice, they effectively used targeted criteria and chart reviews to "discover" those patients. The study by Garrison et al²⁰ finds more rapid recoveries for depressed patients when nurse care managers are part of the team. Care managers facilitated faster evaluation for patients not responding to therapy and likely overcame the impact of depression's anhedonia.

Ten percent of patients consume 50% of health care. Care managers cut across clinical services, engage these patients in the patient's setting, and track responses. Because care management is an NCQA criteria by which insurers are judged, many insurers now use care managers and get mixed reviews.²¹ A Medicare demonstration project further demonstrates that, when embedded within primary care practices, certified care managers trimmed costs by 7%. Future redesigned reimbursement programs, including capitation, will encourage practices themselves to use care managers.²²

Finally, Kwan et al²³ offer critical methodological insights for the study of patient-reported outcomes. PCMH practices are complex but, being patient-centered, their effectiveness should be measured according to patient health status, functional ability, symptoms, quality of life, and their care experience. Kwan et al remind us that data collec-

tion must be minimally disruptive and focus on care that matters to patients.

Primary care has been associated with lower levels of evidence-based care when analyzing specific disease protocols. The paradox is that health systems based on primary care have healthier populations, have less inequality, use fewer resources, and experience lower death rates.²⁴ This issue of the *JABFM* moves our understanding toward creating a proactive primary care/PCMH model. Stripping the findings to the basics, good primary care results in increased patient contact, but that contact is shifted from emergency departments and specialists to the primary care office. The required new skill is managing teams to help care for disadvantaged patients or those with multiple chronic conditions.²⁵ In its most mature form, a medical home integrates medical and psychosocial services such that they more closely align with an individual's health beliefs.⁴

To date, NCQA has had a near monopoly on PCMH recognition. Their standards have evolved in an effort to consistently define effective primary care and presently exceed the willingness of some practices to comply. Most large primary care groups in our community have achieved level 3 recognition. We continue to support many 1- to 2-physician practices that to date have failed to complete the NCQA process. Unfortunately, meeting physician quality reporting system, meaningful use, and PCMH standards tax the limited resources of a small practice.

The *JABFM* has provided a service by offering an outlet for continued evaluations of PCMHs. The results are consistent with the emerging evidence that PCMH transformation can improve quality and reduce emergency department visits and hospitalizations. The financial benefit of PCMH recognition has largely supported the cost of extended services. Attracting enough physicians to primary care practice means boosting the average incomes of these physicians to at least 70% of the median incomes of all other physicians.²⁶

“Silver-bullet” interventions will not fix American health care. PCMHs standardize wholistic services within a primary care base and reduce triage to specialty services. Ultimately, it is possible that the achievement of a PCMH has less to do with NCQA recognition than creating teams of responsible providers. Restructuring reimbursement may

do as much to spur collaboration, coordination, and the vision to serve.

References

1. Millis JS. A rational public policy for medical education and its financing. Cleveland, OH: National Fund for Medical Education; 1971.
2. Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005;83:457–502.
3. Barr M. The advanced medical home: a patient-centered, physician-guided model of health care. Philadelphia: American College of Physicians; 2006.
4. Rosenthal TC. The medical home: growing evidence to support a new approach to primary care. *J Am Board Fam Med* 2008;21:427–40.
5. National Committee for Quality Assurance web site. Available from: www.ncqa.org. Accessed October 26, 2015.
6. Jaén CR, Ferrer RL, Miller WL, et al. Patient outcomes at 26 months in the patient-centered medical home National Demonstration Project. *Ann Fam Med* 2010;8(Suppl 1):S57–67; S92.
7. Khanna N, Shaya FT, Chirikov VV, Sharp D, Steffen B. Impact of case mix severity on quality improvement in a patient-centered medical home (PCMH) in the Maryland multi-payor program. *J Am Board Fam Med* 2016;29:116–125.
8. McWilliams JM, Meara E, Zaslavsky AM, Ayanian JZ. Medicare spending for previously uninsured adults. *Ann Intern Med* 2009;151:757–66.
9. Mayes R. Moving from volume-based to value based health care payment in the USA: starting with Medicare payment policy. *J Health Serv Res Policy* 2011; 16:249–51.
10. Friedberg MW, Rosenthal MB, Werner RM, Volpp KG, Schneider EC. Effects of a medical home and shared savings intervention on quality and utilization of care. *JAMA Intern Med* 2015;175:1362–8.
11. Friedberg MW, Schneider EC, Rosenthal MB, Volpp KG, Werner RM. Association between participation in a multipayer medical home intervention and changes in quality, utilization, and costs of care. *JAMA* 2014;311:815–25.
12. Harder VS, Krulewitz J, Jones C, Wasserman RC, Shaw JS. Effects of patient-centered medical home transformation on child patient experience. *J Am Board Fam Med* 2016;29:60–8.
13. Halladay JR, Mottus K, Reiter K, et al. The cost to successfully apply for level 3 medical home recognition. *J Am Board Fam Med* 2016;29:69–77.
14. Magill MK, Ehrenberger D, Scammon DL, et al. The cost of sustaining a patient-centered medical home: experience from 2 states. *Ann Fam Med* 2015; 13:429–35.

15. Phillips RL Jr, Bazemore AW. Primary care and why it matters for US health system reform. *Health Aff (Millwood)* 2010;29:806–10.
16. Kano M, Silva-Bañuelos AR, Sturm R, Willging CE. Stakeholders' recommendations to improve patient-centered "LGBTQ" primary care in rural and multicultural practices. *J Am Board Fam Med* 2016;29:156–60.
17. Bodenheimer T, Willard-Grace R. Teamlets in primary care: enhancing the patient and clinician experience. *J Am Board Fam Med* 2016;29:135–8.
18. Loskutova NY, Tsai AG, Fisher EB. Patient navigators connecting patients to community resources to improve diabetes outcomes. *J Am Board Fam Med* 2016;29:78–89.
19. Friedman A, Howard J, Shaw EK, Cohen DJ, Shahidi L, Ferrante JM. Facilitators and barriers to care coordination in patient-centered medical homes (PCMHs) from coordinators' perspectives. *J Am Board Fam Med* 2016;29:90–101.
20. Garrison GM, Angstman KB, O'Connor S, Williams MD, Lineberry TW. Time to remission for depression with collaborative care management (CCM) in primary care. *J Am Board Fam Med* 2016;29:10–17.
21. Powers BW, Chaguturu SK, Ferris TG. Optimizing high-risk care management. *JAMA* 2015;313:795–6.
22. Nelson L. Lessons from Medicare's demonstration projects on disease management and care coordination. Working paper 2012-01. Washington, DC: Congressional Budget Office; 2012.
23. Kwan BM, Sills MR, Graham D, et al. Stakeholder engagement in a patient-reported outcomes (PRO) measure implementation: a report from the SAFTI-Net practice-based research network (PBRN). *J Am Board Fam Med* 2016;29:102–15.
24. Jerant A, Fenton JJ, Franks P. Primary care attributes and mortality: a national person-level study. *Ann Fam Med* 2012;10:34–41.
25. Homa L, Rose J, Hovmand PS, et al. A participatory model of the paradox of primary care. *Ann Fam Med* 2015;13:456–65.
26. Council on Graduate Medical Education twentieth report. Advancing primary care. December 2010. Available from: <http://www.hrsa.gov/advisorycommittees/bhpradvisory/cogme/reports/twentiethreport.pdf>. Accessed November 20, 2015.