

The Patient-Centered Medical Home

One Size Does Not Fit All

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The patient-centered medical home (PCMH) is widely and vigorously promoted as the basis for primary care reform that will support a high-performing, cost-effective health care system.¹



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The PCMH involves a deceptively simple set of key structural practice features that have been proposed to result in enhanced access for routine primary care, improved delivery of preventive services, high-quality chronic disease management, and reduced emergency department and hospital utilization.^{1,2} The most definitive assessments of its success in improving quality and reducing utilization have been based in highly integrated health care systems and single-payer community-based practices,³ but this model of care is often promoted as the foundation for all primary care delivery, including the solo and small group practices that dominate the primary care delivery system.⁴ Advocates for the PCMH may be disappointed by the results of the study by Friedberg et al⁵ reported in this issue of *JAMA*. They need not be disappointed, but they should pay close attention to the study's lessons.

The study by Friedberg et al⁵ is an ambitious and reasonably well-conducted evaluation of the PCMH in 32 small and medium-sized community-based primary care practices that participated in a large medical home pilot project and provided care for approximately 64 000 patients from 6 major payers, compared with 29 control practices that provided care for approximately 56 000 patients. "Medical home-ness" was assessed with validated National Committee for Quality Assurance (NCQA) criteria, and all intervention practices achieved NCQA recognition by the third year. The assessment period of 3 years was longer than that in most other reports examining the PCMH. The cumulative financial benefit for meeting various performance criteria averaged \$92 000 per physician over the 3 years. Despite these and other laudable features, the evaluation revealed that among practices participating in the medical home pilot, there were no reductions in health care utilization of hospital, emergency department, or ambulatory care services or total costs, and there was improvement in only 1 of 11 quality measures of chronic disease management, nephropathy monitoring in diabetes.

Like all real-life studies of complex phenomena, this one has several important limitations. A 3-year assessment should be adequate to demonstrate at least some cost reductions, but this time frame still may be too short to assess the outcomes of chronic disease management that evolve over decades. Despite this caveat, the lack of improvement on 10 of 11 quality

measures is still disappointing. Using volunteerism to identify intervention practices introduces many potential confounders. Practices that volunteer for the study may be more receptive to adopting PCMH features but may also already be performing well and have little opportunity for improvement. An alternative approach would have been to solicit a larger group of volunteer practices and then randomize that group to intervention or control. This approach also would have likely improved the response rate of the control practices to a survey assessing NCQA features. The poor response rate by the comparison practices to the PCMH-criteria survey (24%) makes it difficult to correlate any changes in performance with changes in PCMH features. The lack of benefit in reducing utilization could be because utilization and cost data were provided to only about half of the clinicians; regular meetings about utilization occurred in barely a third of practices. Hospital discharge summaries were not available to a quarter of practices, a particularly unfortunate limitation given the focus on reducing hospitalizations.

However, it is unlikely that correcting these limitations would lead to a more positive assessment of the value of the PCMH in a diverse set of small and medium-sized community practices such as these. The problem is not in the rigor of the methods; the problem may be the patients to which PCMH features were applied.

This problem may be similar to that of expensive biomedical technologies that often are proven to have benefit in high-risk patient populations but then are inappropriately exported to broad, community-based, low-risk populations for which they fail. The same error may be occurring with the PCMH, a different type of expensive technology. The PCMH has been promoted for widespread adoption, using a fairly generic and fixed set of structural practice features, even before being fully developed in targeted high-risk populations or before clearly understanding which features or combination of features are most effective with which patients. It is time to replace enthusiasm and promotion with scientific rigor and prudence and to better understand what the PCMH is and is not. Widespread implementation of the PCMH with limited data may lead to failure.

The critical characteristic of the US health care system that defines how the PCMH will best be deployed is the skewed distribution of health care utilization across the population. Nearly a quarter of all medical care is consumed by 1% of the patient population, nearly half by just 5%.⁶ The healthy half of the population uses nearly no medical care⁶ and therefore has essentially no opportunity to benefit from any restructuring of

health care delivery, however robust. The methods by which health care is delivered need to be adjusted similarly to how health care is utilized. Insurers, both private and government, and employers should be providing substantial support to health service investigators and primary care physicians to assess and then implement features of the PCMH that work best for different strata of patient risk and health care utilization, but with a particular focus on the most expensive and complex patients.⁷ The identification of target populations should not be defined by disease, as was the case with failed disease management programs of the past that focused on a single disease, but by the simple measures of utilization and cost. This approach can be linked with other aspects of health care reform, such as accountable care organizations, in which both primary care and specialty physicians are held jointly accountable for cost and outcomes.

All patients in a primary care population can benefit from various PCMH features but only with a strategic stratification to match risk. The majority of patients need only a basic disease registry to support usual preventive service delivery, general lifestyle counseling, and educational resources. The cost as well as the expectations for improvement would be relatively modest. High-risk and high-utilization patients would likely benefit from detailed health risk assessments; integrated and intense comorbid disease management programs; assigned health care teams with multiple approaches to outreach and monitoring, including new smartphone technologies, home visits, and family and caregiver support and edu-

cation; special post-hospital care protocols; and enhanced access and tracking of emergency department care. The financial incentives and premiums would be commensurately and substantially higher than that for low-intensity patients.^{8,9}

Before confidently promoting the PCMH as a core component of health care reform, it is necessary to better understand which features and combination of features of the PCMH are most effective for which populations and in what settings. The identification of specific PCMH features for various risk strata will likely have significant influence on the work patterns of physicians, who may be responsible for a larger panel of patients than currently but for whom only routine care is needed, often by other members of the health care team. The physician's time and expertise will be best focused on a relatively small number of the most complex and expensive patients.

The study by Friedberg et al⁵ has done a great service for advocates of the PCMH by effectively ending promotion of this care model as a generic, low-level, unselective approach to health care delivery for all. The next critical phase of PCMH development should focus on its strategic deployment for the care of high-utilization patients with multiple chronic comorbidities, frequently with concomitant mental illness, and often with poor social support. A biomedical technology of this potential power and cost should be targeted in its most intense form to the care of a small and expensive subset of the broad population of primary care patients, with the benefits of lower-intensive application flowing to all patients.

ARTICLE INFORMATION

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