

Role of pharmacists in the medical home

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The concept of the “medical home” was developed over 40 years ago and came from the field of pediatrics as a way to address the needs of children with special health care needs.¹ More broadly, the reasoning was that all patients should have a home where they can receive much of their care and through which their care can be coordinated; this includes but goes beyond having a primary care provider. The medical home is not a physical structure but a fundamental rethinking of the way care should be delivered. The medical home concept has been embraced by a variety of fields, including family medicine and general internal medicine.^{2,3} The features of a medical home include (1) integrated and comprehensive physician-led team care, (2) clinical information systems to support this care, including decision support and registry functions, (3) ready access to care when the patient needs it, (4) routine patient feedback to physicians, (5) patient engagement in care and decision-making, (6) patient-centered care with an emphasis on

dignity and respect, and (7) publicly available information on quality and efficiency.⁴

The impetus for changing the structure of medical care was in large part due to the rising costs of care in the United States. Health care in the United States is the world’s most expensive, yet the outcomes we achieve are some of the worst among developed countries.⁵ Although there are many reasons for these results, the lack of emphasis on primary care in the United States relative to other nations is likely a major contributor to poor health outcomes.⁶ This lack of emphasis on primary care has been fostered by a fee-for-service reimbursement system, another major contributor to high health care costs and poor health outcomes.

The United States currently faces a crisis in primary care.⁷ There is a greater need for providers than in the past, yet few medical students are pursuing a career in primary care. One likely reason for this is that primary care providers need to work unusually hard and are poorly reimbursed.

All of these factors have led to the renaissance of the medical home. The medical home has the potential to improve the quality and safety of the health care system while reducing health care costs, a combination that has been difficult to achieve. Multiple pilot studies of the effect of the medical home on health care are being conducted in the United States. The medical home represents one of the most exciting changes in health care today.

Pharmacists and clinical care. Numerous studies have demonstrated that pharmacists can improve clinical care, both inside and outside the hospital, although evidence showing the extent to which outcomes are improved or that these interventions are cost-effective is not as strong. For example, in the hospital, having pharmacists attend rounds in the intensive care unit has been shown to reduce the rate of adverse drug events (ADEs), both in adults⁸ and children,⁹ and a 2006 review found improvement in a variety of areas.¹⁰ In the outpatient setting, a review found considerable evidence that clinical pharmacy interventions reduced the frequency of drug-related problems in the elderly but much less evidence that such interventions reduced morbidity or mortality rates or health care costs.¹¹ The transition from acute care to the ambulatory care setting is especially risky, with ADEs occurring frequently.¹² Having pharmacists telephone patients after hospital discharge significantly reduced the ADE rate in one study.¹³

The issue for increasing the clinical role of pharmacists has been how to pay for it. Hospitals are largely prospectively reimbursed, so it is in

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their financial interest to reduce ADE rates. However, care in the outpatient setting and after hospital discharge is paid on a fee-for-service basis, and visits to pharmacists are not reimbursed in most states.

The medical home. Primary care has been defined as first contact, comprehensive, continuous, and personalized.¹⁴ Medical homes typically focus on patients with specific chronic diseases with high resource utilization and manage care in these patients more aggressively. Team care involves managing care with a variety of health professionals.

Early data suggest that implementation of medical homes can reduce resource utilization. At Geisinger Health System, preliminary data showed a 20% reduction in hospital admissions and a 7% savings in total medical costs.¹⁵ Because of this success, Geisinger Health System has expanded its medical home initiative to include additional practice sites. Work on the implementation of medical homes is also occurring at other integrated delivery systems, including Group Health.

Outside of such integrated delivery systems, financing implementation of medical homes has been more difficult, and the best scheme for reimbursement for the medical home is uncertain. Many of the current projects are using fee-for-service models, with an additional payment, sometimes with pay for performance, on top of this payment. The fee-for-service approach emphasizes visit-based care, which may be counterproductive. In one attractive alternative proposal, practices would receive a yearly, risk-adjusted comprehensive payment for the comprehensive care of each patient in the practice to cover all practice expenses, infrastructure expenses, and salaries for the primary care team.⁴

Role for pharmacists. Pharmacists could play a number of important roles in the medical home.

Evidence already suggests that having pharmacists contact patients soon after hospital discharge can reduce ADE rates. Similarly, pharmacists should play a key role in the care of patients who have specific chronic diseases (e.g., diabetes, acquired immune deficiency syndrome) and those who take multiple medications. Pharmacists should be involved in some way in the care of all patients for whom medication adherence is a suspected issue.

To justify these pharmacist interventions, it is essential to demonstrate that they are not only effective but cost-effective. Pharmacist time is expensive and should be used judiciously. The evidence supporting pharmacist interventions is more robust in some areas than others.

Pharmacy and the medical home. Many medical homes do not currently use pharmacists to a substantial degree or at all. A number of professionals justifiably feel that they will be playing important roles in the medical home, such as nurses, social workers, care coordinators, mental health workers, dietitians, and rehabilitation professionals. These groups will be competing for scarce resources in medical homes. Pharmacy must get involved now to justify its role and should aggressively promote research in this area. As is clear from the clinical pharmacy literature, pharmacists can play many important roles in the outpatient setting, especially in the care of patients with chronic conditions. Some of this responsibility should be leveraged through health information technology. For example, it should become possible to use data from pharmacy benefit management companies to identify patients who may be having problems with adherence, but few data are available regarding how best to work with such patients. This represents just one of the numerous opportunities for pharmacy.

The financial models for payment reform should also receive attention

from the profession. Moving away from a fee-for-service reimbursement system would likely make it easier for providers to justify including professions like pharmacy under the medical home umbrella. Pharmacy should begin to work with primary care societies and individuals conducting studies to evaluate the effect of the medical home to assess how pharmacists can best contribute. Pharmacy should also work with policymakers on payment reform.

Conclusion. The medical home concept is one of the most exciting ideas about how to improve care and reduce health care costs. What to actually put in the medical home with respect to staff and other resources so that it will make a difference is still relatively fluid, but this train is beginning to leave the station. Pharmacy needs to be sure it gets a seat.

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Editor's note: Readers may be interested in a recent and extensive ASHP Policy Analysis on the concept of the health home (or medical home), including considerations related to pharmacy involvement. See www.ashp.org/HealthCareHome.pdf.