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How Physician Practices Could Share Personnel And Resources To Support Medical Homes

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ABSTRACT To become a medical home, providing patients with comprehensive, coordinated primary care, practices need to meet multiple requirements. These include some form of round-the-clock access for patients; managing chronic or complex conditions; carrying out timely, clear communication between providers and patients; and engaging in continuous quality improvement. The recently enacted health reform law reinforces these requirements. Although most primary care practices are small, we show how they, too, can meet the requirements by sharing services—for example, by using a shared nurse-staffed service to provide medical advice evenings and weekends—and by receiving help through various “extension” centers.

In a patient-centered medical home, patients receive enhanced access to primary care that is efficiently coordinated by a clinical team using decision-support tools, measuring its performance, and engaging in quality improvement activities to meet patients’ needs.¹ Patients with a medical home are more likely to receive higher-quality preventive and chronic care, with fewer medical errors and at greater efficiency and lower cost. The patients are more likely to have positive experiences with their providers, and the clinicians and staff report higher job satisfaction.^{2–6}

However, ensuring that patients have a medical home requires generalist practices to meet several functional requirements. These include excellent communication with patients and with other providers; providing round-the-clock access to care without patients’ having to go to the emergency department; providers’ working collaboratively with patients and each other to manage complex conditions; and continuous quality improvement.

The Patient Protection and Affordable Care Act of 2010 includes several provisions to promote the medical home concept. The statutory language defining medical home, or “health

home”—to emphasize the integration with public health and the lead role of advanced-practice nurses—will require an infrastructure that most primary care practices do not have now.^{7,8} Surveys show that small, nonaffiliated practices are less likely than practices in larger, integrated systems to meet the criteria for becoming a medical home. Yet most primary care in the United States is provided by small private practices or underresourced safety-net providers operating in relative isolation from one another.⁹

Most small and medium-size practices have difficulty offering the broad range of services that a medical home must provide, as a result of limited staff, unpredictable demand for services, and prohibitive cost. Small practices rarely have the money or volume of patients to employ a care coordinator, a data analyst to run quality reports, or a nutritionist to work with diabetic patients. However, if groups of small practices band together and contract with or hire such support or personnel for all to share, the cost becomes manageable, their practice capacity greater, and their performance better.

This paper explores how independent primary care practices can meet the functional requirements of the medical home by sharing resources

to augment their capacity and improve their performance. We present examples of shared resources, describe opportunities to test their development based on the new health care reform law, and make suggestions to ensure the successful implementation of various reform provisions. Finally, we outline organizational or structural features to consider in the sharing of health care resources in the community.

Shared Resources

Several medical home certification programs exist. The most widely used standards are those of the National Committee for Quality Assurance (NCQA).¹⁰ One-fifth of practices recognized by the NCQA as medical homes are solo practices. A large practice or one that shares services with other physicians or practices can much more easily meet the criteria for a medical home. These include, in the NCQA's scheme, providing urgent phone response within a specified time, making clinician support available around the clock, providing an interactive practice Web site, making language services available for patients with limited English proficiency, having nonphysician staff educate patients about managing their conditions, and having such staff coordinate care with external disease management or case management organizations, as appropriate.

The health reform law underscores that medical homes are expected to provide a wide range of services. Although the specifications need to be clarified during the regulatory process, at least two different provisions of the law indicate that

patient-centered medical homes must provide expanded access to care, comprehensive care management, coordinated and integrated care, appropriate use of information technology (IT), referral to community and social support services, and continuous quality improvement. Small and medium-size primary care sites will benefit by coming together to share services or resources.

There are two categories of shared resources (Exhibit 1): shared clinical services that augment the care otherwise provided to patients, such as shared care coordinators, nutritional counselors, and urgent care providers; and shared technical assistance that helps practices improve systems or infrastructure, such as coaching the staff in implementing an electronic health record or ways to improve practice operations.

SHARED CLINICAL SERVICES One example of shared clinical services is after-hours care. Coventry Health Care of Kansas City, a network-model health maintenance organization (HMO), has organized an after-hours telephone triage service staffed by registered nurses with physician backup to provide prompt medical advice evenings and weekends and to promote more appropriate use of the hospital emergency department. A pre-post evaluation showed increased patient satisfaction, reduced inappropriate emergency department use, and a financial return of \$1.70 for every \$1.00 invested.¹¹

In Denver, the Children's Hospital coordinates urgent care by telephone for 91 percent of Denver pediatricians.¹² When parents call their pediatricians between 5 p.m. and 8 a.m., the after-hours service is automatically notified, and a registered

EXHIBIT 1

Matrix Of Shared Resources For Practice Support In Primary Care

	Clinical management	Business management	Clinical care
Shared technical assistance	Electronic health records/ health information technology	Coding/billing contract negotiations certification	Quality improvement
Shared clinical services	Care coordination Resource database Health information exchange Microsystem design Advanced-access system Registry reports and panel management E-prescribing Quality measurement Appointment reminders Patient surveys Decision support	Equipment/supply purchasing	After-hours coverage Patient education (genetic counseling, nutrition education, chronic disease Web-based information) Translation services Mental health services Poison control Public education Public health services Social services Immunizations Home visiting Medication reconciliation Telephone and e-mail advice Self-care support Care planning

SOURCE Authors' analysis.

nurse calls the family to triage symptoms with the assistance of decision-support algorithms. Although no quality or cost data are yet available, more than 90 percent of the participating pediatricians reported satisfaction with the program.

An international review has identified nine organizational models for structuring after-hours services, many involving primary care sites sharing coverage through a centralized resource.¹³ Denmark and the Netherlands have nationwide but locally based after-hours services organized by physicians, with information promptly relayed to the patient's primary care physician's office. An evaluation of the Dutch after-hours service found a 53 percent reduction in the use of emergency departments and a 25 percent increase in the use of primary care urgent care centers for after-hours care.¹⁴

Care coordinators can support multiple primary care practices. Community Care of North Carolina is a public-private partnership between the state and fourteen local, nonprofit networks encompassing 3,500 physicians and 750,000 Medicaid and Children's Health Insurance Program (CHIP) recipients. The networks provide case management, disease management, and care coordination services, augmenting the primary care sites' capabilities.⁶ Each network receives \$3.00 per member per month for their shared services, and each physician receives \$2.50 per member per month.

Since 2006, based on changes in utilization patterns—including a 23 percent reduction in emergency department use—Community Care of North Carolina has saved the State of North Carolina \$161 million annually.⁶ The program has also improved quality of care, especially for patients with asthma. In 2009 the Centers for Medicare and Medicaid Services (CMS) approved North Carolina's request to expand the program to include Medicare beneficiaries.¹⁵

Geisinger Health Plan has "embedded" nurse care coordinators within practices, including some not owned by Geisinger. Preliminary results include favorable reports from practices and patients, 20 percent reduction in hospital admissions, and 7 percent net cost savings.³

The Massachusetts Child Psychiatry Access Project provides highly specialized, scarce clinical services in a generalizable model. Six regional teams—each consisting of a child psychiatrist, licensed social worker, care coordinator, and administrative staff member—serve pediatric and family practices in their areas. Physicians calling the project receive prompt responses to their diagnostic or therapeutic questions, assistance with arranging appropriate consultations or referrals, and coordination of care with other providers. The program is funded by the state;

managed by a private organization, the Massachusetts Behavioral Health Partnership; and available to all children regardless of insurance status. Clinicians value the assistance of a care coordinator because it ensures that patients receive timely access to child psychiatry services and makes efficient use of the practices' limited resources.¹⁶

SHARED TECHNICAL ASSISTANCE The second category of shared resources, shared technical assistance, is increasingly referred to as "extension centers." This concept has now achieved national attention with the federal funding of Health Information Technology Extension Centers as part of the American Recovery and Reinvestment Act of 2009.

One example is the New York City Primary Care Information Project. This project, led by the New York City Department of Health and Mental Hygiene, represents the largest community electronic health record project in the country, with 1,557 providers using electronic records to serve disadvantaged communities as of May 2009. Among the providers are 605 clinicians, who work in 254 small private practices.

Participating providers receive electronic health record applications and licenses, extensive training for all levels of staff, interfaces with common lab and billing systems, and customization of their record systems to support public health functions. The project helps physicians adopt an electronic health record and provides technical assistance on using it to improve patient outcomes.¹⁷ Practices have improved the management of patients' medications and are more likely than nonparticipating practices to send preventive care reminders to patients.¹⁸

The structuring of shared resources, both clinical services and technical assistance, depends on the size of a practice and its local environment. Smaller primary care sites may collaborate locally to create the shared resource or buy it from a vendor that may serve multiple localities. In addition, depending on local circumstances, some resources may be provided within the practice or in a central, although external, location or facility. There is no evidence that one type of structure or one way to organize shared resources always produces better results or costs less.

Impact Of Health Reform

The recent health reform law includes several provisions that promote and test shared resources to help primary care sites meet the functional requirements of the medical home (Appendix Exhibit 1).¹⁹ Various grant or contract programs will go into effect in January 2011 that will enhance clinical services or provide technical

assistance to primary care providers to help them improve their performance.

The broad strategy of these programs is to provide seed money to promote the development of shared resources. For example, the secretary of the Department of Health and Human Services (HHS) can award grants to support the development of a community-based collaborative care network—defined as a consortium of health care providers with a joint governance structure—to provide comprehensive, coordinated, and integrated care to low-income populations.

Similarly, the Agency for Healthcare Research and Quality (AHRQ) is charged with establishing the Primary Care Extension Program, which will offer grant support to state “hubs” to provide technical assistance and share best practices among primary care sites. These programs will all end in 2014 or 2015. Other programs, such as Community Health Teams to support patient-centered medical homes, do not yet have specified start and end dates, although the rule-making process may impose them.

Several provisions of the new law also are likely to increase the demand among primary care providers for shared clinical services or technical assistance. The legislation accelerates pilot-testing and implementation of the medical home, which includes reimbursing primary care clinicians in qualified practices for instituting best practices to improve outcomes for patients, especially those with chronic illnesses. It creates a new Center for Medicare and Medicaid Innovation, within the CMS, which will fund pilots of new payment and delivery models, including the medical home.

Many small and medium-size practices will seek ways to expand their existing capacity to take advantage of payment innovations. Sharing resources is one promising strategy.

Future Policy Considerations

We have identified a set of policy issues and recommendations to ensure the effective development, testing, and spread of shared resources.

COORDINATION OF FEDERAL PROGRAMS The CMS, Health Resources and Services Administration, and AHRQ all have or will develop programs to promote shared resources or medical homes. In addition to the pilots authorized in the new legislation, three federal medical home demonstrations are being planned by the CMS.

To ensure the efficient use of resources and a streamlined interface with primary care practices, these various programs need to be coordinated. For example, the activities of the primary care extension center “hubs,” intended for the use of all patients, and those of the collaborative community health networks, focused on low-

income patients, should be coordinated at the federal level to achieve consistent selection criteria and measures of performance.

COORDINATION AMONG FEDERAL AND STATE ACTIVITIES Thirty-one states are planning or implementing medical home pilots in their Medicaid or CHIP programs, or both.²⁰ There are also at least twenty-six commercial-plan demonstrations testing the medical home model.²¹ Many existing pilots are in the process of developing shared resources to support the participants.

Because delivery of shared resources is a local activity, federal investments need to build on the existing infrastructure. Some states have multiple pockets of activity. For instance, Colorado has three medical home demonstrations—a multipayer pilot, a Medicaid-only program, and one involving community health centers. Federal resources could help promote synergy and coordination among such projects through standardization of data collection tools and measures to assess project performance.

RAPID DIFFUSION OR SPREAD The health reform law’s provisions for creating shared resources are important, but the grant programs are limited to four to five years. Early testing is critical. Should the programs prove successful, the HHS secretary should be granted the authority to modify, sustain, or expand them, similar to the authority awarded the secretary under the new Center for Medicare and Medicaid Innovation. This would require new legislation and ideally extend beyond the Medicare program.

The standards for sustainability and expansion could include rates of participation by primary care practices, improvements in quality, and increased efficiency. For example, if after-hours coverage arrangements for primary care sites are developed, the standards for sustainability and expansion could be reduced use of emergency departments, increased appropriate use of primary care, and positive patient experiences with care.

Organizing Shared Resources

The examples presented above suggest principles to consider when designing and implementing shared resources.

CONNECTION WITH PRIMARY CARE SITES Shared resources should be established locally and connected to primary care sites. From the Netherlands to North Carolina, successful models of shared resources are locally established entities, businesses, or organizations. A decade of research on disease management programs indicates that outsourcing services, such as care coordination for patients with chronic conditions, yields the best results under specific cir-

cumstances. These include, first, a connection between the nurse care manager (the shared resource) and the lead clinician; and, second, an opportunity for the outsourced provider to have a face-to-face encounter with the patient.²²

If shared resources are locally organized and controlled, there is a better chance for primary care providers to meet and work directly with support service providers, which will engender familiarity and trust. All of the relevant provisions in the reform law incorporate this principle.

CLINICIAN AUTONOMY Physicians value autonomy, and medical practice is still characterized by a predominance of small practices and even independent individual behavior within larger groups. The key to successful, well-organized shared resources is providing much-needed services that augment the capacity and improve the efficiency of the primary care practice, while allowing participating clinicians to maintain some independence.

If clinicians believe that accepting assistance from an external entity will jeopardize their revenues or autonomy of clinical decision making, they are likely to forgo the assistance. The Dutch, New York City, and North Carolina examples illustrate that it is possible to assist practices while preserving their sense of clinical autonomy.

All of the models have in common both active participation and leadership by clinicians from the outset. Most of the high-performing, organized care systems in the United States are the products of physician leadership. The current national effort to promote the medical home is grounded in principles written and endorsed by the leading primary care organizations. However, because medical homes involve teamwork and shared services, implementation should involve leadership from a range of professionals, not just physicians.

PARTNERSHIPS The entity that organizes, provides, or arranges for the shared resources needs to have the support of a diverse range of stakeholders. There are twelve multipayer, public-private medical home demonstrations in process. Their success relies largely on the leadership provided by public agencies acting as neutral conveners.²⁰ The states' active involvement enables diverse stakeholders to reach consensus on tough design issues, such as practice qualification criteria, payment methodology, and evaluation metrics.

In some states where there is substantial competition among payers, such as Pennsylvania, local medical home initiatives are expanding. The economic downturn has slowed expansion efforts in other states, such as Vermont, where their comprehensive program, the Blueprint for Health, remains limited to three pilot counties.

On the other hand, no multipayer medical home initiatives have ceased. The health reform law's provisions that promote shared resources mandate multistakeholder involvement. However, one program in the law—Community-Based Collaborative Care Networks—would be strengthened by adding state Medicaid agencies and local health departments to the leadership team. Public-private payer participation in all medical home and shared resources activities could increase programmatic efficiency.

EXPANDED CAPACITY Both public health departments and federally qualified health centers could be recipients of new funding to coordinate the development and implementation of shared resources. In fact, the Primary Care Extension Program requires the involvement of state health departments. Public health agencies have already demonstrated that they can offer specialized services, such as technical assistance to adopt electronic health records or clinical care for tuberculosis.

Similarly, the new Community-Based Collaborative Care Network program mandates the participation of local, federally qualified health centers in the establishment of collaborative care networks. Montana Medicaid is supporting additional nurse managers to work out of federally qualified health centers to provide care management services to high-need enrollees, including Medicaid patients referred from private practices. Although the shared service is operated out of the health center, an agreement between providers assures the private practice that their patients “will stay with [them] for primary care.”²³ Of course, not all health departments or centers are in a position to take on this role. Therefore, funding should be carefully targeted to those that have demonstrated the ability to carry out these activities.

One obstacle to implementing shared resources is lack of knowledge about how best to organize or structure them. The various medical home demonstrations and programs in the new bill provide an opportunity to learn more. There is also no guarantee that practices that meet their functional requirements are in fact providing high-quality care, since the quality of many shared services, such as care coordination or technical assistance, can vary. Wherever appropriate, the evaluation of medical homes should include an assessment of the quality and efficiency of shared services from patients' and providers' perspectives.

Conclusion

Improving the quality and efficiency of U.S. health care requires strengthening primary care. Striving to have every primary care practice

achieve the functionality of a medical home is a reasonable goal, but an ambitious one. Generalist physicians—especially those in small practices—who wish to change their practices face major challenges.

Sharing clinical services and technical assistance could lighten the burdens of change on individual practices. Doing so could achieve economies of scale, bring standardization to care processes, and foster greater cooperation and

communication among providers. Ideally, primary care practices that share resources would begin to develop a sense of shared accountability as they cooperated and integrated their services. Their patients would receive better-quality care and achieve better health outcomes.

Health reform thus offers a promising way to begin supporting primary care practices as they adopt new and better ways to meet the needs of their patients. ■

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NOTES

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