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May/June 2009

Primary Care and the Medical Home

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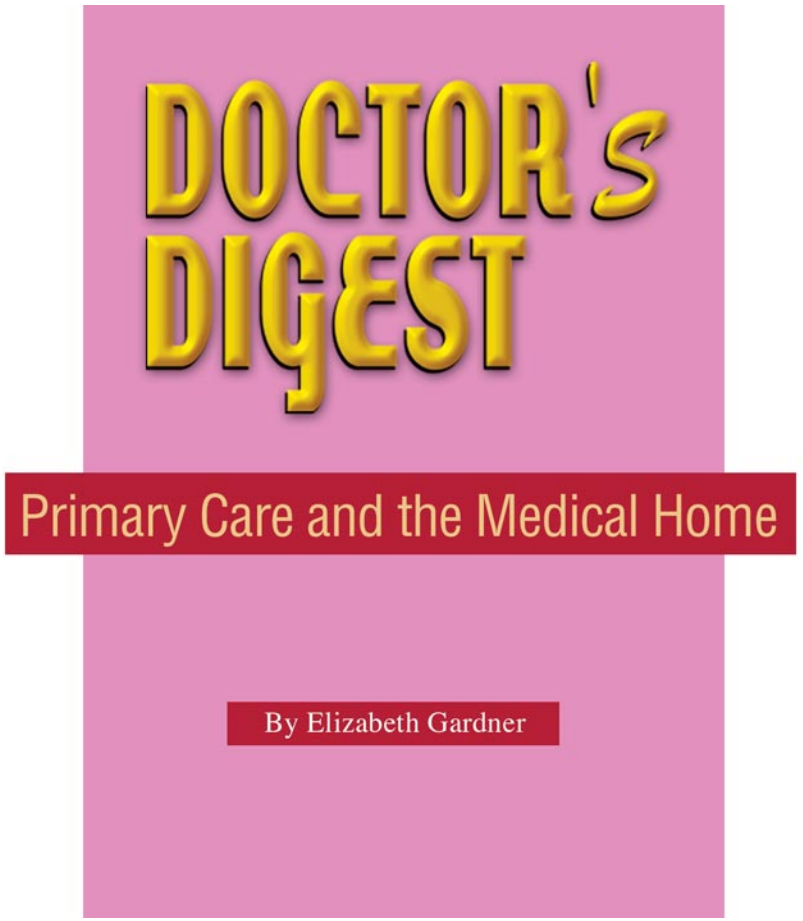

ABOUT THE AUTHOR

Elizabeth Gardner is a Chicago-based freelance writer specializing in healthcare, science, and technology. She began her journalism career at *Modern Healthcare*, covering information technology and quality measurement. She has also contributed to *Inside Healthcare Computing*, *HealthLeaders*, *Health-IT World*, *Bio-IT World*, *Popular Science*, *New Scientist*, and *Internet World*.

Doctor's Digest (ISSN 1554-6195), May/June 2009, Volume 5, Number 3. Published bimonthly by Brandofino Communications, Inc., 12 Spruce Park, Syosset, NY 11791. For general subscription information and paid subscriptions, email: doctorsdigest@verizon.net. Doctor's Digest is available on a paid subscription basis at the following annual rate: $54 (foreign, $108). Single-copy price: $12.To order send check or money order payment to: Doctor's Digest, 12 Spruce Park, Syosset, NY 11791, Attn: Circulation Department (be sure to indicate title of issue, shipping address and phone number). Visit our Website at www.doctorsdigest.net. For Advertising Sales and Editorial call 516-364-2575 or e-mail doctorsdigest@verizon.net. Postage paid at Mechanicsburg, PA 17055.

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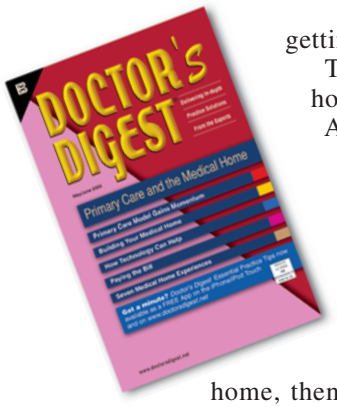

It may surprise you to find that a strategy to reshape primary care to focus on the patient and not incentives is actually getting a chance to prove itself.

That approach is the patient-centered medical home. The idea, which has the support of the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians, and the American Osteopathic Association, is now being tested in pilot programs that have engaged payers and collaboratives alike.

In this issue, author Elizabeth Gardner gives you a quiz to find out if you're already on your way to having a medical home, then outlines the changes you'd have to make to meet already-established criteria. She also guides you through reimbursement options that are currently available—or may be in the future—and the experiences and lessons learned by several practices that decided to make a go of it now.

I'd also like to introduce Paula S. Katz as the new editor of *Doctor's Digest*. Paula brings to the table more than a decade of physician association publishing experience from the American College of Physicians, where she served as editor of the award-winning *ACP Observer*. She also has healthcare publishing experience from Medical Economics publications as well as hospitalist publications. She brings to us a commitment to providing high-quality, well-researched editorial that you and all other physicians need now.

Please join me in welcoming Paula to our "home" at *Doctor's Digest*. You can contact her at *pkatz@doctorsdigest.net*.

As always, I look forward to hearing from you. Contact me at *jbrandofino@doctorsdigest.net* or by fax to 516-364-2575.

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Primary Care and the Medical Home

When you first became a doctor, you almost certainly wanted to practice primary care medicine in a way that would enable you to establish long-term relationships with your patients; but between the pressures of payers and the dysfunctions of our healthcare system, that may not be the way it has worked out. However, the solution just may be a new concept in primary care: the medical home.

After years of talk, that idea is finally getting its day to prove it can not only bring patient-centered care back to medicine, but can also give physicians a way to get paid for doing so.

This issue of *Doctor's Digest* explores why support is burgeoning now for the medical home, and describes the tools you'll need to make the transition for your practice. We'll guide you through current and proposed reimbursement plans so you can see how some practices are making ends meet—or hope to in the future. Finally, we'll share the experiences of primary care practices that are giving the idea a try with varying degrees of success, but plenty of optimism.

Primary Care Model Gains Momentum

The medical home is built on the idea of patient-centered care in which physicians can focus on patients and not patient volume. While primary care physicians have supported the concept for a while—and may already be adopting it informally—the concept is only now gaining steam, as government and other payers search for an approach that will make primary care more effective, more accessible, and more affordable. Nothing less than the future of primary care may lie in the balance.

Chapter in Brief:

- *The medical home changes the role of the primary care physician. But unlike the old "gatekeeper" days, this time it's voluntary, patients don't need permission to see specialists, and physicians generated the concept.*
- *Statistics show that primary care has diminishing appeal among internal medicine residents. The medical home may stimulate a turnaround by emphasizing a team approach to care, with more time for physicians to focus on patients, and increased compensation.*
- *Major efforts underway include TransforMed, an American Academy of Family Physicians (AAFP) subsidiary, and the Patient-Centered Primary Care Collaborative (PCPCC), which is supported by major medical associations. Medicare is also testing the concept.*

Denis Chagnon, MD, a family physician in Latham, N.Y., had an 88-year-old patient with an array of problems: diabetes, obesity, coronary disease, and chronic renal disease. "He was kind of stable but not doing great, and he knew he was in his last year or two," Dr. Chagnon says. One day the patient had a strange feeling in his chest and called 911. The paramedics brought him to a hospital where Dr. Chagnon doesn't admit. A physician there diagnosed him with a mild heart attack, then decided to do an angiogram when he couldn't find a pulse in his foot. That procedure put him into kidney failure. A kidney specialist started him on dialysis. After ten days of dialysis, a vascular surgeon did a bypass to try to save his leg. The procedure failed, and the leg had to be amputated. By the time the patient saw Dr. Chagnon a couple of months later, he'd been in and out of rehab and a nursing home, and was on dialysis and wheelchair bound.

"He sat there and cried," Dr. Chagnon says. "He said, 'No one ever asked me if I wanted this. I've lived my life. If I'd known all this was going to happen, I would have told them not to start.'" After Dr. Chagnon assured him that he didn't have to stay on dialysis if he didn't want to, he discontinued it. He died at home three weeks later. "That's all the poor man wanted to begin with," Dr. Chagnon says. "His care cost the system half a million dollars. No one did anything wrong, but no one really had a relationship with the patient or communicated with him about his wishes."

Although the U.S. spends twice as much as any other developed country on its healthcare, such stories are all too common. And it's understandable, given the present payment system and its incentives. Because physicians are paid per encounter, per test, and per procedure, they naturally compensate for shrinking payments by squeezing more encounters, tests, and procedures into each day. Patients' "oh, by the way" comments that stretch a 15-minute appointment into 20 or 30 without any hope of extra compensation become a moral dilemma. Talking with patients, which should be the glue that cements the doctor-patient relationship, instead becomes an obstacle to a more financially productive day. Even though primary care physicians choose their specialty because they want to build long-term relationships with their patients, it doesn't always happen. And everyone suffers: the patients, the physicians, and a healthcare system that ends up spending billions on redundant or unwanted treatments.

Defining a Medical Home

What is a medical home? In March 2007, the American Academy of Pediatrics (AAP), the American College of Physicians (ACP), the American Academy of Family Physicians (AAFP), and the American Osteopathic Association (AOA) as part of the Patient-Centered Primary Care Collaborative (PCPCC) developed principles that included the following:

1. Personal physician: Each patient has an ongoing relationship with a personal physician trained to provide first contact and continuous and comprehensive care.

2. Physician-directed medical practice: The personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.

3. Whole-person orientation: The personal physician is responsible for providing all the patient's healthcare needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of life: acute care, chronic care, and preventive services, as well as end-of-life care.

4. Care is coordinated and/or integrated across all elements of the complex healthcare system (e.g., subspecialty care, hospitals, home health agencies, and nursing homes) and the patient's community (e.g., family, and public and private community-based services). Care is facilitated by registries, information technology, health information exchange, and other means to assure that patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner.

5. Quality and safety are hallmarks of the medical home, including having patients actively participate in decision-making, using information technology to support optimal patient care, and enhanced communication. Practices go through a voluntary recognition process by an appropriate non-governmental entity to demonstrate that they have the capabilities to provide patient-centered services consistent with the medical home model.

6. Enhanced access to care is available through systems such as open scheduling; expanded hours; and new options for communication among patients, their personal physician, and practice staff.

7. Payment appropriately recognizes the added value provided to patients who have a patient-centered medical home. It should pay for services associated with coordination of care both within a given practice and among consultants, ancillary providers, and community resources; support adoption and use of health information technology for quality improvement; support provision of enhanced communication access such as secure e-mail and telephone consultation; recognize the value of physician work associated with remote monitoring of clinical data using technology; allow for separate fee-for-service payments for face-to-face visits; recognize case-mix differences in the patient population being treated within the practice; allow physicians to share in savings from reduced hospitalizations associated with physician-guided care management in the office setting; and allow for additional payments for achieving measurable and continuous quality improvements.

For more information, see *http://www.pcpcc.net/content/joint-principles-patient-centered-medical-home*.

No Place Like Home

In a medical home, patient care is not always associated with the office visit. A patient visit could just as easily take place by way of phone, e-mail, or text message, through a group education session, or even by an occasional house call. Most routine care—immunizations, sore throats, school physicals—moves to nurses, medical assistants, or case managers. As a result, physicians now can focus their time, energy, and clinical insight on complex situations that make the most of their training.

The medical home is not an entirely new concept. In fact, medical home-like care is the standard in countries like Denmark that have national health insurance. "We know that countries with a strong foundation of primary care have better outcomes, lower costs, and greater equity," says Melinda K. Abrams, assistant vice president at the Commonwealth Fund and director of its Patient-Centered Primary Care Program (see *http://www.commonwealthfund.org/Content/Program-Areas/High-Performance-Health-System/Patient-Centered-Primary-Care-Initiative.aspx.)*

Even in the U.S. the term "patient-centered medical home"

has been around since the AAP elucidated it in 1967 in its principles for special-needs children, although it gained more traction when the AAFP put out its "Future of Family Medicine" report in 2004. Now there's evidence that the idea of putting the concept into practice is gaining momentum:

- The influential policy journal *Health Affairs* devoted more than 40 pages of its September/October 2008 issue to the medical home, and *The New England Journal of Medicine* carried 17 articles mentioning the medical home between 2007 and early 2009.
- Several dozen bills are pending in various state legislatures to study the medical home model or incorporate it into the public health or insurance systems.
- In October 2008, the AAP announced that it had received five-year funding for the National Center for Medical Home Implementation from the federal Maternal and Child Health Bureau.
- In January of this year, the Centers for Medicare and Medicaid Services started a three-year medical home demonstration project that could result in paying physicians who restructure their practices to provide services $10,000 to $25,000 per month. (See "Medicare Gets in the Game," p. 17.)
- The PCPPC, a provider-payer group, lists 22 medical home projects either planned or in progress in 17 states.

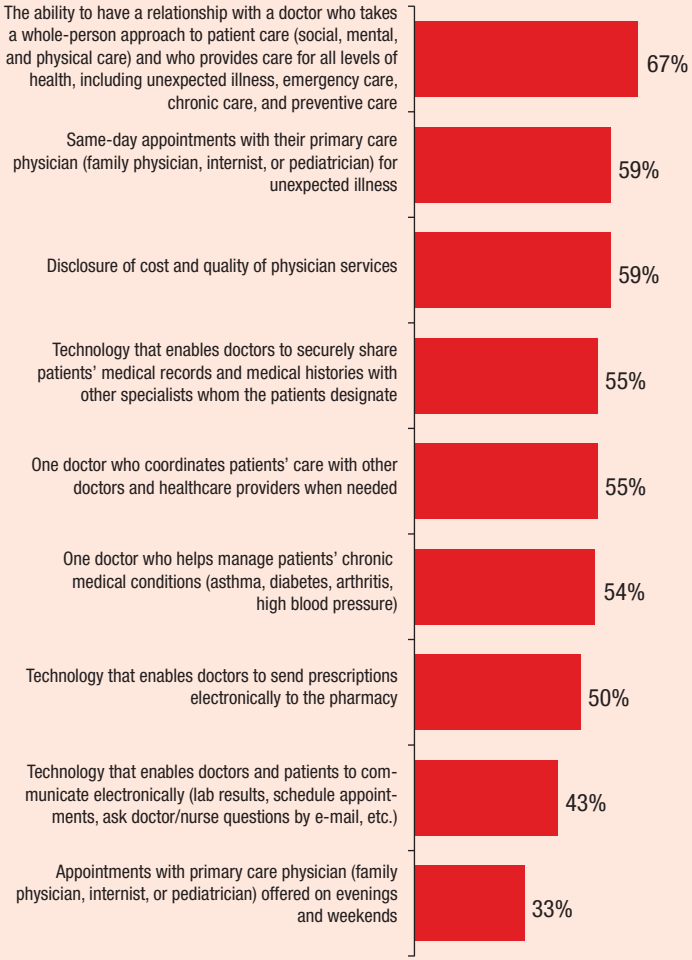
It's Not Gatekeeping

Primary care physicians with long memories may think a medical home sounds suspiciously like the "gatekeeper" concept from the early days of managed care. At that time, primary care physicians were the "front line," keeping patients from getting expensive specialty care unless it was crucial. But Ms. Abrams says the medical home is different because it is voluntary for both physician and patient. Patients will be able to bypass their primary care physician and go directly to a specialist if they choose. Also, unlike the per-patient, or "capitation" payments that HMOs paid annually to primary care physicians, medical home reimbursement models try to confine any physician risk to factors that they can control. And finally, the medical home idea came from physicians, not payers.

"The goal of the medical home is not only to describe a better way of providing care, but to reinvigorate primary care," says

Survey : Evaluating Healthcare Elements
Extremely/Very Important

Question: When it comes to healthcare, how important are each of the following for you and/or your family members? When answering, please consider "family" to include a spouse/significant other, child/children, and/or adult relative(s) (parent, grandparent) you are responsible for making healthcare decisions for, even if they do not physically live with you. (Extremely important, very important, important, somewhat important, not at all important) (N=2,022)



Source: Reprinted with permission. "Executive Summary: Patient-Centered Medical Home Election Study," Patient-Centered Primary Care Collaborative, October 2008.

Michael Barr, MD, vice president of practice advocacy and improvement for the ACP.

Researchers are already looking at the few practices that set out to be medical homes to evaluate their results. The Center for Home Improvement (CMHI) in Greenfield, N.H., for example, recently completed a study of 43 medical home practices in five states. While the specific results are still awaiting publication, these practices are the first to demonstrate tangible benefits, specifically fewer hospitalizations, emergency room (ER) visits, and other expensive acute interventions, says W. Carl Cooley, MD, CHMI's medical director.

A Primary Care Crisis

The medical home model of care is being sold not only as a boon to patients and a potential cost-cutting measure for the entire healthcare system, but also as an essential lifeline for a beleaguered profession.

ACP combined two alarming sets of statistics in an October 2008 white paper—the increasing U.S. population, especially those over 65 and with chronic illnesses, and the shrinking pool of primary care physicians. ACP concluded that the primary care profession is on its way to oblivion without drastic action (see *http://www.acponline.org/advocacy/where_we_stand/policy/primary_shortage.pdf*). For example, between 1997 and 2005, the number of U.S. medical graduates entering family medicine residencies dropped by half. By 2007, only 23 percent of third-year internal medicine residents planned to practice general internal medicine compared with 54 percent in 1998. A 2008 survey in the *Journal of the American Medical Association* showed that while almost one quarter of students were planning to pursue a career in internal medicine, only two percent were interested in general internal medicine. Finally, many primary care physicians are retiring early—11 percent in the next three years, according to the Physicians' Foundation, and another 20 percent plan to cut back on the number of patients they see.

If primary care doesn't become more appealing to physicians, and quickly, it could leave the healthcare system to deal with most patients through specialists and ERs. That's why the medical home, in transforming the way primary care is delivered,

also needs to transform the way it's compensated, dramatically in favor of primary care physicians.

The AAFP came up with a list of capabilities that practices must have in order to be considered a medical home. They include a team approach to care, registries for chronic illness to help track patients as groups, advanced information technology for electronic medical records (EMRs), e-prescribing, and patient communication and education.

"Even if we could click a switch and change the payment system, most practices don't have those things in place," says Bruce Bagley, MD, medical director for quality improvement at the AAFP. "We need to make them aware that they have to have these capabilities to be up in order to speed once the payment system is ready."

First Steps

Several major initiatives are helping primary care move toward the medical home model of care.

TransforMED

The AAFP's effort is TransforMED, an affiliate that helps practices make the changes they need to become a medical home (see *http://www.transformed.com/whoweare.cfm*.). TransforMED didn't originally have the words "medical home" in its core mission. But the strategies that it was advocating turned out to dovetail beautifully with the medical home philosophy, and over the past two years TransforMED has come to embrace the terminology as well.

TransforMED worked with 36 practices in a two-year national demonstration project, for which a final report is due late this year or early next year. It is now offering its services to any primary care practice through either its consultants or do-it-yourself tools available on its Website. TransforMED is also beginning to work with family practice residency programs to teach the new model.

The Patient-Centered Primary Care Collaborative

In 2006, the PCPCC (*http://www.pcpcc.net*), a provider-payer-employer organization with more than 300 institutional mem-

bers, was formed. Paul Grundy, MD, who may well be remembered as the father, or at least the godfather, of the patient-centered medical home, was at the helm. (His official title now is chairman.) He asked the four main primary care specialty societies—AAP, AAFP, ACP, and the AOA—to develop a set of principles for the medical home. After months behind closed doors,

The medical home may not be warmly embraced by either hospitals or specialists. If the incomes of other providers continue to depend on volume, the ability of primary care physicians to change the system single-handedly is going to be limited.

they came up with the joint principles on page 10. In November 2008, the American Medical Association (AMA) signed on; 17 other medical groups, including the American Academy of Cardiology, have added their endorsement, as have seven health benefits companies. The collaborative's goal is to get payers and providers on the same page.

Dr. Grundy estimates that it takes two or three years for a practice to transform itself. "This is probably a 10- or 15-year journey," he says. "It takes a long time for practices to change and for residency to change. It's a big change from episodic care to robust, data-driven prevention, but there's no other answer."

All Aboard?

Getting payers, employers, and primary care providers to cooperate is a promising first step, but successful medical homes aren't built in the middle of nowhere. Elliott S. Fisher, MD, director of the Center for Health Policy Research at the Dartmouth Institute for Health Policy and Clinical Practice in Lebanon, N.H., says there's no point in instituting the medical home without a "medical neighborhood" to go with it. Writing in the September 18, 2008, issue of *The New England Journal of Medicine*, he called for cooperation from other providers, effective payment reform, and acceptance of the idea by consumers, who evidently think of nursing homes when they hear

Medicare Gets in the Game

When it comes to changing the face of U.S. medical care, no single agent is more influential than the Centers for Medicare and Medicaid Services (CMS), and 2009 is the year in which CMS is beginning to test the medical home concept.

Now CMS is recruiting 400 practices in eight states, aiming for a total of 2,000 physicians, to receive a more-than-token extra payment for revamping their practices to provide medical home services. The payments will range from $40.40 to $100.35 per patient per month, depending on the level of medical home services provided by the practice and on how much care is needed. CMS has made an electronic medical record a prerequisite for participation and will have two possible tiers of "medical homeness" based on criteria the NCQA has adapted from its medical home recognition program (see Chapter 2).

CMS estimates that participating physicians will care for an average of 250 Medicare patients each, which puts the potential medical home payments at $10,000 to $25,000 per month, assuming the physicians can convince all of their Medicare patients to participate. Since the medical home concept puts some onus on patients, especially those who are chronically ill, to participate in their treatment, patients have to agree to be part of the trial. Payments would begin January 2010 and continue through December 2012. The practices would also continue to receive their usual fees for any covered Medicare services.

The American College of Physicians Website keeps track of what's happening with the Medicare demonstration: *http://www.acponline.org/running_practice/pcmh/demonstrations/cms_ demo.htm*

Medicare's Medical Home Management Fee

Payments Per Member Per Month

Medical Home Tier	Patients with HCC* Score <1.6	Patients with HCC Score ≥1.6	Blended Rate
1	$27.12	$80.25	$40.40
2	35.48	100.35	51.70

**HCC: Hierarchical condition categories.*

- HCC score indicates disease burden and predicted future costs to Medicare.
- Nationwide, 25% of beneficiaries have HCC ≥1.6, and are expected to have Medicare costs that are at least 60% higher than average.

*Source: "*Medicare Medical Home Demonstration Overview*," Centers for Medicare & Medicaid, Oct. 28, 2008. Information is subject to change.*

Quiz: Is Your Practice a Medical Home?

You may think your practice is already a medical home, but is it really? Probably not entirely, says Melinda K. Abrams, assistant vice president at the Commonwealth Fund and director of its Patient-Centered Primary Care Program. "A lot of practices may have the relationships with their patients and offer them access, but they rarely do the care coordination piece or have the infrastructure needed to manage their panel," she says.

Take this quiz to see how your practice rates:

Yes	No	
☐	☐	**1.** Is your office staff organized into teams (for example, a physician, a nurse, and a physician's assistant)?
☐	☐	**2.** Does each patient have a relationship with a specific care team?
☐	☐	**3.** Can patients see a member of their team the day they call?
☐	☐	**4.** Is someone on the team responsible for seeing that its patients get all routine exams and tests, and for monitoring chronically ill patients by phone or e-mail?
☐	☐	**5.** Does your practice have electronic medical records?
☐	☐	**6.** Can you easily compile a list of patients who are due for a specific test?
☐	☐	**7.** Can your patients communicate with you easily in other ways besides an office visit (for example, via phone, text message, or e-mail)?
☐	☐	**8.** Is each team aware of (and, when necessary, in communication with) patients' other healthcare providers?
☐	☐	**9.** Do you offer group visits for patients who share common illnesses or conditions and need to learn the same self-care regimens?
☐	☐	**10.** Does your practice actively involve patients in making choices about their treatment?

If you answered yes to all these questions, you're in good shape to receive medical home "recognition," a National Committee for Quality Assurance designation (see Chapter 2 for more information). If you said yes to seven questions, you're well on your way. Fewer than five? You still have work to do.

the term "medical home."

Dr. Fisher points out that Medicare and other payers think of the medical home as a zero-sum game: Increased payments to primary care doctors will be offset (at the very least) by reduced payments for unnecessary ER visits, inpatient admissions, and specialty visits. As a result, the medical home may not be warmly embraced by either hospitals or specialists. If the incomes of other providers continue to depend on volume, the ability of primary care physicians to change the system single-handedly is going to be limited.

"I think the model offers great promise, but there will be challenges … in getting everyone to play ball unless there are incentives for all," Dr. Fisher says.

Dr. Chagnon, whose multiply afflicted patient—described at the beginning of this chapter—exemplified problems with the system today, would certainly champion that thought. Now that his practice is participating in the Albany-area medical home pilot program (described in Chapter 4), he sees a bright future for primary care. "I love being a family doctor, and I've had special relationships with my patients for 35 years; but I'm not doing as well at it now as I was 20 years ago," he says. "I'm very excited about the project and the concept."

Building Your Medical Home

Once you are convinced that the benefits of transforming your practice into a medical home are worth the effort, it's time to get started. In this chapter we provide the tools you'll need to take the plunge, along with tips about where to find help during your journey.

Chapter in Brief

- *The medical home is ideal for you if you want improvements in your practice—a more streamlined day, better use of technology, better care for your patients, and an income boost depending on your level of medical "homeness."*
- *Checklists are available to help you determine how well your practice is doing now and what needs to change in order to become a medical home. The gold standard is "recognition" earned by meeting the NCQA's Patient-Centered Medical Home criteria.*
- *In return for a commitment to the medical home idea—which may include providing flexible scheduling and electronic communication with patients—sponsors of pilot projects often provide quarterly reports, coaching, financial help, and technical support.*

Let's assume you've taken the quiz in Chapter 1 and discovered that your practice is not quite a medical home—maybe not even close. If so, you're not alone. A recent study in *Health Affairs* surveyed practices with more than 20 physicians—the ones likeliest to have relatively deep pockets or to be owned by an entity that does—to find out how well they scored on the four vital elements of medical homeness: whether

physicians work closely with other healthcare providers in patient care teams; whether care is well coordinated and integrated; whether care is delivered in ways that maximize quality and safety; and whether patients can reach physicians by e-mail or other nontraditional ways. The study also examined use of EMRs, disease registries, patient reminders, performance feedback, and distribution of educational material to patients.

The results were underwhelming: While 41 percent of the groups used EMRs and half shared information electronically with hospitals and specialists, fewer than a third used teams to deliver care. Two-thirds instructed chronic-disease patients on proper care, but only 10 percent routinely used patient feedback to improve their practices.

Almost every primary care practice in the U.S. has a way to go before becoming a medical home. Are you ready to start that journey? And what are its potential benefits for your practice?

Enhanced Work Life

Making your practice a medical home can make the day less fractured and may give physicians, nurses, and midlevel providers a chance to build relationships with their patients.

The medical home implements technology effectively, uses physicians only where a physician's training is absolutely necessary, and relies on patient education and coaching to prevent and help treat chronic illnesses. If it works the way it should, patient panels will shrink, making the doctor's day significantly less frantic. But since physicians will still be paid to manage each patient, incomes won't shrink and, in fact, should grow.

Visits will be longer, but there will be less need for follow-ups. Technology and the use of extenders will mean that much of what's done will not be done by the doctor, says Paul H. Keckley, PhD, healthcare economist and executive director of the Deloitte Center for Health Solutions. "The doctor has to change strides and become a leader and a manager instead of a clinician. It's a different business. It puts primary care physicians in exactly the role they want to be in—coordinators of care, managing a team to get a result for which they're paid based on outcome. It rewards their skill in clinical management rather than their ability to juggle 39 patients a day."

Dartmouth-Hitchcock Clinic in Lebanon, N.H., a multi-specialty group practice with more than 700 physicians, is switching all 391 of its primary care physicians over to the medical home model as part of a pilot with CIGNA, one of the three largest insurers in the state.

So far this new model is getting a positive welcome, but not because of money. Senior medical director Barbara Walters, DO, says the reason is job satisfaction. "Our doctors want a place to work that uses what they went to medical school for," she says. "The normal primary care environment is toxic for that, and the medical home makes them feel more effective."

Better Care

The medical home can improve the care you give your patients, and it can eventually improve their overall level of health—which is why most physicians went into medicine in the first place. Although not very many U.S. practices are medical homes, and despite the fact that the model hasn't been studied extensively, evidence suggests that it works.

For example, a study of the available literature published in the October 3, 2008, issue of *Pediatrics* concluded that medical homes could lead to better health status, timeliness of care, family-centeredness, and improved family functioning for children with special needs. It wasn't perfect: After combing through 33 studies, the authors concluded that none of them looked at the medical home in its entirety, and the studies used inconsistent definitions for elements of the medical home.

More Money

How does a $21,000-to-$63,000 bump in your income sound? That's how much practices stand to gain per full-time employee in a medical home pilot project that began last May in the Philadelphia area, run by the consulting firm Bailit Health Purchasing, Needham, Mass. The project involves 149 full-time clinicians, including physicians and nurse practitioners, in 32 practices around Philadelphia, and almost all of the major payers in the five-county area. Participating payers represent an average of 70 percent of the income of the participating practices.

The income increase depends on the level of "medical homeness" that the practice adopts under guidelines from the NCQA. Participants are expected to use at least part of the money to hire care managers to coordinate checkups, treatments, and patient education for chronically ill patients.

Experts say extra medical home reimbursement could reach six figures per physician if Medicare and other payers follow through on their intentions to reward medical home care. Some practices could find the boost enough to transform financially

The sweet spot for most medical home transformation is management of patients with chronic diseases, such as congestive heart failure or asthma. If your practice can get really good at that, especially by having nurses handle a lot of the daily work, you probably have what it takes to be a medical home for all your patients, according to Dr. McGeeney.

marginal practices into viable businesses, to give those that are financially healthy a chance to grow, and to afford everyone a way to weather any ill effects of the recession.

For the Philadelphia project, Bailit requires some kind of patient registry—not necessarily an EMR—and gives non-automated practices both registry software and training in how to use it. Practices are required to restructure into teams, which have to submit monthly reports, pulled from their EMR or registry software, on their chronically ill patients.

Michael H. Bailit, the company's principal, says he thinks the medical home is more likely to work than many previous reforms, but it will work best for practices that are already well managed and doing well financially rather than those struggling with basic billing or patient flow challenges.

"This is a lot of work for practices" in the pilot program, he says. "It requires a fundamental restructuring of how they operate."

Tools to Get Started

That restructuring can be a daunting task. But if you think being a medical home is appropriate for you—and your practice is ready for the hard work involved—help is at hand. Several

An Easy Way to Measure Your 'Medical Homeness'

The Center for Medical Home Improvement (CMHI) offers a self-assessment tool that can start practices on their way toward "medical homeness." While this tool doesn't have the official standing that the National Committee for Quality Assurance's recognition program enjoys, it may be an easier starting point for many. Although it was developed specifically to address the care of children with special needs, its criteria can be adapted to adult patients with chronic conditions, and many of the criteria are applicable to any type of patient.

The criteria encompass six areas: organizational capacity, chronic condition management, care coordination, community outreach, data management, and quality improvement. Each area is broken down into several "themes," and within those CMHI identifies four possible levels. Practices can check off whether they have partial or complete compliance with each. Here is an example:

Organizational Capacity: Communication/Access

Level 1: Communication between the family and the primary care provider (PCP) occurs as a result of family inquiry; PCP contacts with the family are for test result delivery or planned medical follow-up.

Level 2: In addition to Level 1, standardized office communication methods are identified to the family by the practice (e.g., call-in hours, phone triage for questions, or provider callback hours).

Level 3: Practice and family communicate at agreed-upon intervals and both agree on "best time and way to contact me." Individual needs prompt weekend or other special appointments.

Level 4: In addition to Level 3, office activities encourage individual requests; access and communication preferences are documented in the care plan and used by other practice staff (e.g., fax, e-mail, or Web messages, and home, school, or residential care visits).

For more information, see *http://www.medicalhomeimprovement.org/.*

organizations offer checklists to evaluate where your practice is now and what needs to change.

If there's an industry standard for such a relatively new area, it's undoubtedly the NCQA's Patient-Centered Medical Home standard (see "Getting 'Recognized': NCQA's Medical Home Standard," p. 26). Another resource is the Medical Home Improvement Kit from New Hampshire's Center for Medical Home Improvement (see "An Easy Way to Measure Your 'Medical Homeness,'" p. 24). This kit differs somewhat from NCQA criteria because it was developed originally to address the care of children with special needs. For example, it urges practices to get the families of their patients involved in the medical home transformation process.

Start small, advises Dr. Terry McGeeney, MD, president and CEO of TransforMED, the AAFP's consulting subsidiary for practice transformation. First steps may include developing a practice Website if you don't already have one, or extending your practice's hours and trying a limited amount of open scheduling. Next, you might consider targeting one group of patients for medical home-style attention. The sweet spot for most medical home transformation is management of patients with chronic diseases, such as congestive heart failure or asthma. If your practice can get really good at that, especially by having nurses handle a lot of the daily work, you probably have what it takes to be a medical home for all your patients, according to Dr. McGeeney.

The physicians' role is straightforward, if challenging, says William Rollow, MD. "They need to adopt the vision of the medical home that they will be the source of coordination of care and that they'll provide care in a proactive rather than a reactive manner," he says.

Enlisting Help

Some pilot projects include ongoing support, such as coaching. For example, the 38 practices in New York City and surrounding counties that are participating in a medical home pilot project are getting quarterly reports on how they're doing and intensive technical support from outside consultants while they're redesigning the way they practice. All that is coming from the project's sponsor, EmblemHealth, the largest insurer in the area with about 2.5 million members.

While the insurer is looking for higher quality and greater efficiency, participating physicians—each of whom have at least 200 EmblemHealth patients—get a management fee of up to $5 per

Getting 'Recognized': NCQA's Medical Home Standard

If you want to prove your medical home readiness, today's gold standard is receiving "recognition" by meeting the National Committee for Quality Assurance's (NCQA) Patient-Centered Medical Home (PCMH) standard.

"We need some validation so that everyone and his brother aren't calling themselves a medical home," explains Terry McGeeney, MD, CEO of TransforMED, the American Academy of Family Physicians (AAFP) subsidiary. He sat on the committee advising the NCQA when it devised its medical home standard in 2008. "The pilot projects need a way to validate things so that they can reward practices for hitting certain milestones."

NCQA began accrediting health plans in 1990 and is the largest accrediting body for them, but it has also developed a significant business in bestowing "recognitions" on physicians' offices for superior care in several areas, including diabetes, cardiovascular care, and spine care, and for superior use of information technology in patient care.

Pay-for-performance programs like Bridges to Excellence frequently use those recognitions in addition to or instead of having the practice submit performance data directly to the program sponsor. NCQA's medical home standard is an adaptation and expansion of the information technology recognition called Physician Practice Connections (PPC). Hence, NCQA refers to its standard as PPC-PCMH.

"It's not perfect, but it provides detailed guidance about the capabilities and systems that ought to be in place to provide good care," says Bruce Bagley, MD, medical director for quality improvement at AAFP, who also sat on the committee advising the NCQA on the medical home revisions to the PPC standard. (His own practice in Albany, N.Y., has received PPC recognition for its use of electronic medical records, e-prescribing, and patient registries.)

The medical home standard includes criteria for all of the following:

- Access and Communication
- Patient Tracking and Registry Functions
- Care Management
- Patient Self-Management Support
- Electronic Prescribing
- Test Tracking
- Referral Tracking
- Performance Reporting and Improvement
- Advanced Electronic Communications

There are three levels of medical home recognition, depending on how practices score on specific elements connected with these criteria. In many medical home pilot projects, the management fee is tiered accordingly.

If your practice is interested in applying for medical home recognition, you can download information from the NCQA Website (see *www.ncqa.org*). The initial investment is $80 for a survey tool that will let your practice assess its readiness to apply. The NCQA survey fee is $450 per physician although practices with more than six physicians pay a lower per-physician cost. There are also discounts available if applicants are sponsored by a health plan, employer, or other medical home pilot program. At this writing, 689 physicians had achieved PCMH recognition. A complete list of recognized physicians is at *http://recognition.ncqa.org*.

In October, NCQA released a modified medical home standard that the Centers for Medicare and Medicaid Services (CMS) will use for its medical home demonstration (see Chapter 1). The CMS standard has only two tiers: the first one is higher than the standard NCQA level one, and the second is lower than the standard NCQA level three. Practices will need to fulfill at least the first-tier requirements in order to participate. An electronic system for managing patient data is required.

Qualifying to be recognized as a medical home won't be easy for practices that are starting from scratch, warns Greg Pawlson, the NCQA's executive vice president. "This is not something where you spend three months, push a button, and everything is good," he says. "We estimate that it's two to three years of hard work. That includes getting the right health information technology, but the really hard part is changing the whole way that practice is done."

covered patient per month. Half of that amount is based on how well the physicians do on measures related to quality, efficiency, and patient experience. There are other cost benefits: EmblemHealth, which began the two-year project last July, is also paying for the NCQA surveys for medical home recognition and the cost of a nurse care manager for covered patients. In addition, the insurer has negotiated price breaks on some EMR systems for participants. As a result, most of the practices, which didn't have an EMR system, are now using the perk to install one and overhauling their work flow to make the new system work.

The physicians' role is straightforward, if challenging, says William Rollow, MD, the project's consulting physician: "They need to adopt the vision of the medical home, that they will be the source of coordination of care and that they'll provide care in a proactive rather than a reactive manner," he says. Participating practices are also required to open up access to their patients through flexible scheduling and to expand opportunities for patients to communicate by phone or e-mail.

One practice found that once it had created identifiable care teams (e.g., physician/nurse/front office staff) and assigned specific tasks to each team member, the average number of undone tasks at the end of the day dropped from 15 to zero.

Practices that are not participating in a project can get help, too. For example, TransforMED has free self-assessment tools on its Website and makes consultants available for a fee. (For more information, go to *www.transformed.com*.)

What to Look For

Diane Cardwell, MPA, a TransforMED practice enhancement facilitator, helps practices find "early wins" in efficiency so they can slow down and look at the bigger picture of what they need to change. She starts by doing a thorough assessment in areas like coordination of work and communication with outside parties. She then looks at how to redeploy the people who work in a practice so that physicians are performing the tasks that only a physician can handle, with other functions falling to nurses, medical assistants, and office staff.

For example, when one practice she worked with started tracking phone calls, staff realized that messages sometimes went in a circle: from call center to nurse to physician to nurse to call center to patient and back again. When the physicians and staff created standard protocols to deal with some common problems that resulted in the phone runaround, they reduced their volume of phone calls by 10 percent, saving time and reducing frustration for both staff and patients. Another practice found that once it had created identifiable care teams (e.g., physician/nurse/front office staff) and assigned specific tasks to each team member, the average number of undone tasks at the end of the day dropped from 15 to zero.

"These may seem like small things, but it teaches the practice the value of data about what they do and reduces the frustrations of 'phone tag' and 'who is doing what,'" Ms. Cardwell says.

The next steps, she says, involve more complex components of the medical home, including the following:

- Managing population by using team members at a level that's appropriate for their skills
- Instituting protocols for evidence-based medicine
- Leaving large portions of the schedule open so that patients can be seen the day they call

She says open access makes appointments more effective. Open scheduling lets both patient and physician focus on the problem at hand. It also keeps appointments within their scheduled time, and that means physicians can leave the office at a reasonable hour.

Re-engineering a practice into a medical home can be a complex process, and Ms. Cardwell says "change fatigue" is common. For example, one practice had done a thorough job of planning before it rearranged its staff into care teams; but ten days after making the transition everything was in chaos. She used performance metrics to show staff that they really were making progress, and advised them to hang on with the new system for just a few more days. Their patience paid off. When that time was up, she began getting enthusiastic e-mails from the practice about the changes.

How Technology Can Help

A medical home's ability to transmit and access information as well as communicate effectively with patients and specialists requires physicians to address the challenges of finding, implementing, and financing an appropriate and fully functioning EMR system.

Chapter in Brief:

- *Vendors are just now working on systems that will meet the needs of medical homes to enhance work flow, team functioning, and the ability to generate reports.*
- *Be careful when making an EMR purchase. Look for the capability to communicate with other providers and with other computers.*
- *Include patients in your communication strategy. Practices large and small should be on the Web using portals that allow online appointment scheduling, e-mail, and patients' access to their medical records. "Wired" patients can be more involved in their own care.*

Any practice changing to the medical home model will benefit from using computers extensively for the two vital components of the medical home: information and communication. The pressure's on since Medicare's medical home demonstration project won't even consider a practice that doesn't have EMRs. In addition, a successful medical home is likely to have tools like e-mail and text messaging to go along with or replace phone calls, and patients will increasingly expect to be able to access their medical information through the Internet.

The medical home requires using the system in a more cost-efficient, improved way to meet your patients' needs, and accessing the right information at the right time is a key part of the equation, says Barbara Morris, MD, chief medical officer for Community Care Physicians, Latham, N.Y.

"It's impossible to have a medical home without electronic support if you have a large patient population," she says. "An overloaded primary care physician taking care of the urgencies of the day doesn't have a good, reliable way to know what types of patients he or she has, and which ones have specific issues in common that constitute a disease management population."

Two of the 35 sites in Dr. Morris's practice are participating in the medical home pilot program run by Capital District Physicians Health Plan (see Chapter 4). These sites already have an advantage since the group, which has about 200 primary care providers, has had an EMR system since July 2005. It uses Allscripts to collect basic data in patients' records. The practice then "mines" that information to analyze the patient population and track performance.

The system can do both because physicians enter as much data as possible in "granular" form, filling out boxes and clicking buttons rather than typing or dictating notes. As a result, the system can easily find the data it needs to build a database and produce reports. Because many physicians prefer reading narratives, Dr. Morris says the next release of the software will allow for a lot of data to be entered into templates that store it as individual elements, but convert it into narrative notes for the user.

Be Glad You Waited

If you've waited to invest your money, time, and effort to convert to EMRs, that may have been a smart move when it comes to medical homes. Most earlier EMRs wouldn't have been able to do the job the medical home needs. In fact, most EMRs aren't yet set up to create disease registries, one of the most basic medical home functions.

You're not alone if you haven't made the leap. Only 4 percent of physicians have a fully functional EMR, and another 13 percent have a basic system, according to a study published last year in *The New England Journal of Medicine*. A $20 billion provision for health information technology in the economic stimulus

package adopted in February, mostly in the form of incentive payments from Medicare and Medicaid, should increase those numbers. The Congressional Budget Office estimates that as a result of the stimulus money, 55 percent of physician offices will be fully "wired" by 2014, compared with only 25 percent that could have achieved this landmark without that financial boost.

Most systems were designed originally to help with coding and billing instead of managing people, explains Dr. McGeeney of TransforMED. While TransforMED, for one, has advised some vendors how to tack medical home-friendly capabilities onto their existing products, health information technology vendors haven't embraced the needs of medical homes anywhere near the way they need to, according to Chris Nohrden, executive director of the Center for e-Health Information and Adoption, an arm of the PCPPC.

Medical homes will be expected to go beyond what the Web industry calls "brochureware"—practice address and phone number, physician bios, and pictures of generic happy patients—to include online appointment scheduling, e-mail, and patient access to their medical records.

The AAFP's Dr. Bagley says some vendors are listening. "They've finally gotten the message that it's not just recording the office visit," he says. "They're starting to see that work flow is important, and how to optimize team functioning." For example, if he needs blood work on a patient, the computer should inform the nurse so that he doesn't have to search for her. The key, he notes, is to integrate decision support so that if the physician is seeing a diabetic who is not on an ACE inhibitor, for example, a window reminder will pop up.

A medical home's EMR will also need to generate reports so that outside parties can measure how the practice is doing, especially as pay-for-performance enters the reimbursement mix. "If you want to assess how a practice is performing, you have to make quality reports part of the regular work flow, not just added on top," says ACP's Dr. Barr. Most EMRs don't create those overall reports, which is one reason payers tend to use incom-

plete and often inaccurate claims data to measure physicians' performance. ACP offers a set of online tools to help member practices select and implement an EMR, including a list of vendors who adhere to a basic set of standards that ACP deems essential (for more information, see *http://www.acponline.org/running_practice/technology/*). The list isn't based on the vendors' assertions that they comply: ACP staff makes site visits and creates its own evaluation. At this writing there were nine vendors on the approved list, but more are being added as they qualify, Dr. Barr says.

The larger vendors know what they need to do for the medical home, and they're working on it. Glen E. Tullman, CEO of Allscripts, says that the company's products support at least half of the NCQA's medical home requirements and they are adding more capabilities with each new software release.

Apples to Apples: How to Get EMRs Working Together

Arguably the most frustrating part of today's physician office electronic medical record (EMR) systems is their lack of uniformity, which makes switching from one system to another infuriating or, at times, impossible. Because the problem is going to be even more profound under the EMR demands of the patient-centered medical home, practices may want to better understand EMR certification.

The conflict stems from how many of these systems were created: Physicians exasperated by the shortcomings of existing products came up with their own, constructed for specific contexts and purposes. Thus, many products don't easily adapt to one another or to new uses. The specter of such a task alone may have scared many physicians off from even trying EMRs. Now imagine the needs of the medical home: Can your system, for example, pull up lists of patients who share certain characteristics? If the information has been entered properly, such tasks are simple; if not, they're out of the question.

The good news is that EMRs have a standard-setting body called the Certification Commission for Health Information Technology (CCHIT). Formed in 2004 as a joint effort by three health information technology professional organizations and funded by all major primary care specialty societies, CCHIT is an independent not-for-profit organization. It developed its certification criteria under a contract from the U.S. Dept. of Health and Human Services starting in 2005, and at this writing it is a leading candidate to be responsible for certifying EMRs under the provisions of the American Recovery and Reinvestment Act.

A CCHIT-certified EMR stores data in certain standard ways so that it can be easily pulled out for reports or passed to another system. In order to earn CCHIT certification, vendors have to demonstrate that their products can comply with 67 pages of criteria that specify what data is stored in the EMR, how it is stored, and how it can be extracted. The process guarantees a basic level of standardization intended to help physicians make apples-to-apples comparisons when they're deciding which system to buy. Individual user interfaces—how the screens look and whether the user can change things around—vary by vendor.

"CCHIT runs tests to make sure 100 percent of the criteria are included and have been demonstrated to work in patient-care scenarios," says CCHIT's spokesman John Morrissey. Then it's up to buyers to test-drive and do due diligence on the specific products.

CCHIT doesn't specifically certify EMRs for use in medical homes—yet. But products that continue to meet the CCHIT's ever-changing standards may be poised to cope with the data demands of the medical home, such as being able to store specific pieces of data as discrete elements and to make sure they're associated with any relevant codes.

For a list of systems that have passed CCHIT certification tests, visit *http://www.cchit.org*.

A Communication Strategy

For a true medical home, getting an EMR is just the first step. The next is figuring out how to communicate with everyone—specialists, hospitals, pharmacies, and especially patients.

Don't rush into an EMR purchase without evaluating what the medical home model will require to communicate with other providers, warns Dr. Fisher of the Center for Health Policy Research at the Dartmouth Institute for Health Policy and Clinical Practice. "I'd be very cautious, even if a [federal government] stimulus package includes a $5,000 tax credit [for an EMR], because I wouldn't be surprised if five years down the line the requirement would be that they'd be interoperable with the systems of other providers," he says.

Interoperability—the ability for two computers to automatically swap data without a lot of fiddling by their owners—is

Rates of Adoption of Electronic Health Records by Physicians, With Adjustment for the Characteristics of the Physicians and Their Practices*

Variable	Fully Functional System (N=117) (%)	Standard Error (%)	Basic System (N=330) (%)	Standard Error (%)	No Basic or Fully Functional System (N=2160) (%)	Standard Error (%)	*P*-Value
All physicians	4	1	13	1	83	<1	
Sex							0.76
Male	4	1	13	1	83	1	
Female	4	1	13	1	83	2	
Race or ethinic group†							0.99
Hispanic or Latino	4	1	13	2	83	3	
White	4	1	13	1	82	1	0.84
Black	5	2	14	4	80	6	0.72
Asian	5	2	14	3	82	5	0.82
Other	3	2	10	4	87	6	0.45
Medical specialty							<0.001
Primary care	6	1	15	1	80	1	
Not primary care	4	<1	11	1	86	1	
No. of years in practice							0.009
1-9	5	1	15	2	80	2	
10-19	5	1	14	1	81	1	
20-29	5	1	14	1	82	1	
≥30	3	1	10	1	87	1	
No. of physicians in practice							<0.001
1-3	2	<1	7	1	91	1	
4-5	3	1	11	1	86	2	
6-10	6	1	17	2	77	2	
11-50	8	1	22	2	71	3	
>50	17	3	33	3	50	5	
Clincial setting							0.008
Hospital or medical center	5	1	15	1	80	1	
Office not attached to a hospital or medical center	4	<1	12	1	85	1	
Other	4	1	13	3	83	4	
Location							0.92
Urban	4	<1	13	1	83	1	
Rural	4	1	13	1	83	2	
Region							0.02
Northeast	4	1	11	1	86	2	
Midwest	4	1	13	1	83	2	
South	4	1	12	1	84	1	
West	6	1	16	1	78	2	

**Percentages were calculated with the use of multivariable analysis, applying a cumulative logit model to predict the adoption of an electronic-records system, with adjustment for all vaiables listed in the table. The analysis was adjusted for nonresponse. The total number of respondents does not include 151 who provided incomplete responses. Percentages (which sum across rows) may not total 100 because of rounding.*

†Respondents could select more than one race or ethnic group.

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essential, says Mark Dente, MD, vice president for healthcare solutions, integrated IT solutions, at GE Healthcare, vendor of the popular Centricity EMR system. It's most important to know your vendor's strategy to help you interoperate because even comprehensive EMR systems are never really complete.

When you're putting together information to make an EMR decision, inventory all the systems that you'd like yours to be able to interact with, and make sure your selected vendor can make that happen—ideally because the vendor has made those particular connections before.

Wiring Your Patients

Like every other business in the dawn of the 21st century, primary care practices are expected to have a presence on the Web. And medical homes will be expected to go beyond what the Web industry calls "brochureware"—practice address and phone number, physician bios, and pictures of generic happy patients—to include online appointment scheduling, e-mail, and patient access to their medical records. (See "From Medical Records to Online Consultations," p. 40.)

Some larger systems have already made progress in this regard. For example, the Palo Alto (Calif.) Medical Foundation (PAMF), a 724-physician group practice affiliated with the Sutter Health system, has offered its 600,000 patients access to its EMR system since 2001 (*http://www.pamf.org/*). Half of the patients take advantage of the ability to access their personal health record online—the same information available to physicians, nurses, health coaches, hospitals, and pharmacies through an integrated system. Surveys show that 75 percent of patients who use the system feel that it has saved them at least two phone calls or one office visit at some point. A survey conducted among employees of Cisco, which sponsored text messaging between employees and their physicians, showed that 87 percent felt that the function saved them time away from work, and 70 percent wanted to use the method as their primary communication with their doctor. Cisco estimated that it saved $9.80 in lowered medical costs for every dollar invested in messaging.

Having patients "wired" is invaluable for involving them in their own care, says Paul Tang, MD, the foundation's chief medical information officer and a member of the recently formed federal Health Information Technology Policy Committee, which is charged with developing a national health care information infrastructure plan. For example, PAMF's diabetic patients are asked to record their sugar readings, and they can

Physicians at NorthShore University HealthSystem in Evanston, Ill., resisted the patient portal at first, fearing that once the public saw their calendars, they would know how many patients they did or didn't have and when they were on vacation; they also were afraid patients would cancel appointments or doublebook, says A.J. Melaragno, assistant vice president of interactive marketing. It didn't turn out that way.

wirelessly upload data from their glucometers. Once this data is in their record, they can annotate their reading, including information on what they had just eaten, which medications they'd taken, and their most recent kind of exercise. "A reading doesn't mean a lot except in the context of how it's affected by behaviors, and we let them graph everything," Dr. Tang says. "It changes their whole role in managing their health."

NorthShore University HealthSystem in Evanston, Ill., has done something similar with a home page portal called NorthShore Connect (*http://www.northshore.org/*). Of 230,000 active patients, 52,000 have already signed up for access through NorthShore Connect, and the organization is aiming to reach a total of 100,000 by the end of the year.

Physicians resisted the portal at first, fearing that once the public saw their calendars, they would know how many patients they did or didn't have and when they were on vacation; they also were afraid patients would cancel appointments or doublebook, says A.J. Melaragno, assistant vice president of interactive marketing. It didn't turn out that way. "Once [doctors] got past the feeling that patients were going to abuse the access, [they] wanted to open it up more and have more features," he says.

The health system is considering offering some form of financial help to affiliated physicians who want to install a compatible EMR. Patients love the access, but they're apt to compare it to their online experience with their bank or eBay. The health

From Medical Records to Online Consultations

For the medical home to work, patients must have better access to their own information. That's where the Internet comes in.

Typical patient portals not only give access to at least a basic medical record, they also allow patients to schedule appointments, send messages to their physician, and pick up health education information. Some enable patients to upload glucose and blood pressure readings and the like for tracking chronic illnesses. Some support full online consultation, in which patients fill out detailed forms with their symptoms and concerns and then get feedback from their physicians. A few insurers are beginning to reimburse for online encounters.

Most large EMR vendors have some sort of patient portal offering to go with their products, including the following:

- Allscripts: *http://www.allscripts.com/*
- Centricity EMR: *http://www.gehealtcare.com/usen/hit/products/centricity_practice/emr_index.html*
- eClinicalWorks: *http://www.eclinicalworks.com/*
- Epic Systems: *http://www.epicsystems.com/*
- McKesson: *http://www.mckesson.com/en_us/McKesson.com/*

There are also a number of independent vendors, including the following:

- Care Converge: *http://www.careconverge.com/*
- Medem: *http://www.medem.com/*
- Medfusion: *http://www.medfusion.net/*
- Medseek: *http://medseek.com/*

Capabilities and costs vary.

system has committed to having test results available online within three days of the test. Patients who get their test results online make 40 percent fewer calls to their physicians' offices.

Even very small practices can offer their patients this type of sophisticated computer access. Joseph Mambu, MD, a family practice physician in Lower Gwynedd, Pa., has been experimenting with a Web portal that allows patients to review their records, make appointments, and communicate with him and his staff. (For more about Dr. Mambu's practice, see Chapter 5.) Because his reimbursement structure doesn't allow time to swap e-mails with 3,000 patients, he's charging $6.50 per patient per month for the portal, at least for now. Between 50 and 75 of his patients are willing to pay the fee, and he says it works great for them.

Paying the Bill

The medical home may sound like primary care nirvana, but the bottom line is whether or not physicians can afford to take on all the front-loaded costs—possibly $50,000 per doctor or more—to change their practices to this model. The good news is payers and insurers are taking note and testing solutions that they hope will pay off for everyone.

Chapter in Brief:

- *The most common medical home reimbursement structure can be viewed as a pyramid: fee-for-service is the base, the middle layer is a care coordination fee to cover services not covered now, and the top layer is some form of pay-for-performance.*
- *Models are already being tested that reward physicians for showing measurable improvements in areas like diabetes or effective communication. Participating practices have to meet NCQA standards.*
- *Some say fee-for-service needs to be eliminated entirely in favor of a system that compensates primary care physicians for comprehensive care delivered through a medical home model.*

Trumping any other debate over the medical home is the question of payment. The basic problem is that the cost of changing to a medical home model is front-loaded, with big outlays for electronic records and other technology; salaries for case managers, health educators, and other physician-extenders; and payments to consultants to help the practice change the way it operates. But the benefits of fewer specialist and emer-

gency visits, less hospitalization, and better disease control could be years away. Who's ready to make the leap?

That level of risk is unfamiliar territory for most physicians. Unlike other businesses and professions, physicians haven't had to routinely assume large upfront costs to get an eventual return on their investment. While some well-organized practices can change to the new model and find profits better than ever, most physicians are, understandably, reluctant or unable to pay out of their own pockets without some guarantee of an immediate and sizable jump in income.

"If you're going to give patients better access and give clinicians better infrastructure and time to spend building those relationships, you need to pay them differently," says Ms. Abrams

While Dr. Mambu, who runs a three-physician primary care practice in Lower Gwynedd, Pa., could afford to spend $50,000 per physician on an EMR system for his medical home, he knows that's not possible for everyone.

of the Commonwealth Fund. Healthcare financing must shift from emphasizing volume to rewarding the quality of the interaction, the care taken with the medical history, the time spent explaining and reconciling medications, and the selection of the proper specialist.

Medical home reimbursement is a classic chicken-egg problem, says Dr. Keckley of the Deloitte Center for Health Solutions. "There's a honeymoon around the idea, but when the payers and the provider organizations sit down to negotiate, the conversations can end really abruptly. The physicians say, 'Pay me more and I promise we'll get better results,' while the payer wants to tie part of the payment to that promise," he says.

Still, physicians can't be expected to underwrite the costs of this huge change. Many practices operate on a shoestring and don't have extra capital. And in today's credit environment, borrowing is neither attractive nor, in some cases, feasible.

"There has to be a model of payment that's reasonable and isn't just break-even," says ACP's Dr. Barr. "It has to include

shared savings or some other form of incentive. It doesn't all have to come up front, but you have to make sure you're not creating a higher cost structure for physicians" without supplying a significant reward.

While Dr. Mambu, who runs a three-physician primary care practice in Lower Gwynedd, Pa., could afford to spend $50,000 per physician on an EMR system for his medical home, he knows that's not possible for everyone. "Primary care doctors are so strapped that they can barely keep their heads above water, so to ask them to take this on without any surety of compensation isn't going to happen," he says. "The first 2 percent of us look at it as an investment, but the other 98 percent are watching to see if we survive."

Payers Back Medical Homes

The reason those backing the medical home idea expect it to be more than just another short-lived quality improvement fad is that payers are on board and apparently willing to back that support with money.

"Blue Cross Blue Shield supports the concept 110 percent," says Sally Bleeks, RN, managing director of the office of clinical affairs for the Blue Cross Blue Shield Association. "We hope it will lead to better outcomes, better patient satisfaction, and also decreased cost," she says. Twenty-nine out of 39 Blue Cross Blue Shield plans have some form of medical home pilot test in progress; most of them began just this year.

The board of directors of America's Health Insurance Plans (AHIP), a consortium of more than 1,300 insurers, issued a statement in June 2008 strongly supporting the concept of the medical home and, significantly, the concept of paying the costs to coordinate that care. (See the full statement at *http://www.ahip.org/content/default.aspx?bc=31|44|23691*.)

"There's widespread agreement from stakeholders across the board that the current payment structure is not providing the right incentives in our healthcare system," says AHIP spokesman Robert Zirkelbach. "We need a system that rewards quality and value. With costs increasing as fast as they have been, there is a growing momentum to look at the payment system and see if we have the right incentives in place."

How Pyramid Reimbursement Works

The most common form of medical home reimbursement being used in current pilot tests can be portrayed as a pyramid. The largest component, at the base, is the usual fee-for-service. The middle layer is a care coordination fee to cover the services that aren't covered now: providing patient education; hiring a care manager to keep track of routine tests and screenings; installing an EMR system; and using phone, e-mail, or text messaging to communicate with patients. No one knows quite how big that care coordination fee ought to be. The pilot tests in progress are paying anywhere from $3 to $100 per patient per month. (See "One State Experiment: Medical Homes for All PCPs," p. 45, and "Humana: Testing a Three-Tiered Pay Program," p. 47.)

To make sure that the services billed under the fee-for-service component are the right ones, the top of the proposed pyramid is some kind of pay-for-performance, or gain-sharing, so that as the overall cost of care goes down, doctors will share part of the savings. "We want to pay for delivering better care rather than for doing more things," Ms. Bleeks says. Some medical home pilots already include the tip of the pyramid; others will incorporate it only after initial experience shows whether the model actually saves any money.

Primary Care Shortchanged

Bridges to Excellence (BTE), a pay-for-performance program backed directly by employers rather than by insurers, has been trying since 2002 to improve reimbursement for primary care. It's putting up real money—five- or six-figure sums for some medical practices—for measurable improvements in areas like diabetes and cardiac care, or for effective use of information technology. It recently added the medical home to the list of activities and practices for which it will pay.

For the medical home program, BTE will compensate physicians $125 per year per covered patient (i.e., a patient employed by one of the BTE participating employers) up to a maximum of $100,000 per year. That money is a bonus, over and above whatever patients' insurers are paying. To participate, practices have to achieve NCQA recognition (see Chapter 2) at Level 2 or 3 in two condition-specific programs (diabetes, cardiac care, or spine care) plus Level 2 or 3 recognition for use of information systems (called Physician Office Link by BTE and Physician Practice Connections by NCQA). Achieving NCQA's new Patient-Centered Medical Home recognition will also do the job.

Why now? BTE employers who either self-insure or purchase commercial insurance for their employees are interested in reducing their costs, especially for chronic disease care, says

One State Experiment: Medical Homes for All PCPs

Blue Cross Blue Shield of North Dakota, the state's biggest insurer, is sponsoring a medical home pilot project that includes almost all the state's primary care physicians. In January it began providing an annual payment of $100 per patient, over and above any visit fees or other charges, to physicians who act as a medical home for any patient with diabetes, hypertension, or heart disease.

In return, physicians agree to upload their patients' data to a central database so that all caregivers can access it; to adhere to standard practice guidelines for treating the targeted diseases; and to take extra steps to make sure their patients get other basic preventive services like mammograms, pap smears, immunizations, and colonoscopies.

Because Blue Cross Blue Shield covers about 85 percent of the commercially insured North Dakota population, or about 275,000 people, it almost has to spearhead any medical home efforts in the state, says Jon Rice, MD, senior vice president and chief medical officer. He estimates that 780 physicians will participate. The pilot program is made easier because most North Dakota physicians practice in one of several large multispecialty group practices.

The care management fee structure is experimental for now as Blue Cross Blue Shield gathers information about the costs of chronic disease care from program participants. "We may be able to start making more intelligent decisions about how to pay for [medical homes], maybe as some kind of risk-adjusted capitated payment," Dr. Rice says. For now, the care management payment is limited to the 40,000 to 50,000 North Dakotans who have one of the targeted chronic diseases, but a risk-adjusted payment could allow Blue Cross Blue Shield to pay the management fee for all patients.

So far the pilot program doesn't include specific performance targets, but Dr. Rice hopes to set some within two years, and perhaps tie them to additional payments.

François DeBrantes, BTE's CEO. He says primary care has suffered from the RBRVS, which Medicare and other insurers use to calculate reimbursement for medical services. The process of setting the values, conducted through a committee under the auspices of the AMA, has been dominated by specialists, Mr. DeBrantes says, which has kept payment for primary care functions relatively low. As a result, 70 percent of the employers' healthcare dollar is consumed in potentially avoidable complications, because primary care physicians can't spend more time per visit or to coordinate care, he says.

One Idea: Reward Comprehensive Care

Not everyone sees the virtue in maintaining fee-for-service reimbursement in a new payment system, claiming that the current system is a big part of the problem.

Some want to ditch fee-for-service payment for primary care entirely and replace it with a system that specifically rewards the care that the medical home provides. One of these advocates is Allan Goroll, MD, professor of medicine at Harvard Medical School and co-founder of Massachusetts General Hospital's primary care residency program as well as chair of the Massachusetts Coalition for Primary Care Reform.

Recommended BTE Rewards by Program

Program Level	Physician Office Link	Diabetes Care Link	Cardiac Care Link	Spine Care Link
3	$50 per patient per year			
2	$30 per patient per year	$200* per diabetic patient per year	$200* per cardiac patient per year	$50 per back pain patient per year
1	$15 per patient per year	$100* per diabetic patient per year	$100* per cardiac patient per year	$0 per back pain patient per year

**The per-patient rewards for DCL and CCL are $80/%160 respectively when in combination with POL rewards.*

Source: Bridges to Excellence, April 2009.

Humana: Testing a Three-tiered Pay Program

As part of its test of a medical home reimbursement system, the Louisville, Ky., insurer Humana is trying a three-tier plan. After fee-for-service, the next largest component would be a care management fee, currently pegged at $3 to $5 per patient per month. The third tier, some form of gain-sharing or pay-for-performance, isn't in play in this particular test while the company sorts out the other two tiers.

Humana began its medical home pilot project in May 2008 with 11 physicians and 800 patients in Atlanta. The insurer pegged those patients with the chronic conditions that cost it the most: diabetes, hyperlipidemia, and hypertension. The pilot practice, Wellstar, had just implemented an electronic medical record system a few months before the medical home project began.

What will constitute success? Marcia James, process manager in physician strategies at Humana, says that she expects to see improvements in measures such as hemoglobin A1c levels and blood pressure in the short term, and fewer emergency department visits and inpatient days down the line. And she'll be looking at basic metrics like patient and physician satisfaction.

"Once all the processes are in place, it makes the practice easier and more enjoyable for physicians and their staff, just because you know what's going on with patients and you feel more in control of their care," Ms. James says. "I don't know why a practice wouldn't want to do this."

He blames the current payment system for the recent erosion in the quantity and quality of medical graduates choosing primary care. "They've been shunning the field for almost ten years, and the work life is the number one reason," he says.

Dr. Goroll's goal is to compensate primary care physicians on the same level as specialists and to stop the system from rewarding volume alone. He opposes the pyramid reimbursement model because it's still primarily fee-for-service and thus relies on volume to a degree. "You see the nuttiness of volume when you see primary care practices and Wal-Mart fighting over who gets to treat a runny nose," he says. "We should pay comprehensively for comprehensive care."

He proposes a comprehensive annual payment based on the size of the physician's patient panel risk-adjusted so that physi-

Trying Out a Radical Change in Payment

The Capital District Physicians' Health Plan (CDPHP), an insurer in Albany, N.Y., is carrying on perhaps the most radical experiment in compensation for the medical home among three practices that include 15 physicians and five midlevel practitioners. For the next two years, it's trying out the payment scheme proposed by Allan Goroll, MD, of Harvard: a combination of a flat annual fee and bonuses based on quality of care.

Payments are based on the number of patients that call the practice their medical home, and each patient pool is risk-adjusted to come up with an appropriate base compensation for the physician or practice. And CDPHP is willing to stick its financial neck out to make sure the pilot works as well as it possibly can: Even though the insurer covers only 40 percent of the patients in the participating practices, it's pretending to cover all of them for the purpose of the test. That is, it will make sure physicians receive enough extra income to account for the per-patient management fee for all their patients, even though more than half of them are covered by other insurers.

Here's how it works. If Physician A's patients, as a group, need 1.5 times as much care as Physician B's patients, then Physician A would get a payment 1.5 times larger than Physician B. (Since CDPHP can only risk-adjust its own patients, it will assume that the rest of the practice's patients share the same risk characteristics as the 40 percent that it does know about.)

In terms of actual money flow, the change won't be immediately obvious because of the need to dovetail it with the existing system; but participating physicians should notice a big difference in their bottom line by the end of the first year. Physicians will keep billing all their payers on their usual fee-for-service basis; but because of the changes in practice stemming from the medical home, it's possible that they may bill for fewer services than before. CDPHP's risk-adjusted payments are designed to make up whatever difference there might be in the practice's fee-for-service income so that physicians can't lose anything by participating in the test.

Beyond that, CDHP is prepared to boost their revenues by as much as $85,000 per physician per year. The first $35,000 is automatic and is supposed to pay for the extra effort involved in medical home services, such as open access, phone and e-mail contacts, health education, and management of chronic illness. The other $50,000 will be paid out based on whether the physicians hit certain quality targets, such as whether patients receive the care needed under standard guidelines, whether they're happy with their doctor, and how well the doctor communicates.

The degree to which physicians qualify for that extra $50,000 will be the main measure of success, says Bruce Nash, MD, CDPHP's senior vice president and chief medical officer. "If patient satisfaction and good outcomes are there, we're happy to pay," he says.

The additional payments should move participating physicians' income into the $200,000 range, enough to start making primary care a more attractive profession, Dr. Nash says. If the test is successful, fee-for-service billing would eventually be replaced by a combination of a risk-adjusted annual fee and performance bonuses. Some services, like immunizations, will likely remain fee-for-service. All three practices already have electronic medical records, and they've been working with consultants from TransforMED for a number of months to make other changes.

cians with sicker patients get paid more. The payment would be enough to support the care team that's the basis of medical home care, and also the necessary information technology infrastructure. Dr. Goroll envisions that the base payment would be at least 40 percent more than what most primary care practices are now making on a fee-for-service basis.

The second part is a bonus of up to 25 percent of the base payment for achieving quality goals, outcomes standards that have been validated by national groups, patient satisfaction measures, and cost and efficiency targets. The bonus is risk adjusted, too, so that there's a proportionally bigger reward for improving the health status of a patient who was very sick to begin with.

Tests, procedures, specialty care, hospital expenses, and medications would still be paid by fee-for-service, at least until some complementary scheme could be devised.

Will it work? Dr. Goroll's ideas are getting their first real-world test with one payer and three primary care practices in Albany, N.Y. (For details see "Trying Out a Radical Change in Payment," p. 48.)

Seven Medical Home Experiences

While there are common elements to every medical home, there are many ways to start, adapt, and maintain one. This chapter examines a variety of experiences. Some practices are starting from the ground up as medical homes, while others are converting their existing systems and approaches to embrace medical home principles. Some of these are finding their commitment paying off while others are regrouping to try again. All of them are convinced they are onto something important for primary care.

Chapter in Brief:

- *Physicians seeking better ways to deliver chronic care management are implementing the medical home model with some success; however, taking on computer systems or struggling for reimbursement sometimes shifts the delicate financial balance into the red. To make a medical home work, think creatively in terms of revenue streams; ancillary businesses are one option.*
- *Teamwork, one of the hallmarks of a medical home, can work by streamlining the practice and giving patients a way to get quick, preventive care. Physicians benefit by putting their training to work with patients with complex treatment needs.*
- *No matter the size of the practice, physicians need determination and flexibility to stick with their medical home experiment.*

When is the right time to transition into becoming a medical home? Despite the challenges, expenses, and initial lack of extra compensation, some physicians have decided the time may as well be now. In this chapter we profile seven practices that are testing the medical home. Their

experiences vary: Some are getting extra pay, some aren't. Some are struggling financially more than others. The first three were sites in the AAFP's TransforMED national demonstration project (see Chapter 1), while the remainder made the change on their own. But in all cases the physicians are finding that practice-specific solutions—along with the awareness that comes with real-world experience—are keys to running a successful medical home.

Optimistic Despite the Challenges

Family Medicine, Geriatrics, and Wellness—Lower Gwynedd, Pa.

These days family physician Joseph F. Mambu, MD, sees about 20 complex patients a day rather than the 30 to 50 (ranging from average to complex) a day that he says is standard in a traditional practice. Even though his medical home practice is still struggling to find its financial footing, he is optimistic that it will all work out—eventually.

A former nursing home administrator, Dr. Mambu had never been happy with how primary care handles chronic disease. So when he set up shop in 2001, he went with a team—adding a nurse and a nurse practitioner—and resolved to deliver care differently and better. He didn't realize at the time that he was creating his own version of a patient-centered medical home.

Although he was satisfied with how his practice was doing, Dr. Mambu added what he calls "rocket fuel" to his practice in 2006 by becoming part of TransforMED, the AAFP's primary care project. As part of the test group, he received consulting services and coaching on such issues as time management and patient metric development.

All was financially well until about 2007, when the practice started installing an EMR system. While the system has now started to deliver the expected benefit, at that time the extra cost upset the practice's financial balance.

Extra money is starting to come in now as a result of the practice's medical home status. It's receiving some extra payments from insurers as a result of a medical home pilot project in southeastern Pennsylvania. Ultimately, Dr. Mambu expects a 10- to 12-percent increase in gross revenues from being part of the pilot project. And because his patient panel includes many aged

65 or older, he's keeping his fingers crossed that Medicare will adopt the medical home model of reimbursement. "That would put us over the top and give us money to invest," he says.

Meanwhile, the practice received its NCQA Level 3 medical home recognition in late 2008—one of the first practices in the country to do so. Dr. Mambu also is reaping the rewards of having the practice function just the way he always envisioned. Now that there are three physicians, two nurse practitioners, a registered nurse, and several medical assistants who are certified to draw blood and administer vaccines, most of the practice's patient care—sore throats, runny noses, and athletics physicals, for example—is handled by non-physicians.

The extra hands make it easier to offer a modified open-access schedule and to keep the office open three nights a week and on Saturday mornings. Dr. Mambu can even make the occasional house call.

"I think the doctors of the future will see fewer patients, send more e-mail, and concentrate their clinical work on patients who really need a doctor," he says.

Teamwork Pays Off

Trinity Clinic Whitehouse—Whitehouse, Tex.

Teamwork gained new meaning when Trinity Clinic Whitehouse, part of Trinity Mother Frances Health System in Tyler, Tex., was accepted into the TransforMED project in 2006.

The practice had been experimenting with being a medical home since about 2000 with open-access scheduling and an EMR. As part of the project, staffing changed so that each of the three physicians was matched up with a nurse. Patients now see the same doctor-nurse team whenever they come in. Because every team member has a specific job, it's easier to keep tabs on specific patients, and the practice can see more patients overall.

For example, the clinic offers special "QuickSick" same-day visits—a dozen slots around lunchtime and two at the end of the day—specifically for upper respiratory infections. It promises a half-hour turnaround for patients who choose to take one of these appointments.

The practice now has a panel of about 5,000 patients and the equivalent of two full-time physicians (three part-timers). "If

you'd asked me three years ago if that was too many [patients], I would have said yes, but now I don't think so," Melissa S. Gerdes, MD, says.

She's also changed her mind about what it means to be a medical home. "We thought it was principally about online services and group visits and open access," she says. "But it's the attitude that your practice has, not fearing change and transformation, and everyone working together."

"We thought [the medical home] was principally about online services and group visits and open access," Dr. Gerdes says. "But it's the attitude that your practice has, not fearing change and transformation, and everyone working together."

The clinic is doing reasonably well financially thanks to a supportive parent organization and decent reimbursement from local payers, according to Dr. Gerdes. None of the clinic's payers has offered any extra reimbursement for its medical home activities, but Dr. Gerdes is comfortable with the present arrangement for now.

"The expense is a big barrier, and I know a lot of practices are struggling, but each one has to look inside itself," she says. "It's my philosophy not to go after that bigger payment until you've done everything you can to increase your efficiency."

Other Business Opportunities

Romeo Medical Clinic—Turlock, Calif.

The Romeo Medical Clinic has found a way to be a medical home even though reimbursement models can't pay all the bills right now. Its solution: auxiliary businesses that subsidize the family practice, including a sports medicine practice and a corporate wellness and occupational medicine program.

The physicians—two brothers and a sister—also have an ownership interest in the Tower Health and Wellness Center, the building where the clinic has its home. The sandstone-colored building, adorned with wrought iron and Italian tile, is meant to evoke the feeling of Tuscany. It also houses a flower shop, an

Italian restaurant, a pharmacy, a dentist, and other tenants associated with a healthy lifestyle. A full-service health club may be in its future.

The Romeo Clinic served as a control or "self-directed" practice in the TransforMED National Demonstration Project because it had already been pursuing most of the recommended strategies on its own.

It has found that those extra businesses enable it to balance the books, allowing the practice to subsidize medical home-style care for its 2,000 patients with the help of eight medical assistants, a part-time dietitian, and a part-time behavioralist. Here are some examples:

- New patients or those having a physical get an hour-long appointment; everyone else gets half an hour.
- Patients can e-mail their physicians.
- The practice is working on a Web portal so patients can access their records. Meanwhile, a medical assistant calls them with lab results that are automatically entered into the practice's EMR system.
- In keeping with the practice's emphasis on wellness, its Website includes a form that patients can fill out to get matched up with a fitness buddy for the sport or workout of their choice.
- The waiting room offers multiple gaming systems, wireless Internet access, fresh-brewed coffee, multiple TVs, and music.

In addition, the physicians get to run the practice the way they planned when they opened their doors seven years ago. "Our practice is fun," says president and co-founder Mike Romeo, MD. "We're not frustrated, we're not disenchanted, and we enjoy what we do."

Learning to Make—and Adapt to—Big Changes

Renaissance Health—Arlington, Mass.

Rushika Fernandopulle, MD, quit his job brainstorming ideas on how to transform primary care away from today's volume-driven, reactive system to do something radical: actually put those ideas into practice.

In 2004, he left the Harvard Interfaculty Program for Health Systems Improvement, a health policy research group. He and Pranav Kothari, MD, took out second mortgages and invested

$1 million in a primary care practice in the Boston suburb of Arlington, Mass. They operated on a model they believed combined the best of the small-town doctor tradition with 21st-century information technology, and christened their endeavor Renaissance Health. The practice had all the hallmarks of what's now called the medical home: personalized health assessments, group visits, online medical records, and lots of communication.

"We would call people to see if they were taking their antibiotics," Dr. Fernandopulle says. "We caught lots of potentially bad things by calling people up."

They also offered Pilates and yoga classes, talks on health topics, and even a group that got together to walk every day.

The practice charged a monthly membership fee—ultimately $55 though adjusted for those who couldn't afford it—on top of whatever it billed insurers for care provided, a format Dr. Fernandopulle calls "concierge lite." The two doctors both worked a part-time schedule and had built up to about 450 patients by 2006.

But the practice started to get negative feedback from insurance companies, which ultimately either dropped the practice or made it difficult to use. Dr. Fernandopulle believes that happened because he and his partner regarded themselves not as agents of the insurers but as advocates for their patients, and, unlike most physicians in the state, weren't part of a large group or network.

The doctors called it a day in late 2006, taking away several lessons from the experiment. First, they felt that they had to go to another state, and they are now implementing their care model on a consulting basis for various organizations, including Boeing Corp. and the Local 54 Trust Fund, which provides health coverage for unionized Atlantic City casino workers.

Second, they needed to concentrate their efforts on the chronically ill, who would benefit most from the kind of intense personal attention that the model provided.

And third, they took a firmer stand on the need to restructure the financing system to encourage desirable behavior. As part of their work with the casino workers' union, Drs. Fernandopulle and Kothari started a practice in 2007 within the Atlantic City-area healthcare system Atlanticare to test the concept with 800 to 900 invitation-only, chronically ill patients. The practice has

the two physicians, a nurse practitioner, four health coaches, a part-time nutritionist, and a part-time mental health worker. Co-pays are waived for medications and office visits.

Big Player Makes it Work

Geisinger Health System—Danville, Pa.

Large-scale change is possible. Just ask the physicians at Geisinger Health System, which began experimenting with the patient-centered medical home in 2007 and has since expanded to include half of its 40 primary care sites. Its success—e.g., hospitalizations have decreased 15 to 20 percent, and the investment has returned $2.50 for every dollar spent—has attracted the attention of provider and payer groups nationwide.

Geisinger is a big player in central Pennsylvania. It's an integrated system with its own health insurance plan and a lot of physicians on staff. It's also a leader in installing and using EMRs. All those advantages give the organization latitude to try out care innovations.

Geisinger focused its medical home experiment on coordinating outpatient and clinic visits, hospital stays, home care, and

Geisinger's primary care physicians (all employed by the organization) received a salary bump of $1,800 a month, and each practice site is receiving an extra $5,000 to $10,000 a month to redesign care. In addition, if physicians beat the health plan's targets for quality and cost of care, they receive half of any savings.

end-of-life care for Medicare beneficiaries. Each of the 20 practice sites got at least one on-site case manager, who works aggressively with the 15 percent of patients who are most seriously ill and their families, developing an individual plan for monitoring symptoms and taking action to head off crises. For example, those with chronic lung disease get a kit of antibiotics and steroids that they can use at home to ward off infections. Other staff members focus on getting less-ill patients in for routine exams and screenings.

The experiment has wrapped in a network of preferred specialists and ancillary providers who have the most cost-effective contracts with the health plan. Patients can go anywhere, but the preferred providers are clued in to the medical home aspect of their care; and the primary care physicians are encouraged to refer patients to them.

For these changes, Geisinger pays fairly generously. Primary care physicians (all employed by the organization) received a salary bump of $1,800 a month, and each practice site is receiving an extra $5,000 to $10,000 a month to redesign care. In addition, if physicians beat the health plan's targets for quality and cost of care, they receive half of any savings.

From Diabetic Management to Medical Home

MeritCare Health System—Fargo, N.D.

In 2005, MeritCare Health System, an integrated network on the North Dakota/Minnesota border, told its largest insurer, Blue Cross Blue Shield of North Dakota, that it could manage its diabetic patients better than the disease management company that Blue Cross Blue Shield was contracting with.

"We didn't see that the company was helping, and it created lots more paperwork," says Julie Blehm, MD, MeritCare's managing physician partner of clinic internal medicine. "One of our best doctors just said, 'This is a pain.'"

When Blue Cross Blue Shield accepted MeritCare's challenge, it was the first step in turning four of the system's 30-plus clinic locations into patient-centered medical homes. The initial pilot project involved four physicians and 200 diabetic patients, with a comparably sized control group. Blue Cross Blue Shield paid $20,000 in seed money for changes in office procedures, funded a half-time disease management nurse, and paid an annual care management fee of just over $100 per patient. Blue Cross Blue Shield found itself saving $500 per diabetic patient per year and split the savings equally with MeritCare.

Next the project expanded to 18 to 21 healthcare providers in three locations and included patients with heart disease and hypertension. It saved $300 per patient. Recently MeritCare added its family practice residency clinic, where 25 residents rotate, into the new model. A patient with one or more of the target diseases meets with a care management nurse, who cares for

and tracks that patient from then on. If the patient agrees, the nurse commits to a regular schedule of phone reminders about tests, appointments, and anything else that needs tracking.

Patients stay in the exam room after the physician leaves, and the scheduler and a nurse come in to arrange the next appointment, give flu shots or any other scheduled immunizations, and answer questions.

The participating practices have eliminated the previous two-step reception and registration process for all patients. Now it's all done at once, substantially reducing patients' waiting room time. Patients stay in the exam room after the physician leaves, and the scheduler and a nurse come in to arrange the next appointment, give flu shots or any other scheduled immunizations, and answer questions.

Even though the test was conducted only with Blue Cross Blue Shield, the practices treat all chronically ill patients the same, regardless of insurance. They're also tracking preventive measures for all patients, chronically ill or not, including colonoscopies, mammograms, and use of generic drugs.

In the statewide medical home pilot project that's coming up (see Chapter 4), MeritCare will continue to get a management fee per patient, but that fee will be subtracted from its share of any savings that it splits with Blue Cross Blue Shield.

Dr. Blehm sympathizes with her patients' management challenges because she herself has Type 1 diabetes. "I've been to medical school and had all the advantages, and I find it hard to keep on top of things some days," she says. "Patients can do it, but they need some assistance from us."

Building What You Want from Scratch

Whole Child Pediatrics—Lakewood Ranch, Fla.

Whole Child Pediatrics is an experiment in building an ultimately profitable patient-centered medical home from the ground up.

Fresh out of residency in 1999, pediatrician Xavier Sevilla, MD, went to work in a community health center, where his

ideals of partnering with his patients for their care collided with reality. "We had very long waits, frustrated and angry patients, and basically an uncoordinated, chaotic care environment," he says. He soon became involved in trying to fix what was wrong with the center. That effort led him to join the AAP's quality improvement steering committee and later the four-society committee that devised the medical home principles described in Chapter 1.

He was so fascinated that when his center wanted to open a satellite office, he jumped at the chance to build a medical home from scratch. He opened the practice in 2007 and grew it to 1,500 patients within a year, adding a nurse and a nurse practitioner. All along he experimented with the various elements of a medical home, like open access, electronic communication, quality measurement, and comprehensive care. He likens the experience to "changing the tires on a moving car."

The practice reached the financial break-even point last summer and is now starting to show a profit. While Dr. Sevilla attributes part of the rapid growth to his acceptance of Medicaid and uninsured patients, he says that can't be the whole story, and he thinks his relatively novel model of care must have something to do with it. "I certainly inherited a minority of patients who followed me from the center, but the majority are new," he says. He

Just as he always hoped, collaboration with patients is one of the hallmarks of Dr. Sevilla's practice. "This is what I thought practice would be like when I was a medical student," he says.

estimates that half his patients are in the state Medicaid program, and another 30 to 35 percent have commercial insurance. The rest are uninsured. Most of his new patients have come to him by word of mouth, referred by friends and family.

Just as he always hoped, collaboration with patients is one of the hallmarks of Dr. Sevilla's practice. "This is what I thought practice would be like when I was a medical student," he says.

If a child develops a chronic condition, for example, Dr. Sevilla will explain the pros and cons of all the possible treat-

ment options and make a recommendation to the family. If the patient's family decides to do something different, he normally abides by that decision.

"My role is to be an information broker," he says. "I find that when patients have the information in front of them, they generally make the same decision that I would, but they really appreciate being given an opportunity for control."

He wanted to give patients even more opportunities for input by including them on an advisory group. At times it has provided surprises. When he started to think about adding staff, for example, a group survey yielded a graph of the qualities the group was looking for in a new nurse practitioner or physician. "There's no way I would have come up with that [graph] on my own," he says. When he wanted to add evening hours one day and shorten another, the group convinced him that Thursday would be the best short day, even though he was leaning toward Wednesday.

His affiliation with the community health center simplifies his life. First, he can use the organization's EMR system and its billing and collection services, which together represent a huge savings. He can also swap call duty with the pediatricians on staff there, so that he can have weekend time off and even the occasional vacation.

None of the payers in his market pay extra for his medical home service, but Dr. Sevilla says it doesn't matter. "You don't need any money to do open-access, patient-centered care, coordinated care, and comprehensive care," he says, although some tools, like a patient registry or an EMR, help.

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Rittenhouse DR, Casalino LP, Gillies RR, Shortell SM, Lau B. Measuring the medical home infrastructure in large medical groups. *Health Affairs*. 2008;27:1246-1258.

Websites

America's Health Insurance Plans' Board of Director's Statement on Core Principles Integral to the Development of the Patient-Centered Medical Home is available.
Planshttp://www.ahip.org/content/default.aspx?bc=31|44|2369

American College of Physicians explains the patient-centered medical home, its costs, and benefits, and provides links to more information, resources, and current demonstration projects.
http://www.acponline.org/running_practice/pcmh/

American College of Physicians includes more than 20 vendors in its members-only Electronic Health Records Partners Program.
http://www.acponline.org/running_practice/technology/ehr/partner_program

Bridges to Excellence, a pay-for-performance program backed directly by employers, offers physicians incentives and rewards.
http://www.bridgestoexcellence.org

Center for e-Health Information and Adoption, the Patient-Centered Primary Care Collaborative's section that focuses on health information technology, offers newsletters and updates.
http://www.pcpcc.net/node/286

Center for Medical Home Improvement offers a Medical Home Improvement Kit.
http://www.medicalhomeimprovement.org/mhik.htm

Centers for Medicare and Medicaid Services offers background and updates on current projects including its Medical Home Demonstration Project.
http://www.cms.hhs.gov/DemoProjectsEvalRpts/MD/list.asp

Certification Commission for Healthcare Information Technology offers EHR products that it endorses.
http://www.cchit.org

Commonwealth Fund offers resources for grant applicants for its Patient-Centered Primary Care Initiative.
http://www.commonwealthfund.org/Content/Program-Areas/High-Performance-Health-System/Patient-Centered-Primary-Care-Initiative.aspx

National Center for Medical Home Implementation, an American Academy of Pediatrics resource, provides background and fact sheets on medical homes plus links to marketing tools such as posters and brochures, and a medical home e-letter.
http://www.medicalhomeinfo.org/

National Committee for Quality Assurance offers standards, guidelines, and survey tools that are part of its Patient-Centered Medical Home recognition program.
http://www.ncqa.org/tabid/631/Default.aspx

Patient-Centered Primary Care Collaborative, a coalition of employers, health plans, physicians, and others interested in the medical home, has links to reports, videos, demonstration projects, webinars, and more.
http://www.pcpcc.net

TransforMED, an American Academy of Family Physicians subsidiary that offers medical home facilitation, offers online resources and assessments.
http://www.transformed.com