

Patient-Centered Medical Homes

January/February 2008

Quality Matters is a newsletter from The Commonwealth Fund. Published bimonthly, the newsletter explores issues of quality and efficiency in health care.

Past issues of *Quality Matters* are available on The Commonwealth Fund Web site at commonwealthfund.org

Welcome to *Quality Matters*, a bimonthly roundup of news and opinion on quality and efficiency, information technology, performance improvement initiatives, and policy innovations.

- In Focus: Are Medical Homes Primary Care's Answer?..... 1
- Case Study: Qualifying as a Patient-Centered Medical Home 6
- News Briefs 12
- Recent Publications of Note..... 13
- Editorial Advisory Board and Team..... 16

In Focus: Are Medical Homes Primary Care's Answer?

Summary: Support for patient-centered medical homes is surprisingly broad, given that little is known about the cost of establishing and sustaining medical homes, and the appropriate mechanisms to reimburse primary care practices for the related services they must provide. The concept is being tested in several pilots.

By Vida Foubister

With the National Committee for Quality Assurance's (NCQA) release of new standards for patient-centered medical homes in early January, health care providers and purchasers now have a means to differentiate these practices and assess whether they add value to patient care.

"People are familiar with the concept," says Xavier Sevilla, M.D., a Florida pediatrician. "The problem is there hasn't really been, up to now, a tool or a way to recognize what practice is a medical home vs. one that isn't.... If you ask all pediatricians if their practice is a medical home, probably 100 percent of them would tell you their practice is a medical home."

But few physician offices—in pediatrics or other primary care specialties—would qualify for recognition as a patient-centered medical home under the new NCQA standards. "It's more than just a medical home, it's a medical home that's responsive to the needs of

patients," says Paul Grundy, M.D., M.P.H., director of healthcare, technology, and strategic planning for IBM Global Wellbeing Services and Health Benefits and chairman of the Patient Centered Primary Care Collaborative, a coalition of national employers, insurers, medical specialty societies, and consumers.

There is widespread agreement that primary care is in crisis. Patients aren't satisfied with the care they're receiving, purchasers and insurers are disappointed with its cost and quality, and medical students aren't choosing to practice primary care medicine.

Patient-centered medical homes promise to change the status quo by enabling physicians to provide comprehensive primary care through stronger partnerships with their patients. Those that choose to integrate elements of this new model into their practices now have a mechanism to prove this distinction to patients. But in order for these enhanced services, such as same-day appointments and pre-visit planning, to be sustainable, this designation will also have to be recognized and rewarded by payers.

"Payment reform has to go hand-in-hand with practice redesign for this to work," says Christine A. Sinsky, M.D., an internist at Medical Associates in Dubuque, Iowa, and a charter member of NCQA's Committee on Physician Programs. "We can't come up with another set of expectations for primary care physicians that are unfunded."

A New Approach to Care

The American Academy of Pediatrics (AAP), one of the four professional societies that have come together in support of this new model of care, first used the term "medical home" in 1967 in reference to the care of children with special needs. More recently,

the AAP, along with the American Academy of Family Physicians, American College of Physicians, and the American Osteopathic Association, has refined the concept and expanded it to the care of all patients. As jointly defined by the four professional societies, patient-centered medical homes encompass the following seven principles:

- each patient receives care from a personal physician;
- the personal physician leads a team of providers who are responsible for a patient's ongoing care;
- the personal physician is responsible for the "whole person";
- a patient's care is coordinated across the health system and community;
- quality and safety are hallmarks of the practice;
- enhanced access to care is offered through open scheduling, expanded hours, and new care options such as group visits; and
- the payment structure recognizes the enhanced value provided to patients.

NCQA developed the Physician Practice Connections—Patient-Centered Medical Home standards in parallel to these efforts. The original recognition program, which has been in place since 2004, grew out of two processes: research funded by the Robert Wood Johnson Foundation to develop a practical tool that assesses an ambulatory practice's use of the [Chronic Care Model](#), and work with GE in the early stages of the [Bridges to Excellence](#) incentive program using the Six Sigma approach to identify errors in office practice.

More recently, efforts to develop practice-level, patient-centered care measures and reach consensus on these measures among NCQA and the four medical specialty societies, funded through Commonwealth Fund grants, led to the addition of 18 such

measures to the Physician Practice Connections standards. NCQA's revised recognition program includes nine standards for medical practices to meet, focused on patient access and communication, patient tracking and registry functions, care management, patient self-management support, electronic prescribing, tracking of patient tests, referral tracking, performance reporting and improvement, and advanced electronic communications (see NCQA's [Web site](#) for more details). Practices must pay an application fee, which varies with the number of physicians at the practice site and may be discounted through participation in recognized programs, and apply for recognition every three years. NCQA requires practices to document how they meet specific requirements and randomly audits 5 percent of those that apply.

"If done right, this will be very transformational for primary care," says Greg Pawlson, M.D., M.P.H., executive vice president of NCQA. He expects the Physician Practice Connections—Patient-Centered Medical Home program, like NCQA's other recognition and certification programs, to evolve, adding new elements as practices start meeting the current standards.

Among the changes John H. Wasson, M.D., professor of community and family medicine at Dartmouth Medical School, would like to see in future iterations of the recognition program is more information from patients about their care experiences, as opposed to relying on provider documentation of medical processes. "The simplest way to ask about access is to just ask the patient," he says. Others have recommended including a measure that assesses practices' cultural competency and community involvement.

Proving the Model

Since 2004, 283 practice sites, representing 3,499 physicians, have been recognized by the Physician Practice Connections program. However, most of these sites—97 percent—received this recognition as part of the Bridges to Excellence program, and thus had a financial incentive to provide medical home services in their practices.

Because most primary care physicians working in small groups do not have access to, and those within academic medical centers might not have direct control of, sufficient resources to create and sustain patient-centered medical homes, several pilot programs are being developed to test the effectiveness of payment mechanisms that reimburse physicians for their value—and anticipated cost savings.

Among the reimbursement models that have been proposed for this model of care is the American College of Physicians' [hybrid payment structure](#). It would include a fee-for-service component; a coordination of care monthly fee to cover care provided outside of face-to-face visits and implementation of health information technology and other systems, which would be risk-adjusted for patients' illness burden; and a pay-for-performance bonus. Another, outlined in a recent *Journal of General Internal Medicine* [article](#), features monthly, per-patient payments with incentives for providing effective, efficient, and patient-centered care.

Other research led by the Urban Institute, and cofunded by the American College of Physicians and The Commonwealth Fund, aims to evaluate the investment necessary for practices to implement patient-centered medical homes. "Nobody fully understands yet what it will cost for a practice to transform itself into a patient-centered

medical home, both the start-up and transition costs and the ongoing costs beyond that," says Deidre S. Gifford, M.D., M.P.H., chief of health policy and programs at Quality Partners of Rhode Island.

Equally important, these pilots will test the effectiveness of patient-centered medical homes. There is substantial empirical evidence supporting features of the model, such as an [international survey](#) led by The Commonwealth Fund and published in *Health Affairs*, which found accessible, coordinated care is associated with better preventive care and chronic disease management as well as better patient experiences. However, little research has been done to demonstrate that patient-centered medical homes, as a whole, have better quality and efficiency.

Another aspect of this model that will be watched closely is its effect on health care disparities. Commonwealth Fund [research](#) suggests patient-centered medical homes could ameliorate or even eliminate racial and ethnic health disparities.

Multiple Pilots

NCQA's new standards will enable researchers to "do some apples-to-apples comparisons in terms of effectiveness and pace of implementation" across these demonstration programs, Gifford says.

Funded by the American Academy of Family Physicians, [TransforMED](#), in June 2006, launched a 24-month demonstration project with 36 family medicine practices from across the United States. Among the patient-centered medical home features that have been found to be important, says Terry McGeeney, M.D., M.B.A., president and CEO of TransforMED, are using technology, managing access to care, accessing evidence-

based reminders at the point of care, providing patients with the option of group visits, and ensuring the right people are doing the right jobs.

A three-year Medicare Medical Home Demonstration will be launched in eight states in 2009. It will provide physicians who participate in the program with a "care coordination fee" for managing the care of Medicare beneficiaries with multiple chronic conditions. Physicians also will be able to share in any system-wide savings that may result.

Other pilots are working to engage multiple payers, so that practices have a financial incentive to participate. "In any given market, you need to have [enough patients] enrolled so that doctors aren't doing something for just a tenth of their population," says Grundy of the Patient Centered Primary Care Collaborative.

These pilots include a multi-payer, public-private demonstration led by Quality Partners of Rhode Island, which is in the final stages of coming to an agreement between providers and payers on specific elements of the program. The physician payment structure, a core component of the pilot, has been a sticking point. "The payers are looking at it from the standpoint of being cost neutral and the providers are looking at it also in terms of being cost neutral, but they're coming at it from opposite angles," Gifford says. "The payers obviously don't want to invest lots of money in a program where they don't think they'll see a return in either cost or quality. The practices don't want to commit to providing a set of services if the payment coming from the payers isn't going to cover those services."

UnitedHealth Group has plans for a multi-payer pilot in several geographic regions. However, its first demonstration, a "proof of

concept" pilot to launch early this year, will test the patient-centered medical home model among Florida practices with a high number of UnitedHealthcare patients. As part of the implementation process, UnitedHealthcare will support practices' efforts to engage patients—for starters, by choosing a personal physician, something that to them might sound familiar to a "gatekeeper." Says Dawn Bazarko, R.N., M.P.H., the insurer's senior vice president of clinical innovation: "We're going to remove every barrier possible for [patients] to seek care in a medical home," perhaps even waiving copayments.

Group Health Incorporated and HIP Health Plan of New York are also planning a two-year demonstration. Central to this project is the random assignment of 50 adult primary care practices to either supported or comparison groups. The supported group will receive revised reimbursement, and assistance with care management and practice redesign, as they transition to patient-centered medical homes. An evaluation of the two groups' success, supported by The Commonwealth Fund, will use NCQA's new recognition program to assess the extent to which medical practices adopt the principles of medical homes. Other data will be used to assess clinical outcomes and patient experiences.

Pushing Forward

With the NCQA standards in place, patients might soon have higher expectations for the care they receive through recognized primary care practices. "It's a little like going into a Starbucks," says McGeeney of practices that meet the highest recognition level. "You know what you're going to get, the quality is going to be the same, and the service will be the same."

However, primary care providers and others will need to educate patients about patient-centered medical homes, as many might not be familiar with this new model of care. "Consumers are going to need to hear about this through trusted sources, so they see it as a system of care that will benefit them—not a gatekeeper system or yet another attempt to limit care or reduce cost," says Debra L. Ness, president of the National Partnership for Women & Families. "The medical home has a lot of promise for creating a system in which patients have an ongoing relationship with a primary care provider who can help them get the care that they need."

Physicians who have transitioned their practice to a patient-centered medical home are likely to be strong advocates of the model. "For me, the motivator was getting home at a reasonable time and actually dealing with patients who were not going to shout at me about why I was coming into the room an hour after they've been there," says Sevilla, who led a Florida multi-specialty group practice's transition to a patient-centered medical home. "Practicing like this is very different. It's challenging to surrender a little bit of power and authority and give it to the patient and, at the same time, really rewarding because you really feel that connection with the patient."

Sinsky, whose Iowa practice integrated processes that have subsequently been labeled as elements of a patient-centered medical home, says both she and her patients have benefited from the changes. Its higher nurse-to-physician ratio gives her more time to bond with patients and involve them in medical decision-making. Pre-visit planning, which includes planning for the next appointment at the conclusion of each visit, ensures that laboratory results and other diagnostics are scheduled in advance and available to discuss with patients in real time.

"The medical home can be a good roadmap for physicians as we attempt to redesign our practices and, fully implemented, I think it

can greatly improve the quality of care," she says.

[<back to top>](#)

Case Study: Qualifying as a Patient-Centered Medical Home

By Vida Foubister

Summary: Hudson River HealthCare's experience in multiple quality improvement collaboratives and in meeting its requirements as a federally qualified health center has proved beneficial in its efforts to provide high-quality, patient-centered care.

Issue

Early this month, the National Committee for Quality Assurance (NCQA) released a revised set of standards to assess a physician practice's use of patient-centered, coordinated care processes. The Physician Practice Connections—Patient-Centered Medical Home program was developed in collaboration with four medical societies, the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians, the American Osteopathic Association, as well as the Patient Centered Primary Care Collaborative, a coalition that includes large employers (see [In Focus](#)). These groups have agreed to use the NCQA program to recognize practices as patient-centered medical homes in demonstration projects nationwide, giving it the potential to fundamentally shape the redesign of primary care practice.

This case study examines the steps Hudson River HealthCare took to adopt the features of a patient-centered medical home.

Organization

Hudson River HealthCare, a federally qualified health center, provides care to nearly 50,000 patients at 14 sites in New York State. Its first site, in Peekskill, was opened by local residents and religious leaders in 1975 to meet the needs of the community's underserved population. Hudson River HealthCare is governed by a consumer-majority board, whose composition mirrors the health center's diverse patient population. It provides 200,000 health care visits annually to patients in Peekskill, Beacon, Poughkeepsie, Amenia, Dover Plains, Pine Plains, New Paltz, Goshen, Walden, Monticello, and Greenport, L.I. The health center offers a range of medical specialties, as well as key support services like health education and transportation.

Anne Kauffman Nolon, M.P.H., president and CEO, who has provided guidance to the health center for more than 30 years, and Paul J. Kaye, M.D., a pediatrician and Hudson River HealthCare's chief medical officer, lead the health center's improvement efforts.

Target Populations

The health center's mission is to increase access to comprehensive preventive and primary care and improve the health status of patients in medically underserved communities. Its patients include the rural and urban poor and uninsured, pregnant women, migrants and immigrants, agricultural workers, the homeless, children

and adolescents, the elderly, and those with HIV or substance abuse problems.

Key Measures

Hudson River HealthCare is accredited by the Joint Commission. It is recognized through the NCQA Physician Practice Connections program, an enhanced model of care that features open scheduling, expanded hours, and communication between patients, physicians, and staff. The health center participates in several national quality improvement collaboratives.

It currently tracks seven strategic aims and measures, with the goal of providing safe, timely, effective, equitable, patient-focused, accessible, and vital care (Table 1).

Implementation Timeline

Hudson River HealthCare embarked on its "quality journey" in 1993. It applied for recognition under NQCA's Physician Practice Connections program, the precursor to the Physician Practice Connections—Patient-Centered Medical Home program, in 2006.

Process of Change

Hudson River HealthCare's efforts to measure and improve patients' care experiences began with its participation in the Bureau of Primary Health Care's Together for Tots Immunization Project. Using Centers for Disease Control and Prevention software, providers measured immunization rates for two-year-old children every six months and received coaching on strategies to increase these rates.

In 1996, the health center worked with Roger Coleman, M.B.A., currently the general manager of Coleman Associates, to reengineer patient visits. Clinic flow was

Table 1: Hudson River HealthCare's Strategic Aims and Measures	
Safe	Aim: 100 percent of patients have electronic health records (EHRs) Measure: EHR reports of encounters by provider
Timely	Aim: Same-day appointment available with own provider; average office visit cycle time of 45 minutes or less Measure: Time to third next available appointment; average cycle time
Effective	Aim: Improve health outcomes through preventive and planned care model Measure: 90 percent of two-year-olds are fully immunized; 90 percent of diabetes patients will have two HbA1c tests performed within one year, with at least three months between tests
Equitable	Aim: Eliminate differences in clinical care and health status between racial, ethnic, and socioeconomic groups Measure: No disparity by race or socioeconomic characteristics for all effectiveness measures
Patient-focused	Aim: 100 percent of patients recommend the health center to friends and family Measure: 100 percent of patients reply "Agree" or "Strongly Agree" to the following statement on the patient satisfaction survey: "I would recommend this practice to my friends and family."
Accessible	Aim: Serve 50 percent of center's target population Measure: Evaluate the health service penetration rate for underserved and other target populations in specified service areas
Vital	Aim: Achieve high productivity and staff satisfaction Measure: 20 billable patient visits per primary care provider per day; 90% staff retention

redesigned so patients could go directly to the appropriate clinical areas to receive care and did not have to wait in long lines to arrange payment. "We learned some principles but we were still struggling with how do we get more efficient and make it easier for patients to get in," says Kaye.

In 1998, the health center joined 19 other practices in the Institute for Healthcare Improvement's (IHI) Access and Efficiency Breakthrough Series, which introduced it to the concept of open access. Also called "same-day scheduling," it involves redesigning scheduling systems to enable physicians to offer same-day appointment to patients, regardless of the nature of their medical need. To do this, the health center has focused on reducing its "time to third appointment," a standard measure of access to care that indicates how long a patient must wait to be seen. This is the average length of time, in days, from when a patient makes a request for an appointment to the third next available appointment for a new patient physical, routine exam, or return visit. "The whole principle of open access becomes see the patients when they want to be seen, preferably today if that's what they want," says Kaye. A second component of the IHI series was efficiency, and the health center worked to decrease its average office visit cycle time, focusing first on its Beacon site and later across the health center's sites.

To maximize access for its underserved patients, the health center locates its sites in downtown areas, on public transportation routes, and in economically disadvantaged communities. It has evening, Saturday, and Sunday appointments, as well as a 24/7 answering service with physicians on call. Pediatric nurse practitioners also are available to take first calls from patients.

Other access initiatives include Casa de Salud, modeled after care systems in Mexico, which

offers open appointments on Wednesday nights to meet the needs of a new Ecuadoran immigrant population; a mobile medical van to reach out to migrant workers; a mobile dental van to address patients' oral health needs; and co-locating social services, health plan enrollment, and other ancillary services at its sites.

Recently, Hudson River HealthCare has found that group visits with multiple health disciplines, a component of the patient-centered medical home model, are very effective for providing care to its population. These visits enable patients to obtain all the services they need under one roof, from dental care to diabetes education. As the visits are not reimbursed, the health center charges patients a \$25 fee. "We're doing it even though we're losing money," says Kathy Brieger, vice president of quality operations.

In 2000, Hudson River HealthCare participated in the Bureau of Primary Health Care and Health Resources and Services Administration Diabetes II Health Disparities Collaborative. It learned how to use the Chronic Care Model, which outlines components of good care for chronic illness: self-management support, or providing information and systems to help patients and their families manage their illness; delivery system design, including organized visits and multidisciplinary care teams; decision support, such as reminders and standing orders; and use of clinical information systems, including disease registries, to improve patient care. The health center has since disseminated this knowledge to additional sites and other chronic conditions.

Also in 2000, the health center adopted a first-generation electronic health record (EHR) system.

Hudson River HealthCare participated in the Health Resources and Services Administration HIV Collaborative, beginning in 2002, and was one of five community health centers nationwide participating in the National Prevention Pilot Collaborative in 2004. A further effort was its participation in the Primary Care Development Corporation Redesign Collaborative, which helped leadership at the health center's two Poughkeepsie sites understand their role in transforming care. "The team that had been chosen to work on the whole process came together and started to talk our language," says Nolan. "They proved the case for redesign of the patient visit and their involvement in it."

Also, as part of the IHI Planned Care Innovation Community in 2005, Nolan and Kaye attended IMPACT network meetings and were exposed to IHI's white paper, written by James L. Reinertsen, M.D., "Seven Leadership Leverage Points for Organization Level Improvement in Health Care." (IMPACT is a membership network that brings health care organizations together to improve clinical outcomes, patient and provider satisfaction, and financial performance.) This further opened their eyes to "what you need to do to move an entire organization in the direction of quality care," says Kaye.

Results

By 2006, those involved in the various quality improvement collaboratives came to a similar conclusion. "You have to change the efficiency of your system to get enough staff time and enough resources to be able to do something different for every patient," says Kaye. The health center's leadership decided to bring staff members together for a day-long "harvesting meeting," at which they ranked the key changes that had to be

made in order to transform the practice. These changes included:

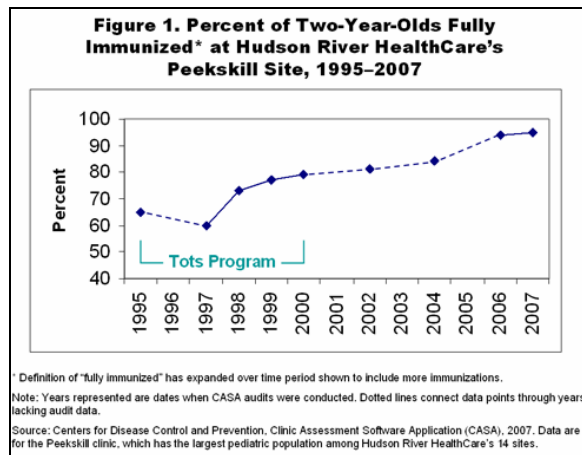
- the need for chart preparation and visit planning;
- care team huddles, for example, regular meetings between members of multidisciplinary care teams;
- technology to support communication across systems of care;
- cross-training of staff members to enable them to perform more than one team function;
- EHR implementation;
- standing orders, or a course of treatments and tests each patient with a given diagnosis receives, unless a physician feels there is a reason to change or augment the order; and
- establishing a phone line that patients can call to refill prescriptions.

As a result of this process, Hudson River HealthCare adopted its current strategic aims and measures (Table 1). In 2007, Hudson River HealthCare was recognized through NCQA's Physician Practice Connections program, which assessed its care processes in nine areas. Its experience in the collaboratives, as well as its compliance as a federally qualified health center and accreditation by the Joint Commission, made qualifying "pretty easy," says Kaye.

The health center, which has 493 employees, has ongoing staff development programs and measures staff satisfaction annually. Full-day training programs are an important component of this process, as they increase staff members' competency and satisfaction with their roles. Hudson River HealthCare has worked, through staff wellness and other programs, to reduce turnover rate. As a result, it has dropped from 25 percent in 2005 to 21 percent in 2006, and down to 11 percent last

year. Its goal is to achieve 10 percent staff turnover annually.

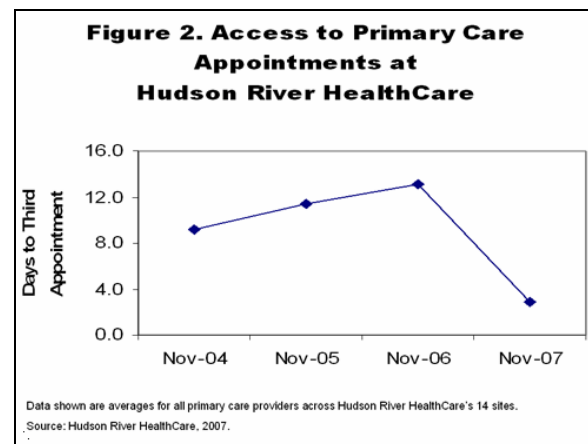
Childhood immunization rates have been tracked continuously since 1995, and Hudson River HealthCare now has 12 years of improvement data for this measure (Figure 1).



Access has continued to be an important issue for the health center. Despite its efforts to offer extended hours and an after-hours call service, many patients still seek care in the emergency room. Hudson River HealthCare responded to this issue by having community care partners in several local emergency rooms to schedule follow-up visits and other appointments with patients at the health center sites. This effort to bridge outreach and primary care was recognized by a New York State Patient Safety Award in 2006.

Every two weeks the health center assesses the time to third next available appointment for each primary care provider, including physicians, nurse practitioners, and physician assistants, across its 14 sites. These efforts have reduced the average time to third next available appointment for an office visit to four days (Figure 2). In addition, six sites have attained the goal for this measure, achieving an average time of zero to one day. "We've paid a lot of attention to

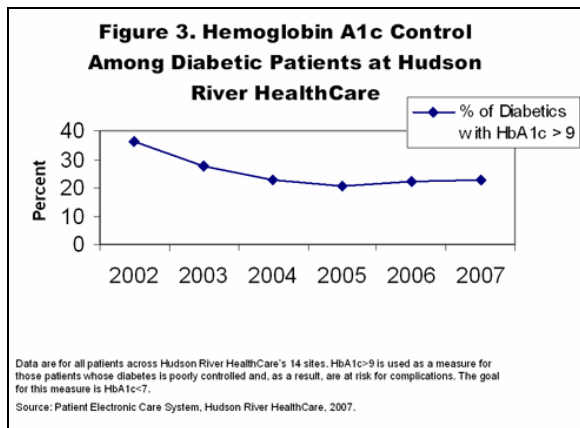
appointment access and there's a lot of work to be done because it really requires a total mind shift on the part of the staff. You have to be willing to lay back and let stuff happen," says Kaye. "It's a real culture change because it's around giving up control." Also, the center has found that open access has had a beneficial effect on its "no show" rate, reducing it to about 5 to 7 percent.



Its focus on efficiency, initiated through the IHI series, led to a reduction in the average office visit cycle time at its Beacon site from about 60 minutes to 39 minutes. Subsequent efforts across its sites have dropped the average length of a visit to about 50 to 60 minutes. (Some specialty visits, including prenatal care, can run as long as 90 minutes, raising the health center's overall cycle time.)

The health center has a PECS (Patient Electronic Care System) registry that it uses to monitor diabetic patients. As its diabetic population has grown from about 300 patients to nearly 2,200, the number of patients with poorly controlled diabetes has dropped (Figure 3).

Ensuring there are enough staff to answer patient phone calls at peak times continues to be one of the thorniest issues affecting patients at many of Hudson River HealthCare's sites. "I don't think the problem



is technological," says Kaye. "We're trying variable staffing and having an extra person who's working in the back to answer phones at peak times." Among other options, it has considered creating a call center.

Through its efforts to adopt an EHR, the health center learned that a poorly structured system can make it difficult for providers to improve quality of care. "If you get an alert that says, 'Mrs. Jones needs a mammogram,' in most of the [first-generation] EHRs, you've got four more steps to order the test," says Kaye. "When the doctor's in hurry, and they get six alerts, they're going to just close them all. You need a system that, when you click on the alert, it orders the mammogram." Hudson River HealthCare recently chose to adopt eClinicalWorks, which will have such public health and reporting functionality features built in to its next version, to be released this spring.

Implications

Hudson HealthCare learned about many elements of the patient-centered medical home through its participation in national quality improvement collaboratives. But, in order to transform the practice by matching patients to personal physicians, implementing open access scheduling, offering extended hours, and making other related changes, providers had to be brought on board.

"Clinicians don't get excited by efficiency," says Kaye. "The buy-in of provider champions probably happened because we picked a clinical topic of relevance to our patients—diabetes."

It also found that it's important to educate all team members about the change process. For example, the front desk has a key role to ensure open access scheduling appropriately matches patients to their personal physicians. "It's often easier for the receptionist to put patients in the first available appointment they see on a screen, then to take the time to have a conversation with the patient about, 'Wouldn't you really like to see Dr. Jones?'," says Kaye. "They've got to understand its importance and also be supported by providers."

Even though they're an important quality improvement tool, EHRs shouldn't come first. "One lesson I would pass on is that system change ought to precede technology," says Kaye. "People ought to know how they want to change their systems, have some insight into what they want to accomplish, and then put the technology in."

While EHRs will likely be necessary to achieve the highest patient-centered medical home recognition—level three—practice management systems will be sufficient for many practices to reach the first two levels of recognition, says Kaye. "Health centers will achieve level one if they are in compliance with [Health Resources and Services Administration] program expectations. If they've done a collaborative, and are using a registry to manage patients, I think achieving level two will not be difficult."

[<back to top>](#)

For Further Information

Contact Paul Kaye, M.D., chief medical officer, Hudson River HealthCare, at pkaye@hrhcare.org.

News Briefs

More Physicians Using Online Communication

Physicians' use of the internet and social networking media began to take hold in 2007, according to a recent [iHealthBeat column](#). Last year saw the launch of the first [blog about running a hospital](#), by Paul Levy, CEO of Boston's Beth Israel Deaconess Medical Center, and [Sermo](#), a social networking site for physicians. (Sermo, by posing the question "Why consult one colleague when you can consult thousands?," enables users—who self-attest to be physicians living in the U.S.—to post and respond to questions about ways to improve patient care.) Another [report](#), by the market research firm Jupiter Research, found that more physicians are using the Web for professional tasks. It cites, for example, that the number of physicians e-mailing their patients has grown from 20 percent in 2005 to 39 percent in 2007.

Universal Coverage + Health Reform = Real Savings, Report Says

Guaranteed health insurance for all, combined with federal policies to achieve cost savings, could result in \$1.5 trillion in reduced spending over 10 years, according to a Commonwealth Fund [report](#) published last month. The authors explore 15 policy options focused on: the use of health information technology and evidence-based clinical decision-making; public health measures such as reducing smoking; financial incentives aligned with quality and efficiency such as hospital pay-for-performance and strengthening primary care; and policies that use the health care market to increase efficiency, add value, and reduce costs. For example, if Medicare were to pay primary care physician practices to provide enhanced

access to care, manage beneficiaries' chronic conditions, and coordinate their care, and require all Medicare fee-for-service beneficiaries to enroll with such practices, it could result in net health system savings of \$194 billion over 10 years.

Health spending in the U.S. is predicted to increase from \$2 trillion to more than \$4 trillion over the next 10 years—eventually consuming one out of every five dollars of national income. According to the report's findings, it is possible to curb this spending and, at the same time, bring health coverage to all and enhance the health care system's overall performance.

Health Insurers Refuse to Pay for Errors

Following the federal government's lead, private insurers, including Aetna and WellPoint, may refuse to pay for the costs of care related to serious medical errors, according to a Jan. 15 [article](#) in the *Wall Street Journal* (subscription required). Starting this October, Medicare will no longer reimburse hospitals for the costs of treating bed sores, falls, certain hospital-acquired infections, and other preventable conditions developed during hospital stays. This approach is intended to spur hospitals to invest in systems that improve patient safety. For now, private insurers plan to stop paying for only the most egregious errors, such as leaving a sponge in a patient after surgery. Aetna's new hospital contracts will stipulate that it will not pay for costs related to 28 serious errors, which are designated as "never events" by the National Quality Forum. WellPoint's contracts will target four of these "never events."

Physicians Willing to Discuss Errors, But Better Forums Needed

According to a recent [study](#), most physicians—92 percent—are willing to

report medical errors or near misses to their hospitals or health care organizations. In fact, 82 percent of physicians said they had reported an error to their risk management staff or filed an incident report. Yet many said such systems, on their own, do little to get at the root cause of errors or improve patient safety. Physicians said they relied on conversations with colleagues to discuss

medical errors, indicating that health care organizations may be missing opportunities to uncover system-wide patient safety improvements. The survey of 1,082 U.S. physicians was published in the January/February issue of *Health Affairs*.

[<back to top>](#)

Recent Publications of Note

Selected articles on quality improvement from a number of journals, including the *American Journal of Medicine*, *Annals of Internal Medicine*, *Archives of Pediatric and Adolescent Medicine*, *BMJ*, *Health Affairs*, *Health Services Research*, *International Journal for Quality in Health Care*, *Joint Commission Journal on Quality and Safety*, *Journal of the American Medical Association*, *Journal of General Internal Medicine*, *Journal of Patient Safety*, *Journal of Safety and Quality in Health Care*, *Medical Care*, *The Milbank Quarterly*, *The New England Journal of Medicine*, and *Pediatrics*. The articles are nominated by Editorial Advisory Board members from a preselected list.

Health Care System Performance

Improving U.S. Health Care: Lessons from Abroad

This position paper describes health care access, quality, and efficiency in the United States and compares the U.S. health system with those in other countries. The authors propose lessons to be learned from these countries and make recommendations for achieving a high-performance health care system. American College of Physicians (2008) [Achieving a High-Performance Health Care System with Universal Access: What the United States Can Learn from Other Countries](#). *Annals of Internal Medicine* 148, 55–75.

Cost Containment

Value-Based Purchasing Limited

Researchers conducted telephone interviews with executives at 609 large businesses across 41 randomly selected U.S. markets between July 2005 and March 2006. Among the executives surveyed, 65 percent reported that they examine health plan quality data, but few reported using it for performance rewards (17%) or to influence employees (23%). The results showed that physician quality information is even less commonly examined (16%), used by employers to reward performance (2%), or influence employees' choice of providers (8%). M. B. Rosenthal et al. (2007) [Employers' Use of Value-Based Purchasing Strategies](#). *Journal of the American Medical Association* 298, 2281–2288.

Paying for Medical Errors

Hospitals currently do not have a strong economic incentive to improve patient safety, as most of the costs of medical errors are shifted to other payers. This study analyzed 465 adverse events and found that, on average, the sampled hospitals generated injury-related costs of \$2,013, and negligent-injury-related costs of \$1,246, per discharge. However, the hospitals bore only 22 percent of the costs of all injuries and 30 percent of the costs of negligent injuries. The authors conclude that legal reforms or market interventions may be necessary to address

this externalization of injury costs. M. M. Mello et al. (2007) [Who Pays for Medical Errors? An Analysis of Adverse Event Costs, the Medical Liability System, and Incentives for Patient Safety Improvement](#). *Journal of Empirical Legal Studies* 4, 835–860.*

Hospitalists' Impact on Quality, Cost

A retrospective cohort study of 76,926 patients, hospitalized between September 2002 and June 2005, used multivariable models to compare the outcomes of care by 284 hospitalists, 993 general internists, and 971 family physicians. The study found that the hospitalist model was associated with a small reduction in length of stay for common inpatient diagnoses, without adversely affecting readmission or death rates. Costs were also modestly less when compared with general internists' care, but not significantly different from that provided by family physicians. P. K. Lindenauer et al. (2007) [Outcomes of Care by Hospitalists, General Internists, and Family Physicians](#). *New England Journal of Medicine* 357, 2589–2600.

Patient Safety

Targeting Risky Drugs

This study estimated the number of and risk for emergency department visits for adverse events involving Beers criteria medications—a consensus-based list of medications identified as potentially inappropriate for use in older adults—compared with other medications. It found adverse events due to three other medications, warfarin, insulin, and digoxin, were 35 times greater than for those identified by Beers criteria. The authors conclude that, to maximize their impact, performance measures and interventions should target warfarin, insulin, and digoxin use. D. S. Budnitz et al. (2007) [Medication Use Leading to Emergency Department Visits for Adverse Drug Events](#)

[in Older Adults](#). *Annals of Internal Medicine* 147, 755–765.

Quality Reporting

Benchmarking Hospital Quality

Ventilator-associated pneumonia rates are increasingly being used to benchmark hospitals' performance and reward better care. However, accurate diagnosis of ventilator-associated pneumonia is challenging, and there is substantial subjectivity in the current surveillance definition. The authors conclude that ventilator-associated pneumonia should be excluded from compulsory reporting initiatives until objective outcome measures for these patients are validated. M. Klompas and R. Platt (2007) [Ventilator-Associated Pneumonia—The Wrong Quality Measure for Benchmarking](#). *Annals of Internal Medicine* 147, 803–805.

Rating Doctors' Efficiency

As health care costs continue to increase and physicians make spending decisions for patients, purchasers have begun to look for ways to identify individual physicians who deliver good care most efficiently. Appropriate measures, and the proper use of such measurements, have been the focus of much debate between those who pay for health care and those who provide it. The authors conclude that physicians and consumers should collaborate to measure efficiency and encourage physicians to pursue lower-cost paths to the best clinical outcomes. A. Milstein and T. H. Lee (2007) [Comparing Physicians on Efficiency](#). *New England Journal of Medicine* 357, 2649–2652.

Focusing P4P on Patients

Pay-for-performance initiatives that focus on a few specific elements of a single disease or condition may cause physicians to neglect patients as a whole, especially elderly patients

with multiple chronic conditions. There are also concerns that such programs could result in the de-selection of patients, if providers "play to the measures." The authors conclude that, as this and other quality improvement initiatives evolve, they should put the needs and interests of patients first. L. Snyder and R. L. Neubauer for the American College of Physicians Ethics, Professionalism and Human Rights Committee (2007) [Pay-for-Performance Principles that Promote Patient-Centered Care: An Ethics Manifesto](#). *Annals of Internal Medicine* 147, 792–794.

Quality Tools in Practice

Rapid Response for Pediatric Inpatients

A cohort study design, with historical controls, was used to evaluate the effect of introducing a rapid response team (RRT) on hospital-wide mortality rates and code rates outside of the ICU setting at an academic children's hospital. RRT members included a pediatric ICU-trained fellow or attending physician, ICU nurse, ICU respiratory therapist, and nursing supervisor. The study found that, after RRT implementation, the mean monthly mortality rate decreased by 18 percent, the mean monthly code rate per 1,000 admissions decreased by 71.7 percent, and the mean monthly code rate per 1,000 patient-days decreased by 71.2 percent. P. J. Sharek et al. (2007) [Effect of a Rapid Response Team on Hospital-Wide Mortality and Code Rates Outside the ICU in a Children's Hospital](#). *Journal of the American Medical Association* 298, 2267–2274.

Improving Care for Stroke Patients

A nationwide, population-based study was used to examine the association between quality of care and mortality among patients with stroke. Based on an analysis of the seven selected criteria, the authors found an inverse dose-response relationship between

the number of quality of care criteria met and mortality. Patients whose care met all criteria had the lowest mortality rate, suggesting that higher quality of care during the early phase of stroke is associated with substantially lower mortality rates. A. Ingeman (2008) [Quality of Care and Mortality Among Patients with Stroke: A Nationwide Follow-up Study](#). *Medical Care* 46, 63–69.

RN Staffing Affects Outcomes

A review of 28 studies was used to examine the association between registered nurse (RN) staffing and patient outcomes in acute care hospitals. These studies showed associations between increased RN staffing and lower hospital-related mortality among patients in intensive care units (ICUs), surgical patients, and medical patients. Also, an increase of one RN per patient day was associated with a decreased odds ratio of hospital-acquired pneumonia, unplanned extubation, respiratory failure, and cardiac arrest in ICUs, and with a lower risk of failure to rescue in surgical patients. R. L. Kane et al. (2007) [The Association of Registered Nurse Staffing Levels and Patient Outcomes: Systematic Review and Meta-Analysis](#). *Medical Care* 45, 1195–1204.

Summarizing Drug Evidence Increases Adherence

A cluster-randomized trial was used to examine the impact of having consultants write one-sentence evidence summaries—about medications they had recommended for patients with chronic disease—on discharge letters to primary care providers. The study found that appending the evidence summary decreased non-adherence to discharge medication from 29.6 percent to 18.5 percent, and that most clinicians were enthusiastic about receiving these summaries. R. Kunz et al. (2007) [Impact of Short Evidence Summaries in Discharge Letters on Adherence of Practitioners to Discharge](#)

Medication. A Cluster-Randomised Controlled Trial. *Quality and Safety in Health Care* 16, 456–461.

Quality Matters editorial staff, and thus was not included on the list reviewed by the Editorial Advisory Board.

* This Fund-supported article was published in a journal that is not routinely reviewed by

[<back to top>](#)

Special thanks to Editorial Advisory Board member Bruce Siegel and Melinda Abrams, director of The Commonwealth Fund's Patient-Centered Primary Care program, for their guidance with this issue.

Editorial Advisory Board 2007

David Blumenthal, M.D., M.P.P., director of the Institute for Health Policy at Massachusetts General Hospital/Partners Health Care System

Eric Coleman, M.D., M.P.H., associate professor of medicine, University of Colorado

Janet Corrigan, Ph.D., president and CEO, National Quality Forum

Don Goldmann, M.D., senior vice president, Institute for Healthcare Improvement

Thomas Hartman, vice president, quality improvement, IPRO

Rosalie Kane, Ph.D., professor of public health, University of Minnesota

Gordon Mosser, M.D., associate professor, School of Public Health, University of Minnesota

Mary Naylor, Ph.D., R.N., Marian S. Ware Professor in gerontology, University of Pennsylvania School of Nursing

Michael Rothman, director, Quality Improvement, Johns Hopkins Hospital

Paul Schyve, M.D., senior vice president, Joint Commission on Accreditation of Healthcare Organizations

Bruce Siegel, M.D., research professor, Department of Health Policy, George Washington University

Robert Wachter, M.D., professor and associate chairman, Dept. of Medicine, University of California, San Francisco

Editorial Team

Anthony Shih, M.D., assistant vice president, Program on Quality Improvement and Efficiency

Vida Foubister, M.A., M.Sc., and Douglas McCarthy, M.B.A., contributing editors

Martha Hostetter, M.F.A., managing editor, mh@cmwf.org

Citation

Quality Matters: Patient-Centered Medical Homes, January/February 2008, The Commonwealth Fund, Vol. 27