Pittsburgh Regional Healthcare Initiative
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UPMC St. Margaret Lawrenceville Family Health Center

Perfecting Patient Care in a community health center

Of the 13,000 patients seen at the UPMC St. Margaret Lawrenceville Family Health Center, about 260 are known to have diabetes. Making sure that each of those patients receives recommended care at each visit, plus the education they need to manage their condition, has become a cause for Team Leader Jan Setzenfand. With assistance from the Jewish Healthcare Foundation, Jan attended the Perfecting Patient Care™ University, with the idea of applying the improvement techniques specifically to the care of diabetic patients. On-site coaching has been provided by Fran Sheedy-Bost, JHF's Project Leader for introducing Perfecting Patient Care in community-based organizations.

"This is where the Chronic Care Model and Perfecting Patient Care™ meet. The model tells us what care a diabetic patient needs: Perfecting Patient Care gives us practical ways we can make sure it happens," says Setzenfand. (See boxes,these pages.)

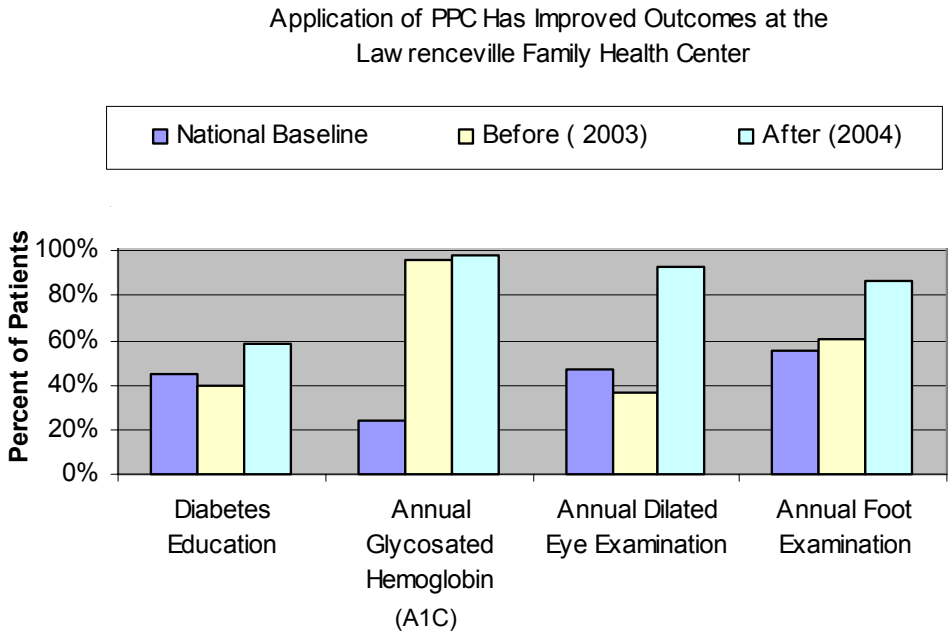
Beginning with a question

Perfecting Patient Care often begins with one simple question. In this case, the team considered: Do our exam rooms make it possible to deliver perfect care to diabetic patients every time?

The observation team noticed physicians and nurses leaving exam rooms repeatedly during patient encounters to find items that were not in the room, robbing precious minutes from the exam. Setzenfand's team discovered that no two exam rooms were equipped quite alike. For example, none had large blood pressure cuffs, since they were stored in separate room. None contained a monofilament, a pen-sized instrument for measuring foot sensation, which is required every time a diabetic patient comes in for care.

← *Before:* cluttered workspace wasted clinician time.
↓ *After:* organized supplies mean more time for clinician to spend on direct patient care.

Drawing on what they had learned from visiting the Perfecting Patient Care team at the VA Pittsburgh Healthcare System, and collaborating with the entire staff, Setzenfand's group set about creating a "perfect" exam room—one with the right items in the right amounts for examining diabetic patients. Counters were cleared to increase work space (see photos). Soon staff were adjusting the room to make sure the right items were there for every usual need. In all, 15



improvements were made.

The staff quickly developed a preference for using the "perfect" exam room for all patients, not just those with diabetes. So the team standardized every room into a perfect room: unused inventory came out and needed supplies—like large blood pressure cuffs and monofilaments—went in.

Physicians are now able to do more for patients during office visits. The standardized rooms made orientation for new clinicians much easier. Improvements made ostensibly in the interest of diabetic patients began to accrue to all patients.

"This isn't just about cleaning out rooms. It's about getting people exactly what they need, when they need it. Improving work flow definitely relates to clinical improvements," says Setzenfand.

Visual cues

Perfecting Patient Care techniques often rely on visual cues. From posters to post-its, visual reminders either inform or reinforce desired practice and help people do the right thing. Visual cues can help clinicians, patients and even suppliers of goods and services, like outside laboratories.

For example, diabetic patients require foot exams at each visit. Setzenfand and team discovered, as they went chart by chart, variation in the frequency and documentation of foot exams. Working with the physicians, the team devised a simple sticker for each chart that provided: 1) a reminder to do the exam, and 2) a consistent way to chart what had been done.

Diabetic patients also require a yearly, dilated eye exam to check for retinal damage. Since blindness is such a devastating potential complication for diabetics, annual eye exams are extremely important. But many of the center's patients misunderstood or overlooked verbal instructions to have their eyes tested. So the team devised a

Locally: What we know — why it matters

- Improperly managed diabetes is a leading cause of blindness, limb amputation, cardiovascular disease and kidney failure. Nationwide, deaths from diabetes have risen 58% since 1979. Locally, Beaver, Butler, Fayette, Washington and Westmoreland Counties all report higher rates of complications and death from diabetes than the state average. Diabetes hits particularly hard among Southwestern Pennsylvania's African Americans, who, for example, undergo twice as many limb amputations as whites.
- Patients with diabetes receive routine care—eye and foot exams, kidney monitoring, lipid screening and control—between 9% and 57% of the time. In other words, despite the best efforts of our medical professionals, only about half of known diabetics receive appropriate treatment.
- Our region has seen a shocking 75% increase in hospitalizations due to diabetic complications in the last 5 years at a cost of
- ***$1.27 billion* in hospital charges.**
- The suffering is made all the more unacceptable, because diabetic complications leading to hospitalization are *almost always preventable.*

prescription-like pad describing the needed test, including the reason, the frequency, and physician phone numbers. Physicians and patients found the pads easy to use. Of the patients who received the form, 93% went in for a dilated eye exam.

Lab tests were another challenge. An internal form listed all the tests necessary for diabetics, but the commercial lab's form was different and hard to use. As a result of a meeting between the center's medical director and a lab representative, the forms were standardized, and the lab amended its form.

"This isn't just about cleaning out rooms. Improving work flow relates to clinical improvements." —Team Leader Jan Setzenfand, RN

What is the Chronic Care Model?

The Chronic Care Model identifies the essential elements of a health care system that encourage high-quality chronic disease care. These elements are the community, the health system, self-management support, delivery system design, decision support and clinical information systems.

The model was created by Ed H. Wagner, M.D., M.P.H., F.A.C.P., Director of Improving Chronic Illness Care (ICIC), a general internist/ epidemiologist, and director of the Seattle-based MacColl Institute for Healthcare Innovation. He is developing and testing of population-based care models for diabetes, frailty in the elderly and other chronic illnesses; the evaluation of the health and cost impacts of health promotion/disease prevention interventions; and interventions to prevent disability and reduce depressive symptoms in older adults. He has written two books and more than 200 publications.

Diabetes registry

The best care will not help people who do not come in to receive it. The staff at LFHC used a one-at-a-time approach to create a registry of patients, identifying people with barriers to care, and taking steps to help them reach optimal health. They created a database of all diabetic patients, and follow up with doctors and staff members to ensure that anyone newly diagnosed, or any new patient with diabetes, is added to the list. They follow lab results to see who is getting regular blood tests, eye exams and so forth, and cross-check with reports from insurance agencies. Benefits include:

Those patients who may have missed a blood test or a checkup receive a reminder letter or even a phone call. Regular, scheduled visits by diabetic patients are up.

Every month, 30 to 40 patients are invited to class to learn ways to manage their diabetes. As attendance has picked up, 60% of patients are coming to class, and 95% of attendees have shown clinical improvement.

What is Perfecting Patient Care™?

Perfecting Patient Care™, or PPC, adapts the principles of the Toyota Production System to health care. These principles offer a systematic way to use frontline observations of work and a system for identifying and solving problems all the way to their root cause in real time, rather than working around them. Using the principles can increase efficiency, safety and quality for patients and healthcare workers, and reduce cost by eliminating waste from the workplace. PPC relies on frontline personnel who actually do the work to propose and make improvements. It is not a temporary "project" but a fundamentally different way of working. To learn more about PPC and its successes in the Pittsburgh region, please visit http://www.prhi.org/ppc.cfm.