What is the mission of a health system? To cure illness, but more important, to avoid illness and its progression.

At the Jewish Healthcare Foundation, through the Pittsburgh Regional Healthcare Initiative and other grants, we have been working to perfect the treatment of disease. But we believe that better primary care can help patients avoid illness and prevent its progression. So we are now testing Perfecting Patient Care (PPC) principles in ambulatory settings.

Two clinical study groups helped us pave the way. Since 2000, physicians, psychiatrists, and other health professionals have been poring through state health outcomes data to assess our region's treatment of depression and diabetes. The conclusion: far too many people experience avoidable disease complication, progression, and hospitalization.

We set out to reverse the situation. Our demonstration project, begun in 2002, will answer a relatively simple question: Can we mitigate the dangers of a predisposition to disease — here, diabetes and depression — by diligent attendance to each patient's risk factors?

We know what this diligence looks like: ongoing assessment and planning with proactive patient follow up; management of concurrent health behaviors or risk factors; patient education and shared decision making; and connections to community resources.

To make these practices the norm, providers and patients need a transformation of our symptom-driven healthcare system into one that anticipates patient needs and applies best practices with every patient, every time. This means redesigning work processes to center around the patient. It demands current, accessible data on patient health status. It requires patients to be active partners in their own care. It feeds on constant measurement and evaluation by a health team at the point of patient care.

In addressing diabetes and depression, we tackle two chronic conditions that are associated with many comorbid conditions — all of which can be debilitating to a patient and costly to the healthcare system.

The demonstration has already begun in two community-based organizations; ultimately the PPC model will be tested in six more. In three years, we'll know if we're right — if patient care does improve with the right patient-driven systems in place.

Diabetes is the leading cause of new cases of blindness, end stage renal failure, amputation and neuropathy.

People with diabetes are predisposed to cardiovascular complications, such as heart disease, hypertension and stroke.

Diabetes is the 7th leading cause of death in the United States. Deaths from diabetes have risen by 58% since 1979.

In southwestern Pennsylvania, hospitalization rates for type 2 diabetes have grown by 75.4% between 1996 and 2000.

Depression affects approximately 17.6 million Americans each year, at a cost of $44 billion.

Depression is known to impair the medical outcomes of accompanying illnesses, such as diabetes, asthma, and heart attack.

In our region, 12.7 percent of those patients hospitalized for depression were readmitted within 30 days.

Pennsylvania Health Care Cost Containment Council (PHC4), and the Health Plan Employer Data and Information Set, 2001
According to data from the Pittsburgh Regional Healthcare Initiative (PRHI), hospitalization rates for type 2 diabetes in southwestern Pennsylvania grew by 75.4 percent between 1996 and 2000 (consistently higher than statewide rates), and saw a 110 percent jump in hospitalizations for long-term complications of the disease. At the same time, depression remains under-diagnosed and under-treated in primary care settings. For those who had been hospitalized for depression, the region saw readmission within 30 days in 12.7 percent of patients.

The statistics prompted the JHF to test the Perfecting Patient Care system in chronic care in primary care settings — closer to the point of day-to-day patient care, before any patient requires hospitalization and exposure to the comorbidities of hospital care, such as hospital-acquired infections, disorientation, or medication errors.

Thanks to the additional support of Allegheny Health Choices, Inc., (AHCI), the Staunton Farm Foundation, and the Pittsburgh Foundation, it started its three-year pilot study, “Perfecting Patient Care in Community-Based Organizations,” (CBOs) in the summer of 2002. An AHCI staff member serves as the demonstration project manager. AHCI is a private, not-for-profit organization that monitors and reports on the effectiveness and value of the management of behavioral health care programs in local communities.

Clinical and administrative leaders in CBOs who join the demonstration learn the values that shape PPC. CBO leadership commit to assuring the necessary environment for best practices in chronic care management. CBO leaders support a patient-focused culture. Staff is encouraged to identify problems and assess changes that can improve patient care.

**Applying What We Know at the Point of Patient Care**

CBOs selected for the JHF pilot project each nominate a staff member to be trained in Perfecting Patient Care (PPC) and chronic care management techniques and become a **PPC Team Leader**. After the training, he or she, with the support of the project's **PPC Teacher**, sets up a “learning line.” The learning line serves as a PPC laboratory to correct problems discovered at the point of patient care by clinical professionals with direct patient care responsibilities.

---

**COMMUNITY-BASED ORGANIZATIONS: A LEARNING LINE MODEL FOR DEPRESSION**

The right improvements in patient care require that the entire organization supports experiments tested on the learning line. Should the need arise, learning line members — seen in blue — can call on every member of their organization for support, especially their team leader. They also count on technical support from the PPC teacher or PRHI staff.

**TOGETHER ON THE LEARNING LINE, DIRECT CARE PROVIDERS:**

Learn. Observe how work is done at the point of patient care; identify problems; determine root causes; involve workers to solve problems, not work around them.

Plan. Design a countermeasure or change for every problem.

Do. Implement the change, as an experiment.

Evaluate. Measure outcomes during implementation. A team leader supports the change and shares the workload during the experiment.

Improve. Changes are tested and evaluated in real time, during the course of work; healthcare workers can modify their own behavior and recommend additional improvements.
CARING FOR DIABETES

The first demonstration began at UPMC St. Margaret Lawrenceville Family Health Center in October 2002. The hospital-owned community health center sees 17,000 patients every year. It is trying to assure that every patient receives evidence-based care and the education and support to participate in the management of diabetes.

Using a Patient Registry. The site is now using a diabetes-specific patient registry for tracking and measuring project and patient outcomes. The registry now profiles over 200 active diabetic patients, tracking those whose hemoglobin A1c level is above 10 percent for three months—a level which puts them at high risk for complications from diabetes including limb amputation, blindness, kidney failure, and heart disease. Patients with this A1c level now receive aggressive care management and education, since staff are able to identify and target them through the registry.

Assuring Current Lab Work. The learning team discovered that for many patients, laboratory results—such as A1c levels—were between six and 12 months old by their next scheduled doctor’s appointments. The team leader brought this to the medical director’s attention, and the medical director authorized standing orders for updated, standard lab work on diabetic patients before doctor’s appointments.

Facilitating Eye Exams. Every diabetic patient needs an annual dilated retinal examination, but only 37 percent of the site’s patients had seen an ophthalmologist in the past 12 months. The team’s immediate countermeasure was a one-page “how-to” guide for patients to schedule an ophthalmologist appointment. But upon evaluation, patients were no more likely to schedule eye exams. The team adapted their form to a prescription pad format, and established collaborative referral relationships with two nearby ophthalmologist practices. Patients are scheduling exams, and each ophthalmologist practice sends a post-visit report to the site’s medical director.

CARING FOR DEPRESSION

Work at the next site for the demonstration project has begun, with a focus on the chronic care management of depression. Depression is a leading cause of disability, in spite of the fact that it is easily diagnosed and treatable. A learning line is in development at the Allegheny East Mental Health and Mental Retardation Center, Inc., a community mental health provider serving 11 communities which include Wilkinsburg, Penn Hills, and Verona. It has a management contract with Forbes Regional Hospital for emergency evaluation and inpatient adult psychiatric services. The center serves about 900 patients every year; 72 percent have depression diagnoses. The site’s work focuses on the patient pathway of psychiatric treatment in order to understand the root causes of patient readmissions.

MANAGING DIABETES: A PATIENT CHECKLIST

✔ Have your blood’s A1c level tested at least twice a year. A1c is the glucose concentration in the bloodstream. A goal A1c level is under 7 percent.

✔ Get a foot examination at every visit to your care provider. Your provider can help you find small wounds that you might not have noticed—wounds that left untreated could cause serious infection.

✔ Talk to your provider about whether and how to improve your diet and physical activity level at every visit. Getting this kind of education supports the self-management of your chronic care.

✔ Get your LDL cholesterol level checked every year. Your LDL cholesterol level, or “bad cholesterol” level, should be under 100. Otherwise, your risk of heart disease could grow.

DEPRESSION SCREENING

If you answer yes to either of these questions, tell your doctor. During the past month have you often been bothered by:

• Little interest or pleasure in doing things?
• Feeling down, depressed, or hopeless?

Depression is a treatable disease. Talk to the doctor about how you are feeling. It is the first step toward feeling better.

This questionnaire is in use at the Lawrenceville demonstration site. Posted as a flyer in the CBO’s waiting room, it offers a quick, clear, and stigma-free screening and education tool. It is adapted from the work of the MacArthur Initiative on Depression and Primary Care, a network chaired by Allen Dietrich, MD, of Dartmouth College.
REALIZING THE VISION

The Jewish Healthcare Foundation has supported best practices in primary and ambulatory care since our establishment, as just a few examples demonstrate.

Preventing Wounds, Preserving Limbs. In 1995, we led a major public health education and prevention initiative aimed at improving the treatment of wounds — vital among people with diabetes. An advisory committee consisting of more than 40 providers and physicians guided the pilot projects.

Treating Depression in the Elderly. In 1996, we supported a Western Psychiatric Institute and Clinic demonstration to develop best practices in primary care for diagnosis and treatment of depression in the elderly — a project led by the Hartford and MacArthur Foundations.

Testing Quality and Outcomes in Senior Care. In 1999, we supported the development and testing of measures to track outcomes of older adults who use adult day care or adult day living centers — a first step to measuring quality outcomes for a range of home- and community-based providers.

Preventing Heart Disease. Working Hearts, a coalition of community organizations and individuals committed to women’s heart health awareness, education, and research, was launched by the Foundation in February 2002.

Educating Employees. Member organizations of the Pittsburgh Regional Healthcare Initiative (PRHI) are committed to educating employees about health problems. Consider PPG Industries, Inc. For depression, it has established on-site interventions, educational intranet content, patient self-management resources, and training in and promotion of best practices among healthcare providers. PPG earned an award for innovation from the Occupational and Environmental Health Foundation in September.

Using Current Health Information. To address inadequate and variable care for people with diabetes and depression, PRHI launched the Pittsburgh Health Information Network (PHIN). The PHIN proposes to be physicians’ central organizing clearinghouse for claims data and diabetes-related lab results, presenting information in one format on all of a physician’s patients — regardless of insurance provider or lab. This secure Internet-based network will improve access to information on depressed and diabetic patients through a single source. Physicians will also track key health indicators in effective care of diabetes and depression. The PHIN will be secure; only a physician with a clinical relationship to a patient will have access to that patient’s records.

Putting Our Knowledge into Practice. We have embarked on a plan to create a new community health center based on Perfecting Patient Care principles. A proposal for federal funding of the center has been submitted and if successful, it would reflect a model Perfecting Patient Care environment.