

**Diabetes Quality Improvement Project  
Lovelace Health Systems  
1999 Acclaim Award Honoree**

Lovelace Health Systems developed a strategic diabetes program to improve patient outcomes, develop diabetes data feedback and practice support tools, and empower patients. Filling the information void left by thick and cumbersome paper charts with data reports and on-line patient information proved to be an invaluable disease management tool.

**Goal**

To improve the health of their type 2 diabetes population using disease management technology.

**Intervention**

Episodes of Care program combined patient and provider education with detailed provider reports outlining information needed to more effectively manage the PCP's diabetes patient panel.

**Highlights**

- Enabled providers to access patient information electronically on the Medical Profile in each exam room.
- Generated quarterly Provider Support Reports on HbA1c rates and results of entire patient panel, including list of "high risk" patients.
- Placed poster in exam rooms reminding diabetes patients to remove shoes and socks.
- Formed a Senior Operating Team to coordinate quality functions throughout the health care system.
- Made primary care physicians accountable for attending Diabetes Improvement Project provider education programs.
- Increased availability of diabetes education programs by reassigning diabetes educators to nine clinics across the city.
- Established Diabetes Clinic Days at several of their sites to facilitate one-stop patient care, education, and evaluation.

**Results**

Increased HbA1c testing rate from 43 percent to 93 percent and increased percentage of patients in good to optimal control from 68 percent to 75 percent.

**Concluding Remarks**

The Diabetes Improvement Project (DIP) has provided the organization with valuable experience in developing and implementing disease management programs across the continuum of care. This team has developed a template that has guided 16 other disease management teams in their work and has led to the publication of the Disease Management Navigator. A number of lessons have been learned concerning successfully developing and implementing disease management programs within a healthcare organization. These lessons pertain to the following topics: senior management support, a team "steering group," and the four tenets of the implementation phase.

Senior leadership support at all stages of the project is critical to success. The DIP was successful partly because the organization's senior leadership provided classic textbook support to the project. Senior leadership established the vision, communicated the vision repeatedly in formal and informal settings, and developed communication channels to keep themselves abreast of progress and barriers. They

quickly addressed barriers as they occurred and provided the resources necessary to be successful. Senior leadership maintained constancy of purpose that allowed the work of the DIP team to take root.

Teams will experience a period of confusion in the first phase of development. Although early confusion is normal, careful planning and including a facilitator who oversees team processes minimizes the sense of chaos and ensures the team does not fizzle out in frustration. Several preliminary meetings, which include the team leader, team facilitator, and quality consultants, should occur before the team convenes. At this time, the "steering group" lays the preliminary groundwork; the group drafts the vision and mission, identifies the patient population, maps out the major components of the care continuum, identifies the key literature for distribution to the team and drafts a timeline for the team. Potential members are identified and contacted. Baseline data is collected and potential outcomes are considered. Accomplishing these tasks ahead of time ensures a quick start by focusing the team and providing them with information to consider and discuss.

The most important phase of a quality improvement or disease management project is the implementation of improvement strategies within the healthcare environment. The development of practice guidelines and care continuums is relatively straightforward. Changing behavior and influencing clinicians and patients to actually adopt the products developed is far more difficult. In order to be successful, careful consideration should be taken to the following four tenets of the implementation phase:

1. A systems view of the QI endeavor should be taken. Any tools developed should ideally fit into existing processes. By fitting tools into existing processes, they will more readily be adopted by clinicians and will have a structure to sustain them over time.
2. Interventions should be simple, easy to adopt, cost-effective, and make practitioners' practices easier and more efficient. Practitioners are time deprived and will not adopt interventions unless the advantages are readily apparent. Start simply and build layers of sophistication one step at a time as successes are achieved. This philosophy applies to indicators as well; focus on improving one or two indicators at a time and as targets are achieved add other indicators.
3. Do not underestimate the importance of data and feedback. Timely, patient-specific indicator reports to physicians on how they are performing in relation to guidelines is instrumental to operationalizing practice guidelines. Information should be used to support practice patterns (not to inspect or judge). Physicians are highly competitive. A useful report that visually reflects practice patterns, patient management, and performance relative to their practice group and professional peers is a powerful motivator. Physician reports, such as the Diabetes Support Report, are among the most successful tools that have been developed by the health care system's disease management teams.
4. Remain flexible. A CQI project consists of numerous small CQI cycles. Constantly solicit feedback from customers and be ready to adapt interventions to meet the needs of consumer groups. It is rare that a team "gets it right" the first time. Nor is there often a single right answer since frequently a group of clinicians must adapt an intervention to be congruent with their needs and systems. The CQI team must remain flexible and expect that changes to tools and processes will frequently be required in the pilot and implementation phase.

As a result of the DIP team's groundbreaking efforts, and persistence over more than five years, the healthcare system has gained considerable knowledge and skill in developing disease management programs and championing quality improvement efforts. Every step of the way has been a learning process. Although at times the team developed and implemented interventions such as the Diabetes Care Days that did not match with their expectations, it was not a lost effort. Failures as well as successes provided a template for other disease management teams to follow.

There is one characteristic that cannot be taught. That quality is the DIP team's single-minded desire, above all else, to improve the care of patients with diabetes throughout the delivery system. Their constancy of purpose and dedication carried them forward in spite of the delays and barriers that

emerged. The team has proven obstacles to be temporary; their constancy of purpose has been permanent.

*Lovelace Health Systems, based in Albuquerque, New Mexico, is a multi-speciality group practice of 285 staff physicians, a 225-bed medical center, two multi-speciality outpatient centers, and nine staff-model primary care centers located in Albuquerque with additional primary care centers in Santa Fe and Las Cruces.*