

**Health and Disease Management Quality Improvement Project
University of Pennsylvania Health System
1999 Acclaim Award Honoree**

The Penn Health and Disease Management Programs coordinated resources throughout the organization by integrating clinical guidelines, physician and patient education, health risk assessment, case management, clinical decision support, and preventive care and wellness activities. The program has resulted in significantly improved patient outcomes and preliminary economic modeling yields a marginal annualized cost savings of \$8.3 million across four of the programs.

Goal

To provide population-based best practice care so that 80 percent of all patient visits by the year 2001 will be accounted for by one of 40 best practice disease management programs.

Intervention

Implemented disease management programs in 24 areas, with plans to introduce 16 more by the year 2001.

Highlights

- Penn Health Management was identified as a strategic goal thereby integrating the program into UPHS strategies for managed care, information systems, financial budgeting, research, and education.
- Senior executives are given financial incentives for successful implementation of disease management.
- Disease-specific case managers work with high-risk patients.
- Office-based coordinators rotate through each office and assist in re-engineering the work flow.
- An internally developed Disease Management Intranet System includes clinical guidelines, patient education, and interactive portions that allow access to patient enrollment statistics and the ability to enter outcomes data.

Results

Increased the percentage of patients receiving preventive care and reduced hospitalizations and ER visits, while simultaneously maintaining high patient and provider satisfaction.

Concluding Remarks

A number of lessons have been learned with this process. First and foremost, this strategy is successful because of the commitment and passion by leadership at all levels to do the right thing. If we know a best practice, the organization feels a responsibility to our communities to disseminate and change practice as rapidly and effectively as possible. The advice for others is that leadership must be committed and it must be identified as a strategic imperative to promote success.

Building upon the dedication of leadership through this vision, traditional CQI methods and tools must be used. There must be significant buy-in from all individuals, including a multidisciplinary, team-based approach. There must always be data available to evaluate changes and be part of a feedback process for continual improvement. The fundamental approach used by the Health System has been to emphasize implementation, not development. Traditionally, developing the best practice bogs down improvement efforts and little is done with the implementation or execution. However, the PHM programs are focused upon a number of implementation strategies as the focal point. The evidence for best

practice in this country is often known and not controversial. It's the execution of those practices or the incorporation of those practices in the daily work where quality improvement has failed.

Redesigning processes and workflow are important in light of disease management programs. In the primary care offices, the roles of the office manager, medical assistants, and nurses were examined to streamline their work and to enable identification of enrollment of patients in Health and Disease Management. One strategy was the development of Health Disease Management stickers placed on charts to identify and alert providers of the patients' conditions. Another strategy used by some offices is to prepare the next day's scheduled patient charts with the disease management protocols in the charts. This is achieved by printing out the schedule and reviewing the reasons for the patient visit as a trigger for a disease management program.

Replication of the Health and Disease Management improvement initiative hinges upon leadership commitment, dedicated resources, clinician buy-in through consensus and team building, elements that are inherent to all successful quality improvement activities. The underlying philosophy of the Health and Disease Management program is, however, the key to success.

The University of Pennsylvania Health System is an academic-based, integrated delivery system serving the populations of three states - Pennsylvania, New Jersey, and Delaware. On an annual basis, UPHS encounters over 70,000 inpatient admissions and two million outpatient visits.