

**Coronary Artery Disease Improvement Initiative
Park Nicollet Health Services
2002 Acclaim Award Recipient**

Each year, Park Nicollet Health Services establishes strategic objectives that typically include areas of service, profitability, and staff satisfaction. Leadership builds a culture of innovation and improvement by giving quality improvement initiatives equal prominence with other organizational priorities such as achieving a 2 percent operating margin and answering 90 percent of calls within 30 seconds. In 1998, the Coronary Artery Disease Initiative was selected as a strategic care initiative, thereby ensuring strong organizational and financial support.

The CAD Improvement program required interventions in at least 15 processes spanning the full continuum of care, including the clinic, urgent care, emergency department, inpatient care, discharge planning, and post-hospitalization follow-up. The initiative encompassed two levels: (1) preventive care for those at risk or already diagnosed with CAD, and (2) care improvements and guideline development for treating patients with myocardial infarction in the ER, in inpatient settings, and following discharge.

The group attributes the majority of the initiative's success to a simple intervention involving chart preparation. The night before the visit, the nurse reviews the patient's chart and updates a health profile form with any recent tests and/or results, including those related to CAD. The physician can then quickly scan the profile form and identify if the patient is due for an LDL test or ASA. This "visit planning" transforms the typical acute care visit into a preventive care model that plans for and supports the care of high-risk patients in the primary care setting, combining three separate improvement threads related to preventive care, coronary artery disease, and diabetes into a single process.

Goal

- To provide optimal treatment for patients with coronary artery disease
- To improve in-hospital survival of acute myocardial infarction
- To reduce the risk of subsequent complications in Acute MI patients post discharge

Intervention

- Patient and staff education
- Visit planning and standardized orders for patients with CAD
- Development of standard admission and ER department orders for patients presenting with AMI

Highlights

- The health profile form is prominently placed in the patient chart and features prompts for standard CAD preventive care measures such as LDL tests and ASA.
- Standing orders allow nurses to schedule and order overdue tests and procedures.
- Care Improvement Department supports the quality improvement project teams, assisting with guidance and mentoring as well as direct services such as patient education, staff training, and baseline and outcomes measurement.
- Staff are given time out of their regular work schedules to attend continuing education classes.
- Nurses reinforce provider teaching and help patients begin to integrate lifestyle changes.
- "At risk" lists of CAD patients due for services are distributed to each primary care physician.
- In 2000, the hospital and clinic implemented a rapid adoption of ACE Inhibitor therapy to reduce progression of vascular disease.
- An ongoing AMI registry with its supporting critical pathways, guidelines, and standing orders permitted standardization of many key care processes while allowing each clinician to manage individual cases in an unrestricted manner.

- Stretch goals are prominently displayed to encourage continued focus on the need for improvement.
- In 2001, the CAD project received Park Nicollet's internal Reinertson Award of \$5,000, which goes to a team that demonstrates a measured improvement best exemplifying the values of the organization.

Results

- The percentage of patients with LDL cholesterol levels less than 130 mg/dL increased from 69 percent to 76.7 percent.
- The percentage of AMI patients discharged on beta blockers increased from 66.6 percent to 84.4 percent.
- The percentage of AMI patients discharged on ACE inhibitors increased from 18.7 percent to 73.1 percent.
- The percentage of AMI patients discharged on lipid-lowering agents grew from 35 percent to 71.9 percent.
- Survival of patients with AMI increased from 89.9 percent to 93.6 percent.