The Beacon Community Program goals include building and strengthening a health information technology infrastructure; improving health outcomes, care quality, and cost efficiencies; and spearheading innovations to achieve better health and health care.

**Southern Piedmont Beacon Community**

**Overview of the Southern Piedmont Beacon Community**
The Southern Piedmont Beacon Community (SPBC) serves a three-county area of North Carolina in the Piedmont region. The Beacon program grew out of the Southern Piedmont Community Care Plan, a local coalition of health care and community service organizations that share a mission to increase access to health care and other services for Medicaid and dually-enrolled Medicaid and Medicare recipients in Cabarrus, Rowan, and Stanly Counties.

Southern Piedmont Community Care Plan is one of 14 regional health care partnerships in the state established to improve the quality of care for Medicaid recipients while managing costs. Community Care of North Carolina (CCNC) is organized around the patient-centered medical home model and was a forerunner in the medical home movement nationally. The model has already proven effective in both improving quality of care and slowing the growth of health care spending, especially in diagnoses and care for patients with asthma and diabetes.

The region has impressive EHR adoption, including all three nonprofit hospitals and the VA hospital, and close to 60 percent of the ambulatory care physicians in the area. SPBC is building on its past experience with health information exchange to expand the reach of the network across three large counties in the Piedmont region. In addition, it is expanding the benefits of the care management model to other chronic diseases, such as congestive heart failure (CHF) and hypertension, as well as increasing effective use of technologies to support early detection services, such as mammograms and colorectal cancer screenings. Health information technology (health IT) is helping to deepen and expand the effectiveness of the model.

**Goal of the Program**
The goal of the SPBC is to use health IT — including health information exchange among providers and increased patient access to health records — to improve care coordination, encourage patient involvement in their own medical care, and improve health outcomes while controlling cost. This is being accomplished by:

- Adding care managers, pharmacists, and mental health counselors to the care team for patients with diabetes, CHF, hypertension, and other chronic diseases to help establish a more seamless, integrated health care experience. In the first phase (2011), SPBC is working with more than 200 providers and hiring 15 new care managers.
- Expanding opportunities for patient education and involvement through a specialized program and clinics in the community, including schools.
- Expanding health IT to support increased communication and collaboration among members of the care team, including patients.
Using Health Information Technology to Make a Difference
The SPBC is using health IT and health information exchange to allow for greater care coordination for patients in several ways:

- Specialized software notifies care managers when patients are due to be discharged so that plans can be made for a smooth transition from hospital to home or other health care settings. Care managers and nurse practitioners — armed with laptops and access to electronic health records (EHRs) and other information — provide home visits to patients within three days following hospital discharge. This ensures that patients have the correct medications and instructions in order to avoid complications and avoid preventable hospital readmissions.
- Telemonitoring is improving care of patients with heart failure and supporting their continued residence in their home and out of the hospital.
- Computer software allows care managers and other clinicians to identify patients with ischemic vascular disease (clogging of the arteries) to ensure patients receive evidence-based interventions and appropriate monitoring of blood pressure and cholesterol levels.
- School nurses are monitoring students who have asthma and sending updates to the child’s primary care providers through a secure portal that will be available to their primary care pediatricians.
- Clinical decision support technologies are alerting clinicians when a patient is due for early detection or screening services, such as mammograms or colorectal cancer screenings, and embedded care managers are helping physicians redesign processes to follow up on these alerts.
- Inhalers with GPS tracking capabilities, coupled with smart phone and web-based applications, are helping approximately 2,000 asthma patients better manage their condition. The data they collect will also support population-level and individual patient-level analytics.

A Team Approach
The SPBC is a coordinated effort among three hospitals (one in each county) and area social service and medical service providers. Participants include Carolinas Medical Center NorthEast; Stanly Regional Medical Center; Rowan Regional Medical Center; the Rowan, Stanly and Cabarrus Departments of Social Services; the Rowan and Stanly County Health Departments; Cabarrus Health Alliance; and Piedmont Behavioral Health. The SPBC also collaborates with the area Regional Extension Center to help ensure that the provider community makes a smooth transition from paper-based records to electronic health records.

Improvements for Patients and the Community
While the SPBC focuses on Medicaid and indigent patients and on specific health conditions, access to health IT and improved care models will benefit all residents of the three-county area, regardless of their income level, insurance status, or health condition. For example:

- The regional health care environment is benefiting from improved access to care, increased patient engagement in decision-making, and more timely scheduling of appointments through health IT.
- Follow-up care for patients discharged from the hospital or patients with chronic conditions is improving with the increased convenience and coordination made possible by EHRs.
- Through increased emphasis on patient education and patient involvement in the care process, patients and their families are learning more about their conditions and how to manage their own care. Patients who are engaged in caring for their health are less likely to suffer preventable complications and to visit the emergency department.