Southern Piedmont Beacon Community (Concord, NC)

Overview and Goals
Southern Piedmont Beacon Community (SPBC) is one of 17 Beacon Communities building and strengthening local health IT infrastructure and testing innovative approaches to make measurable improvements in health, care and cost. Meaningful Use of electronic health records (EHR) is the foundation of the exciting work in each community. Funded by the Office of the National Coordinator for Health Information Technology, and led by Community Care of Southern Piedmont (one of the networks of Community Care of North Carolina, a national leader in care management for at risk populations), SPBC’s key objectives include:

- Decreasing preventable hospital readmissions for high-risk/high-cost populations by improving patient and provider preparation for the transitional period post-discharge
- Promoting appropriate emergency department utilization for high-risk/high-cost populations
- Improving chronic disease management
- Ensuring seamless, cost-efficient transitions for patients moving between healthcare settings by deploying technology-supported staff dedicated to enhanced care coordination
- Developing a state-wide health IT infrastructure that allows healthcare professionals to share data securely and appropriately, and serves as the prototype for advanced state-wide care management systems

Partners
Southern Piedmont Beacon Community’s major partners include: Community Care of North Carolina (CCNC), Carolinas Medical Center–NorthEast, Rowan Regional Medical Center,
Stanly Regional Medical Center, Cabarrus Health Alliance, Rowan County Health Department, Stanly County Health Department, Northwest Area Health Education Center’s Regional Extension Center, and the Charlotte AHEC Regional Extension Center.

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<th>Southern Piedmont Beacon Community Background</th>
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<td>Total grant award</td>
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<td># of lives affected by Beacon interventions</td>
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“We have seen the Southern Piedmont Beacon Community blaze a trail toward new data sharing and integration, resulting in improved event alerting, decision support and broader awareness of patient utilization and clinical status.”

- L. Allen Dobson, Jr., M.D., Chairman, North Carolina Community Care Networks, Inc.

For a patient story, click here.

Strategies and Achievements

Building and Strengthening Health IT Infrastructure

**Approach:** Community Care of North Carolina has established the Informatics Center, which is a clinical data repository and electronic data exchange infrastructure that combines Medicaid, pharmacy, and laboratory data to support care coordination initiatives in North Carolina. Under Beacon, the Informatics Center is adding new data sources to provide a more robust view of the patient, including real-time hospital admission, discharge, and transfer (ADT) information from three community health systems, and clinical data from public health and primary care records. SPBC is also assisting participating counties’ health departments in deploying Meaningful Use-certified EHR, and partnering with Regional Extension Center staff to encourage adoption of certified EHR throughout the community.

**Progress:**
- The Informatics Center has established a streaming ADT feed with Rowan Regional Medical Center and all locations of Carolina’s HealthCare System in the three-county catchment area. Work is under way to connect Stanly Health Services for data exchange as well.
Public health partners are making progress on achieving Meaningful Use objectives: Cabarrus Health Alliance has already achieved Meaningful Use, Rowan County Health Department has upgraded to a certified EHR version and is working toward Meaningful Use, and Stanly County Health Department will implement a certified version of an EHR in 2013.

Projects are underway to share Continuity of Care Documents (CCD) data with each of the healthcare systems.

**Improving Health, Care and Costs**

**Approach:** SPBC has partnered with three community health systems to embed care managers, clinical pharmacists, social workers, disease-specific educators, and medication technicians in hospitals and provider practices. These teams focus on care coordination during patients' transitions from acute care settings, as well as improved disease management through proactively managing a provider’s panel of patients. SPBC is also focused on integrating patient-reported data into how these teams deliver care, by deploying the Patient Activation Measure, a tool for determining patient self-activation, motivation, and confidence.

**Progress:**

- More than 50 new staff members are in place within 3 hospitals and 11 primary care practices, including 32 clinical staff, 5 clinical managers, 14 provider champions, and support staff.

**Testing Innovative Approaches**

**Approach:** SPBC is working with community partners to develop a virtual educator, interviewer, and counselor. SPBC is using Project Re-Engineered Discharge (RED) at the Boston Medical Center as a model. Project RED has introduced Louise, a virtual patient educator, to aid in teaching patients about components of their care such as their prescribed medications, follow-up appointments, and diagnoses at the point of hospital discharge. Louise’s communication style was adapted from an analysis of how human nurses explain written medical instructions to patients.

**Early Results: By the Numbers**

Between Q3 2010 and Q1 2012, SPBC has seen the preventable readmissions rate among their Medicaid population fall from 15% to 10%.

Improvements may be attributed in part to embedding care managers in the local practices, however, SPBC hypothesizes that hospitals are also responding to anticipated changes in the market particularly with regard to changing incentives around readmissions and emergency department (ED) utilization.

Number of patients ranged from 338 to 458.
SPBC has initiated its own Project RED and is developing a virtual interviewer and counselor, “Anna”, an updated version of Louise, for participants in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). SPBC chose WIC as the first program to use the virtual interviewer because WIC is a very labor-intensive program with numerous Department of Agriculture requirements. Anna, the virtual WIC interviewer and counselor will provide initial intake and education, freeing the time of the WIC employees to perform more complex activities less suited to a virtual counselor.

SPBC is also working with county health departments to deploy an interactive, web-based mapping tool that allows health professionals, policy makers, and academic researchers to combine, analyze, and display information in ways that promote a better understanding of health status across the community. Finally, a virtual home monitoring pilot is evaluating whether case management services supported by remote monitoring and two-way video communication can increase access to primary care and positively impact patients with chronic disease over a 90-day intervention period.

Progress:
- Baseline data collection on Anna has been completed in Stanly and Cabarrus Health Departments and is about 50% complete in the Rowan County Health Department. Anna is being used in Stanly and will begin shortly in the Cabarrus Health Alliance.
- The North Carolina Public Health Portal is now aggregating data from selected Medicaid, Medicare, U.S. Census, Institute of Medicine, and other indicators in a geo-mapping tool. This data can be represented at the county, census tract, Community Care Network, and practice level.
- The virtual home monitoring pilot has enrolled 87 patients toward a goal of 120 total participants in the study. In one unique success story, a truck driver was able to connect virtually from the road with his primary care practice in order to better manage his diabetes.

For more information on the Southern Piedmont Beacon Community, visit: http://www.ccofsp.com/beacon

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