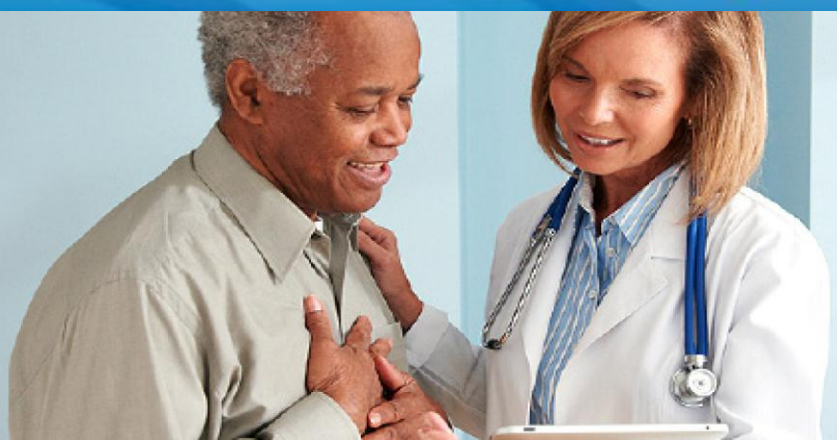
The Office of the National Coordinator for Health Information Technology



IC³ Beacon Community (Salt Lake City, UT)

Overview and Goals

The IC³ Beacon Community 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 lead by HealthInsight, one of the nation's largest Quality Improvement Organizations, IC³ serves three counties in the center of Utah, and including urban Salt Lake County and rural and frontier areas of Summit and Tooele. By using technology, the IC³ Community focuses on:

- Improving the management and coordination of care for people with diabetes mellitus (DM) by utilizing data from clinic EHR to measure their improvement
- Improving consistency between patient wishes and care provided during the last six months of life through creation of an electronic registry for Physician Orders for Life Sustaining Treatment
- Improving communicable disease reporting by replacing paper reports with electronic reporting capabilities

Partners

IC³ s major partners include: HealthInsight, the Utah Department of Health, the Utah Health Information Network, the Commission on Aging, Intermountain Healthcare, and the University of Utah.

IC³ Beacon Community Background	
Total grant award	$15,790,181 over three years
Lead grantee	HealthInsight
Geography	Salt Lake, Summit, and Tooele Counties
# of lives affected by Beacon interventions	Over 2 million
# of providers involved in Beacon interventions	1,087
# of hospital partners	4
# of insurance partners	N/A
# of FQHCs and community health clinics	4

"The IC³ Beacon has helped clinicians improve care processes and patient outcomes through maximizing the power of electronic health records and health information exchange."

- John Berneike, M.D.,
Utah HealthCare Institute

Strategies and Achievements

Building and Strengthening Health IT Infrastructure

Approach: Utah has a longstanding history of exchanging administrative data electronically via the Utah Health Information Network (UHIN). The IC³ Beacon Community is building upon this infrastructure by incorporating clinical data via UHIN's Clinical Health Information Exchange (cHIE). Clinics connecting to the cHIE can share data among multiple stakeholders including Intermountain Healthcare, University of Utah, the Utah Department of Health, as well as private laboratories and national healthcare systems. At the practice level, IC³ supports accurate and accessible IT-enabled performance measurement through the development and deployment of Practice Analytics, which is software that automatically calculates diabetes measures from the database of a clinic EHR and delivers lists of patients meeting, or not meeting, specified measure targets.

Progress:

- The IC³ is able to extract timely and accurate patient outcomes data for over 60 clinics using a variety of data analytic tools for over 300 participating physicians.
- By the end of 2012, IC³ anticipates over 600,000 individuals will have consented to share their clinical data through the cHIE.

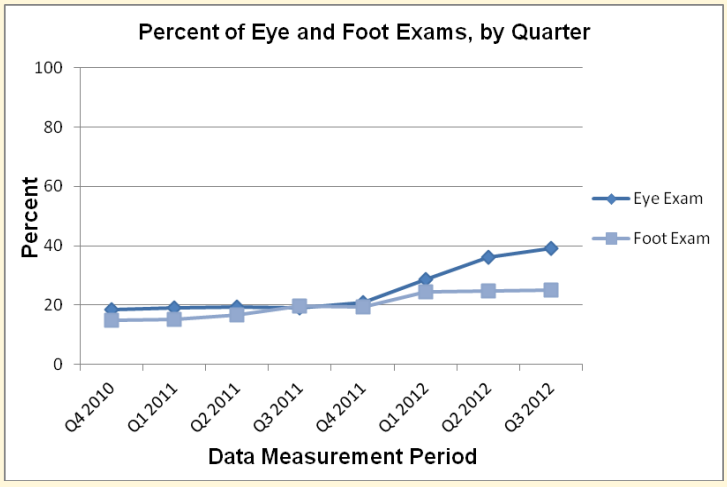
Improving Health, Care and Costs

Approach: IC^3 recruited more than 60 provider practices for participation in clinical transformation activities. Engaged practices meet regularly to disseminate lessons learned and focus on best practices for improving the quality of care delivery. IC^3 is also focusing on intensive practice coaching efforts with a select group of these providers who have committed to moving a specified set of quality measures in their diabetic patient population. Gauging their progress against performance data, these providers are focused on adoption of clinical guidelines, implementation of patient reminder/follow-up systems, integration of care managers, and patient self-management support through new technology and tools. All of these providers are working to maximize the functionality of clinic EHR through practice evaluation services and vendor clinical training.

Early Results: By the Numbers

People with diabetes risk long term illness that can include blindness and extremity amputation. Early and regular eye and foot care have proven to help avoid these complications. Between Q4 2010 and Q3 2012 IC^3 Beacon clinics have:

- Improved A1C screening rates by 4 percentage points and blood pressure control by 5 percentage points.
- Increased the rate of annual eye and foot exams performed and documented by 20 and 10 percentage points, respectively.



Number of patients included in the denominator: 18,673 to 21,387.

Progress:

- Twelve out of 60 clinics are participating in an accelerated program to achieve seven of eight outcome measure goals, Meaningful Use Stage 1, and connection to the cHIE with regular use. Nine of these clinics for which data are currently available improved performance between Q4 2010 and Q2 2012 in aggregate as indicated below:
  - A1C Control (a measure of average blood glucose level) improved by 5%
  - LDL Screening improved by 8%
  - Blood Pressure Control improved by 10%
  - Nephropathy Screening improved by 10%
  - Retinal Exams improved by 16%
  - Foot Exams improved by 26%.

- Measuring clinician performance and feeding back real-time results to providers has engaged several hundred clinicians and practices to implement learned best practices such as patient registry utilities.

Testing Innovative Approaches

Approach: IC^3 is incorporating Physicians Orders for Life-Sustaining Treatment (ePOLST) information into an electronic reporting, registry, and access format for greater assurance that end of life care meets the patient's stated desires. POLST is a form that states what kind of medical treatment patients want toward the end of their lives. The ePOLST registry allows patients to make their own decisions in advance of emergency scenarios to avoid unwanted, painful, or expensive procedures at end of life. Access to this information in the field by emergency responders allows for elimination of procedures and hospitalizations that patients have specifically rejected. IC^3 is also partnering with the Southeast Minnesota Beacon Community to test a quality of life questionnaire designed to help providers incorporate patient reported outcomes into diabetes care. Finally, IC^3 deployed a randomized pilot study evaluating the effects of a bidirectional text messaging application, Care4life, which enables diabetes patients to track their health and receive educational reminders.

Progress:

- Pilot testing of the ePOLST functionality was initiated in September 2012, with a large long term care facility and EMS responders.

- Roughly 310 patients are enrolled in the Care4life text messaging study across 14 provider sites. Early reports suggest patients are highly receptive to the application, and in some cases have demonstrated improved outcomes, including several patients presenting blood glucose readings in normal ranges after years of chronic diabetes complications.

For more information on the IC^3 Beacon Community visit http://www.healthinsight.org/Internal/Beacon.html.

Christie North
Program Director
cnorth@healthinsight.org

Travis Smith
Communications Lead
tsmith@healthinsight.org