The Office of the National Coordinator for Health Information Technology



San Diego Beacon Community (San Diego, CA)



SAN DIEGO BEACON

Overview and Goals



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, SDBC is using technology to improve the quality of health care delivered for all San Diegans by:

- Increasing the speed with which cardiac patients receive appropriate emergency care and reducing the amount of time patients spend in the ER
- Reducing 30 day all-cause readmissions by facilitating successful transitions between hospital and home
- Improving childhood immunization rates and the number of children receiving all recommended vaccinations by two years of age.

Partners

SDBC's major partners include: the Council of Community Clinics, County of San Diego Health & Human Services Agency, the Hospital Association of San Diego and Imperial Counties, the San Diego County Medical Society, and the San Diego Fire-Rescue Department.



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San Diego Beacon Community Background				
Total Grant Award	\$15,275,115 over 3 years			
Lead Grantee	The Regents of the University of California, U.C. San Diego			
Geography	San Diego and Imperial Counties			
# of lives affected by Beacon interventions	175,000			
# of providers involved in Beacon interventions	500			
# of hospital partners	7			
# of insurance partners	2			
# of FQHCs and community health clinics	11			

"My ECG arrived to the ER before I did, and my doctor knew immediately that I was having a heart attack. That information allowed him to make an informed decision about my treatment before he even saw me. Modern medicine is great as far as I'm concerned."

- John Dalton, patient

For more patient stories, click here.

Strategies and Achievements

Building and Strengthening Health IT Infrastructure

Approach: SDBC is building a health information exchange (HIE) that will ultimately enable providers to access patient records across the metropolitan area. The HIE will connect clinical partners using multiple technical protocols using site-specific consent. Providers and medical centers can connect to the San Diego Immunization Registry and submit data to the county's Public Health servers to monitor for disease outbreaks.

Progress:

- Four hospital health systems and two medical groups are now participating in the HIE.
- The HIE includes over 175,000 unique patients whose records could be accessed in an emergency, over 2,500 unique users, and approximately 900 patients who have consented to sharing their medical records for treatment purposes.

Improving Health, Care and Costs

Approach: Four paramedic/ambulance service organizations responsible for emergency medical response within the San Diego region have partnered with SDBC to electronically



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transmit electrocardiograms from ambulances to hospital emergency departments. Delivering this information prior to a patient's arrival in the hospital ensures immediate treatment can be

provided upon arrival. Faster and better coordinated care for emergency cardiac patients is critical to successful outcomes. Transmitting electrocardiograms from the field can also prevent unnecessary activations of cardiac catheterization teams in cases where treatment is not required. SDBC is also working with several area hospitals to provide better care to discharged patients; ensuring at-risk patients are connected with appropriate social services can play a large role in preventing avoidable readmissions.

Progress:

- Transmissions are being sent electronically to four emergency departments and cardiac receiving centers in San Diego County.
- Early results suggest this intervention can lead to a substantial decrease in the unnecessary activation of cardiac catheterization teams, as

Early Results: By the Numbers*

Since SDBC interventions began in January 2011, inappropriate cardiac catheterization lab activations have decreased.

	Q1 2011	Q2 2011	Q3 2011	Q4 2011
Number of false-positive cardiac catheterization lab activations	7	3	1	0
Total number of cardiac catheterization lab activations	21	19	13	4

While the number of cardiac catheterization lab activations are potentially avoided is relatively small, they represent a significant savings with an estimated cost of about \$15,000 for each activation.

discussed in the "Early Results" box.

Testing Innovative Approaches

Approach: SDBC is using text messaging to improve the number of children receiving recommended immunizations by their second birthday. Parents or guardians of young children who have signed up for the service receive text messages tailored to the child's current vaccination status in the San Diego Immunization Registry, which covers over 750,000 lives. Messages contain notifications about upcoming immunizations, alerts about immunizations which may be overdue, and reminders to make and keep routine wellness appointments where providers will have an opportunity to give immunizations.



^{*}Based on April 2012 data

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Progress:

SDBC is testing the technology with a small pilot study involving approximately 150 parents
and caregivers across six sites. With encouraging results from this test, they will explore
opportunities to offer the service to a wider group of patients covered by the registry.

For more information on the San Diego Beacon Community, visit: http://www.SanDiegoBeacon.org.

Anupam Goel Co-Program Director angoel@sandiegobeacon.org Debbie Taheri Communications Lead DeTaheri@sandiegobeacon.org

