



Beacon Community Program

Awardee of The Office of the National Coordinator for
Health Information Technology

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.

San Diego Beacon Community

Overview of the San Diego Beacon Community

San Diego County, located in southwest California, boasts a diverse population of more than 3 million residents. The strategic vision that guides health services in the county is *A County that is Healthy, Safe, and Thriving*. The county is focusing on three behaviors — poor nutrition, lack of physical activity, and tobacco use — that influence rates of heart disease, stroke, cancer, diabetes, and asthma. These diseases result in more than 50 percent of deaths in San Diego. Heart disease alone accounts for one-quarter of all deaths every year. The county believes that improving health habits will lead to higher quality of life and result in significant cost savings. In addition to an emphasis on personal responsibility for health, San Diego County's vision emphasizes the importance of building a better care delivery system — through innovative health information technology (health IT) solutions.

Advanced electronic health record (EHR) capabilities and health IT infrastructure already exist in many key hospital systems in the region. Furthermore, the region has developed an internationally recognized emergency medical services EHR that has facilitated the creation of case management for high-utilizers of emergency services, dramatically reducing costs associated with emergency department readmissions. The health IT gaps in this community include lower EHR adoption rates in clinics outside larger health care systems and lack of health information exchange. Addressing these gaps while transforming clinical care will be instrumental in achieving this community's goals of improvements in quality care, population health, and cost efficiencies.

Goal of the Program

The San Diego Beacon Collaborative (SDBC) aims to use health IT resources and clinical interventions to enable providers to improve medical care decisions and overall care quality, empower patients to engage in their own health management, as well as reduce re-hospitalization and unnecessary and redundant testing. Specifically, the SDBC is working to achieve four objectives:

- Use a strengthened foundation of health IT to facilitate other health improvement initiatives in San Diego by engaging and partnering with community health prevention programs to reduce or effectively manage risk factors for chronic disease including heart disease and stroke
- Improve inpatient discharge and care transition planning for patients of Navy and the University of California, San Diego (UCSD) in phase I, followed by community-wide implementation of care transition planning across the major health systems in San Diego County
- Deploy mobile health technology-enabled solutions to increase rates of childhood and adult immunizations, as well as report data to a county registry
- Test new analytic techniques and measures aiming to reduce redundant radiology tests for patients across the SDBC

Using Health Information Technology to Make a Difference

The SDBC is building on and strengthening San Diego County's health information technology infrastructure and improving the capabilities of county providers to share health information. For example, by creating better electronic communication between health care providers in various settings, the SDBC can enhance care coordination and management of patients. Electronic interfaces and data sharing are the foundation of the SDBC efforts to improve quality of care for the residents of San Diego County, including the many Navy and Veterans Administration residents. Specifically, the SDBC is implementing quality improvement and health IT plans to:

- Make better connections between labs, medical centers, and public health systems to help San Diego officials identify and respond more quickly to disease outbreaks and emerging epidemics.
- Promote data sharing in three ways:
 - Use health IT-facilitated communications in ambulances to reduce the time between when patients experience initial symptoms of heart attack or stroke and when clinicians deliver treatments to reduce the adverse impact and improve outcomes.
 - Between emergency department and catheterization teams within hospitals, shorten the time between when a heart attack is diagnosed and when the obstructed blood vessel causing the heart attack is opened.
 - Between inpatient facilities and outpatient medical centers, ensure that all members of a patient's care team have access to the most recent medication list, problem list, and discharge follow-up and instructions.
- Improve electronic connections between medical centers and the county immunization registry to help providers identify children less than two years of age who need to be vaccinated. The SDBC is piloting a mobile health tool to text alerts when immunizations are due.

A Team Approach

Systemic change requires collaboration, co-investment, and shared knowledge and responsibility. The SDBC, therefore, is a partnership that includes the University of California San Diego Health System, the Council of Community Clinics, Family Health Centers of San Diego, Naval Medical Center San Diego, Rady Children's Hospital San Diego, San Diego County Public Health Services, San Diego Fire-Rescue Department, Sharp HealthCare, Scripps Health, and the VA San Diego Healthcare System. The SDBC also collaborates with the California Health Information Partnership & Services Organization, the local Regional Extension Center that is supported by the Office of the National Coordinator for Health Information Technology.

Improvements for Patients and the Community

By coordinating and aligning with existing community organizations and programs, the SDBC is building on and strengthening the quality improvement and IT infrastructure to achieve improved health outcomes by:

- Reducing preventable visits to emergency rooms and re-hospitalizations through comprehensive discharge planning and care transition support of patients who bounce around the community and without a medical home
 - Using health IT tools to identify opportunities for reducing duplicative imaging and other procedures that drive up costs, but that do not support health improvements
 - Equipping emergency service battalions with wireless technology to enable transmission of electrocardiograms from field to receiving emergency rooms
 - Demonstrating through cutting-edge research the wireless technology solutions that have the most impact on health outcomes, improve efficiency, and demonstrate value
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