



# County of Santa Cruz

## HEALTH SERVICES AGENCY

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### HEALTH SERVICES AGENCY ADMINISTRATION

**To:** Office of the National Coordinator for Health Information Technology,  
Department of Health and Human Services

**From:** Rama Khalsa, Ph.D., Santa Cruz County Health Services Agency Administrator

**Re:** Letter of Intent to Apply for Beacon Community Cooperative Agreement

**Date:** January 8, 2010

The County of Santa Cruz, California, submits this letter of intent to apply to be a Beacon Community under the lead of the County's Health Services Agency and in partnership with member health care organizations of the Health Improvement Partnership of Santa Cruz County, the State of California Health and Human Services Agency, and other key local, regional, state and national stakeholders.

The Santa Cruz Hospital Referral Region (described below) is ready to build on our high rate of EHR adoption, robust experience with health information exchange, and participation in the Institute for Healthcare Improvement (IHI) Triple Aim initiative to improve connectivity within systems and across entities. We will do this by using health information technology, including information exchange, to work collaboratively to integrate our fragmented health care system to improve population health, quality of care, and patient safety, while doing our part to bend the cost curve and engage the patient population. We expect this initiative to create the technology infrastructure for building an Accountable Care Organization (ACO) in our region, in a community already recognized as a high-quality, low per capita cost health environment, as per Dartmouth Atlas and other measures.

### ***Identification/Justification of Measurable Health Systems Improvement Goals***

**Goal #1:** Help health care providers adopt and meaningfully use certified electronic health records (EHRs) for higher quality, safer health care including proactive patient care planning, management of their patient population and building patient-centered medical homes.

Justification	Outcome Measures
Individual physicians and groups were early adopters of HIT resulting in a self-reported EHR adoption rate of 69% in 2009, primarily by the larger private physician groups and County clinics. The two private FQHC clinics are planning to adopt EHRs in 2010-11, as are many independent private physicians. Use of EHRs for proactive	<ul style="list-style-type: none"> <li>• Improvement in Quality Based Incentive scores for Medicaid managed care patients.</li> <li>• Improvement in Pay for Performance scores for commercial patients.</li> <li>• Community Assessment Project bi-annual telephone survey indicates increase in respondents who use primary care providers as their regular source of health care (instead of the Emergency Dept.).</li> </ul>

Justification	Outcome Measures
patient care planning and population management has lagged in all sectors.	<ul style="list-style-type: none"> <li>• Increase number of providers with components of patient-centered medical homes.</li> </ul>

**Goal #2:** Enhance regional clinical integration by expanding clinical messaging throughout the care continuum, across boundaries, so that patient health information follows them to the point of care.

Justification	Outcome Measures
Builds on experience using health secure clinical messaging system. For example, in 2008-09 designed and implemented clinical messaging system to send dictated discharge summaries to safety net clinics and some private physicians within 48-hours of hospital discharge.	<ul style="list-style-type: none"> <li>• Decrease in hospital admissions for ambulatory care sensitive conditions. (AHRQ, Preventive Quality Care Indicators data set)</li> <li>• Decrease in ED use for conditions that could have been treated in a primary care setting. (NY algorithm)</li> <li>• Decrease in hospital re-admissions within 30-days</li> <li>• Decrease hospital re-admissions for CHF within 30 days</li> <li>• Medicare value measures of (Quality x Service)/Cost</li> </ul>

**Goal #3:** Give providers working in the hospital, emergency departments, and urgent care HIPAA-compliant access to a patient's health records from other settings to improve quality and patient safety.

Justification	Outcome Measures
Providers are adopting a variety of EHRs with enterprise-specific Master Patient Indexes. In the hospitals, providers are using remote access to locate electronic records for known patients. SNFs are clinically isolated by a lack of electronic records and clinical messaging.	<ul style="list-style-type: none"> <li>• Establish a community-wide Master Patient Index linked to Public Health/Vital Statistics.</li> <li>• Improvement in rates of medication reconciliation at admission and discharge.</li> <li>• Improvement in information on patient diagnoses and medications by ED staff and hospitalists.</li> <li>• Create electronic records in SNFs linked to providers and hospitals.</li> </ul>

**Goal #4:** Support electronic access by patients to their health information to engage the patient in self-management of care.

Justification	Outcome Measures
Patient access to the electronic records was offered by PAMF in 2008 and is currently used by 38% of their adult patients. Safety net providers and smaller medical groups have not been able to offer patients electronic access, but would like to. Patient access to electronic information is recognized as another element of connectivity of the health care system, as well as contributing to patient empowerment/self-management (including Advance Directives).	<ul style="list-style-type: none"> <li>• Focus groups and electronic surveys to assess patient satisfaction with expansion of electronic health records and record exchange.</li> <li>• Hospital long-term facility audits monitor staff compliance with Advance Directives.</li> <li>• Improved Hospital Compare surveys.</li> <li>• Increased number of patients receive visit summaries and follow-up instructions in all settings.</li> </ul>

**Goal #5:** Improve health care for all children and decrease disparities in health status to improve population health.

Justification	Outcome Measures
<p>2008 Public Health Report identified the health of our children as a priority public health issue. Specific findings included:</p> <ul style="list-style-type: none"> <li>• Low rate of childhood immunizations (86%)</li> <li>• High rate of childhood obesity (29%), especially among Latino youth (40%).</li> </ul> <p>Pediatric providers, including safety net providers, have identified the lack of access to pediatric psychiatry as a priority issue in our community.</p>	<ul style="list-style-type: none"> <li>• Increase in childhood immunization rates.</li> <li>• Decrease in childhood overweight in all segments of the population.</li> <li>• Increase satisfaction by pediatric providers with access to psychiatric care for their patients.</li> </ul>

**Goal #6:** Integrate public health surveillance and web-based communicable disease reporting into the health care information system to improve population health and strengthen emergency preparedness.

Justification	Outcome Measures
<p>High adoption of EHRs has created demand for electronic submission of public health reports via the EHR.</p> <p>Current rate of report submission estimated at 20%.</p> <p>Santa Cruz County is a pilot site for the CA DPH web-based system for communicable disease reporting.</p>	<ul style="list-style-type: none"> <li>• Increased knowledge of communicable disease outbreaks in County.</li> <li>• Improved response to community outbreaks of communicable diseases.</li> </ul>

### ***Geographic Area***

The geographic area to be served by the Beacon Community program is the Santa Cruz Hospital Referral Region (HRR) #87, Santa Cruz, CA, which includes the following zip codes: 95001; 95003; 95004; 95005; 95006; 95007; 95010; 95017; 95018; 95019; 95039; 95041; 95060; 95061; 95062; 95063; 95064; 95065; 95066; 95067; 95073; 95076; and 95077. The Santa Cruz HRR has a diverse population of 260,000 (approximately 30% Latino) and includes Santa Cruz County and adjoining areas of Monterey and San Benito Counties served by hospitals and ambulatory care providers located in Santa Cruz County.

### ***Organizational Mission, Capability, Experience, and Readiness***

Santa Cruz County's Health Services Agency (HSA) exists to protect and improve the health of the people in Santa Cruz County. HSA provides programs in Environmental Health, Public Health, Medical Care, Substance Abuse Prevention and Treatment, and Mental Health. The County and its many partners have been leaders in promoting and adopting health information technology to improve health outcomes, efficiency and quality.

The exchange and use of clinical information in the greater Santa Cruz county service area has a long and rich history. In the early 1990's, Dominican Hospital automated its hospital-based clinical systems and began providing electronic laboratory and diagnostic imaging results, as well transcribed physician documentation such as patient history and physical assessments and hospital discharge summaries. In 1994, after receiving requests from physicians for transmittal of electronic health information to their offices, Dominican Hospital surveyed the community for needs and requirements.

Recognizing the need for some type of “server hub” to standardize the distribution of electronic information, Dominican Hospital prepared a request for proposal from several firms with information exchange experience. Providing the seed money for a development project with the chosen vendor, Dominican Hospital engaged the physician and provider communities to participate in the design, testing and implementation of a new system for health information exchange, even though the term HIE had yet to be coined.

Hospitals, reference labs, imaging providers and Physicians Medical Group of Santa Cruz County (PMG), a local Independent Physician Association (IPA) formed a working group with bylaws for open membership. The working group was referred to as an early Community Health Information Network (CHIN) and later a Regional Health Information Organization (RHIO). Working with the vendor, Axolotl, during 1994 and 1995, the team developed and launched a system that is now known as Elysium.

Since its launch, the Elysium tool set has developed and matured with additional functionality such as e-Prescribing and direct interfaces to a large number of physician-chosen electronic health records (EHR). In 2007, the Santa Cruz HIE demonstrated clinical exchange in the first NHIN prototype demonstration in 2007. Today there is continuing utilization of HIE functionality across the service area, including 2 hospitals, 10 safety net locations, 1 mental health provider, 7 laboratories, 5 radiology imaging sites, 600-700 electronic users (MDs, hospitals, surgery centers), and 80 connections to third-party EMR systems.

In 2003, HSA served as the lead for a community Healthy Communities Access Program (HCAP) grant that included adoption of electronic medical records, quality improvement, and health coverage expansion. A second grant building on these successful systems was awarded to the Health Improvement Partnership Council and expanded projects involving frequent users of emergency services, children’s health coverage, and information exchange between partners using Axolotl Elysium and also EpicCare through OCHIN.

Oregon Community Health Information Network (OCHIN) provides EpicCare to a network of safety net clinics located throughout the nation, with a concentration in Oregon and California. OCHIN supports Epic for Santa Cruz County ambulatory clinics that operate as FQHCs. Sutter Health has selected EpicCare as its EHR for its network of 26 hospitals and medical groups (2 million patients) in Northern California. The Palo Alto Medical Foundation (PAMF), as a Sutter affiliate, operates a hospital, home health agency and 18 outpatient clinics (165 providers) in Santa Cruz County (serving 115,000 active patients) and provides key imaging, urgent care and specialty services to the safety net clinics in this county. EpicCare, when implemented to support patient care and HIT interoperability in Santa Cruz County, will provide a live, bi-directional, EHR linkage between all Sutter providers and all clinics supported by OCHIN's Epic-based clinics. This will encompass all providers in these organizations — not just those linked in Santa Cruz County.

As of December 2009, self-reported survey responses indicated EHR adoption rates were 68% of total providers (n = 533, including mid-levels) and 79% of primary care providers (n = 205, including mid-levels). Two areas that have not been able to implement EHRs are two private FQHC clinics, both of which have launched implementation to begin in 2010, and independent physicians, of whom only half have EHRs.

The table below shows estimated current service offerings for HSA and its partners:

	EHR Adoption/Use			HIE			Privacy/Security		
	Staff	Prax	Prov	Staff	Prax	Prov	Staff	Prax	Prov
HSA	16	1	25	15	1	25	1	1	25
PMG	8	76	210	4	110	350	.5	48	300
CHW/Dom Hospital	5	Most in SC	467	3	DH-credentialed MDs	600	3	DH-credentialed MDs	467 MDs, 1,694 staff
PAMF	105	1	175	15	1	175	10	1	175
OCHIN	64	31	2,794	6	31	2,794	2	31	2,794

### ***Ability to Leverage Existing Programs and Resources***

HSA and its partners intend to collaborate with other ONC/Federal grant-funded programs, including Regional Extension Centers, the Veterans Administration, HRSA, CDC, and AHRQ. The table below lists community partners in the requested categories:

<b>Category</b>	<b>Specific Partner Organization</b>
State Primary Care Association	<ul style="list-style-type: none"> <li>California Primary Care Association (CPCA)</li> </ul>
Health Professional Societies	<ul style="list-style-type: none"> <li>Santa Cruz County Medical Society</li> </ul>
Health Center Controlled Networks	<ul style="list-style-type: none"> <li>OCHIN</li> </ul>
Health Plans	<ul style="list-style-type: none"> <li>Central California Alliance for Health</li> </ul>
Hospital Systems	<ul style="list-style-type: none"> <li>Catholic Healthcare West/Dominican Hospital</li> <li>Sutter Maternity and Surgery Center/Palo Alto Medical Foundation</li> <li>Watsonville Community Hospital</li> </ul>
Local and State Public Health Departments	<ul style="list-style-type: none"> <li>Santa Cruz County Health Services Agency, Public Health Services</li> <li>California Department of Public Health</li> </ul>
Academic Institutions	<ul style="list-style-type: none"> <li>Cabrillo College</li> <li>University of California, Santa Cruz</li> </ul>
Charitable Foundations	<ul style="list-style-type: none"> <li>Community Foundation of Santa Cruz County</li> <li>Pajaro Valley Community Health Trust</li> <li>United Way</li> <li>Tides Foundation</li> <li>California Health Care Foundation</li> </ul>
Quality Improvement Organizations	<ul style="list-style-type: none"> <li>Institute for Healthcare Improvement (IHI)</li> <li>NCQA</li> <li>HEDIS</li> </ul>