

# The Office of the National Coordinator for Health Information Technology



## Health Information Exchange Strategic and Operational Plan Profile

### Overview

Hawai'i is comprised of eight main islands, seven of which are inhabited. With a population of approximately 1.3 million, Hawai'i is one of the least densely populated states and is also one of the most remote geographic areas in the world. Due to the relative isolation and island separation, health care delivery and accessibility remain an ongoing challenge. The most highly integrated systems of clinical data and attendant information gathering and exchange take place within Kaiser Permanente, Hawai'i Pacific Health, The Queen's Medical Center, and a federal hospital. The bulk of the hospital market for both inpatient and outpatient care is represented by the first three organizations. The first three organizations implemented the same electronic medical record system, and those three are linked to various subordinate clinics through outer island locations. Data compiled by the Hawai'i Pacific Regional Extension Center has determined the number of primary care physicians in Hawai'i operating in groups of under 10 to be 960. These small practices are the target group for adoption of EHRs over the next three years.

### Model and Services

In Phase 1, Hawai'i HIE will implement a secure messaging, Direct compliant "push" model available to physicians wanting to communicate with other physicians with or without an EHR and for the delivery of structured lab results. Hawai'i HIE will serve as the Health Information Service Provider (HISP) to authenticate all users to create, transmit, and receive secured messages. Additionally, Hawai'i HIE will host an Individual-Level Provider Directory and Entity-Level Provider Directory. The secured messaging service will also be available for use by all laboratories that are using a laboratory information system (LIS) or, as in the case of medically underserved areas, smaller labs that do not have any electronic structured or unstructured data systems.

In Phase 2, the preliminary plan is to start with a secured messaging platform, then expand into an interoperable HIE exchange model. Following the initial phase, the focus will be on incremental progress toward language standards for laboratory data sets and a more robust exchange interface. Hawai'i HIE network services will leverage existing hospitals to host the technology required to support physicians across the community. The network will create a community master patient index (MPI) with unique identities that is anticipated to grow to equal the full state population before the end of the second year of the project.



Office of the National Coordinator for Health Information Technology  
State Health Information Exchange Cooperative Agreement Program  
HealthIT.hhs.gov

**State:** Hawai'i

**HIT Coordinator:**  
Mark Anderson

**Award Amount:**  
\$5,603,318

**Contact:**  
Christine Mai'i Sakuda  
[csakuda@hawaiihie.org](mailto:csakuda@hawaiihie.org)  
808-441-1313

**Website:**  
<http://www.hawaiihie.org/>

**Other Related ONC funding received by Hawai'i Health Information Exchange:**

Health Information Technology  
Regional Extension Center (REC)  
\$6,548,775

**Other Related ONC funding received by the state of Hawai'i:**

Beacon Community Program  
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Hawai'i-Hilo)  
\$16,091,390

**Contact:**  
Karen Pellegrin  
[Karen3@hawaii.edu](mailto:Karen3@hawaii.edu)

University of Hawai'i Community  
Colleges (UHCC) Health IT Program  
\$796,408

**Contact:**  
Carol Hoshiko  
[hoshiko@hawaii.edu](mailto:hoshiko@hawaii.edu)

## Highlights

- **Market Penetration:** In terms of health care coverage, inpatient and outpatient care, pharmacy organization, and laboratories, the market status of Hawai'i tends to differ from many other states. In each of these three critical environments, two organizations control about 70% of the market. This means that the impact is large when action is taken in these areas. For example, the Hawai'i HIE and the laboratory community will be collaborating to define a common data set used to send lab results through the HIE. On May 9, 2011, the American Society for Clinical Laboratory Science and the Clinical Laboratory Management Association will meet in Hawai'i to discuss the most current HIT Policy Guideline and will assist the independent labs on the federal lab results initiatives.
- **Regional Extension Center Alignment:** Since Hawai'i HIE is also the Hawai'i Pacific REC, they are uniquely positioned to leverage their REC outreach efforts with providers and EHR vendors across the state. The Hawai'i Pacific REC has created an outreach plan to that will assist providers in workflow redesign and meeting Meaningful Use requirements. Additionally, the REC will play the critical role in vendor management for EHRs, which includes verification that vendors meet NHIN Direct Exchange specifications.
- **Collaboration:** Hawai'i HIE and the Hawai'i County Beacon Community Consortium (HCBCC) program will be collaborating on outreach efforts with the REC program to assist primary care physicians with implementing EHR systems in Hawai'i and specific Pacific Islands. In addition to these efforts, program tools that are to be developed by HCBCC, Hawai'i HIE, Hawai'i Department of Health, and the HPREC will be shared with Pacific Island grantees and elsewhere. A secured, shared website will be provided in which each designated grantee will have access privileges. Information such as the Request for Information for a hybrid HIE technical approach, lab data standards, legal policies and NHIN updates, could be shared once finalized.



## Attachment A: Plans to Meet Meaningful Use

	<u>Landscape</u>	<u>Strategy</u>
<b><u>Electronic Prescribing</u></b>	<p>Recent data reflects that an estimated 975 in-state active providers currently use or have implemented electronic prescribing systems. In 2009:</p> <ul style="list-style-type: none"><li>- 10% of prescriptions were routed electronically</li><li>- 16% of physicians routed prescriptions electronically</li><li>- 75% community pharmacies were activated for e-prescribing</li></ul> <p>CVS and Walgreens will soon represent approximately 80% of the Hawai'i prescription market.</p>	<p>The gaps that require acknowledgement are the large percentage of scripts that may be transmitted electronically by Hawai'i prescribers and the 15% of pharmacies that must be connected to Surescripts in order to receive electronic prescriptions.</p> <p>The strategies to address this gap include coordinating with Surescripts, those already e-prescribing, local corporate representation, and the HPREC program, and legislators on implementation of e-prescribing systems and education and outreach programs.</p> <p>In 2011, Hawai'i HIE will be collaborating with CVS and Walgreens to develop the inclusion of prescription drug information into the Hawai'i HIE. There is also a collaborative effort between Hawai'i HIE and the State Department of Health and other public organizations to implement a feasibility study to assist pharmacies to the best extent possible with implementing e-prescribing systems.</p>
<b><u>Patient Care Summary</u></b>	<p>In Hawai'i, the nature of clinical summary exchange is hospital-centric. With the exception of hospitals and physicians affiliated with Hawai'i Pacific Health or with Kaiser Permanente, physician-to-physician exchange occurs only in small numbers.</p> <p>20% of organizations are not able to share CCR/CCD information outside their walls.</p>	<p>The secured messaging model will be able to deliver CCR in such a way that providers without an operational EHR or those with an EHR will be able to take advantage of sending a secure message through the HIE.</p>



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**Structured Lab Results**

Diagnostic Laboratory Services (DLS) and Clinical Laboratories of Hawai'i (CLH) account for approximately 70% of the laboratory market in Hawai'i and serve almost 90% of Hawai'i patient population along with those of Guam and Commonwealth of the Northern Mariana Islands. For physicians that utilize an EHR, it is estimated that approximately 50-70% are able to connect to both CLH and DLS and most of the major hospital information systems have collectively interfaced with DLS and CLH. Currently, electronic clinical laboratory ordering is being done in the state of Hawai'i. For hospitals, it is approximately 90% and for independent providers, it is approximately 20%.

30% of labs are not interfaced with either DLS or CLH. The strategy to address this gap includes:

- Developing agreements with other programs (i.e. HPREC)
- Working with the remaining hospitals that have internal lab facilities
- Using market demand from the participating primary care physicians

Hawai'i HIE will host a secure messaging portal that will allow independent labs to pass data through the exchange. The independent labs will have to conform to HL7 standards and have the technology to support portal access.

The three major hospital systems in the state all have Epic Inpatient EMR as their clinical information systems. It is relevant to note that Epic has incorporated ELINCS specifications into the Laboratory Module for their EMR application. Epic's adoption of the ELINCS standards has the potential to standardize Hawai'i hospital systems' laboratory facilities to a national coding standard. These advancements towards LOINC standardization by Hawai'i's large hospital systems, along with Hawai'i HIE stakeholders, will drive the other laboratories to comply with LOINC standards by the 2013 milestone.

The Hawai'i Pacific REC is also requiring that EHR vendors implementing their systems into the independent provider practice be able to interface to several labs in order for providers to meet MU. While the two largest labs are positioned to meet these providers' needs, the small labs, as a result of increased EHR implementation and increased provider demand to schedule MU, will need to adopt language standards by the providers' EHR go-live milestone.



## Planned HIE Inventory

Standards		Quality Improvement	
Nationwide Health Information Network Exchange Specifications		Care Coordination	
Nationwide Health Information Network CONNECT		Quality Reporting	
Nationwide Health Information Network DIRECT		Behavioral Health Information Exchange	
Plans to exchange with federal agencies or other states via Nationwide Health Information specifications	<b>X</b>		
Public Health		Lab Strategy	
Electronic lab reporting of notifiable conditions		Planning to implement translation services	<b>X</b>
Planning to connect to syndromic surveillance	<b>X</b>	EHR interface	
Planning to connect to immunization data to an immunization registry	<b>X</b>	Policy strategy	<b>X</b>
Patient Engagement			
Patient Access/PHR		Order Compendium	
Blue Button		Bi-Directional	
Patient Outreach		Alignment with CLIA	
Privacy and Security		E-Prescribing	
Privacy and Security Framework based on FIPS		Planning to Display Medication History	<b>X</b>
Individual choice (Opt In/Opt Out/hybrid)		Incentive or grants to independents	
Will develop authentication Services	<b>X</b>	Plan for controlled substance	
Planning to provided audit Log	<b>X</b>	Set goal for 100% participation	<b>X</b>
		Controlled substance strategy	
Administrative Simplification			
Electronic eligibility verification		Care Summaries	
Electronic claims transactions		Translation services	
Vendor			
Planning	<b>Complete</b>	CCD/CCR Repository	
Planning to implement Core Services	<b>X</b>	Directories	
		Planning to create Provider Directory	<b>X</b>
		Master Patient Index	
		Record Locator Services	
		Health Plan Directory	

*Information for this profile was obtained from the approved Operational and Strategic Plan submitted to the National Coordinator for Health Information Technology as a condition of the Health Information Exchange Cooperative Agreement. The complete plan can be downloaded at: [www.statehieresources.org](http://www.statehieresources.org)*



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