



## Health Information Exchange Strategic and Operational Plan Profile

### Overview

The State of Vermont has an existing statewide health information (HIE) infrastructure, the Vermont HIE (VHIE) network operated through a 501(c)(3) non-profit organization, the Vermont Health Technology Leaders, Inc. (VITL). The VHIE is a component of the State's larger health reform delivery system initiative, the Vermont Blueprint for Health. The Blueprint for Health is a statewide initiative to transform care delivery to achieve wellness, prevention, chronic disease management and care coordination goals, financially supported by all the state's payers through a common set of per person per month payments and shared funding of local community health team staff. The initiative supports EHR adoption, implementation of the medical home model in primary care, health information exchange infrastructure, a shared clinical registry, data repository and reporting infrastructure, and community-based disease management and care coordination teams. It is currently piloted in three communities and will expand to a minimum of two medical homes in each county by July 2011 and be fully implemented statewide by 2013.

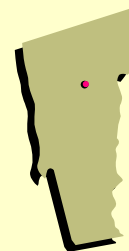
### Model and Services

In the first phase, VITL will focus on expanding access to clinical care summaries and lab results to providers across the state using a push approach. Lab results transmission is a current capability of the HIE. The VHIE receives the results from several hospitals, normalizes the results using LOINC and transmits them to the provider EHR where they are stored in a structured way. By mid-2011, all hospital labs will be connected to the VHIE. By the end of 2010, LabCorp will be connected. Quest is expected to be connected shortly thereafter. Providers connected to the VHIE network will also have the ability to push a CCD through secure routing and a statewide provider directory. The State anticipates using the NHIN Direct specifications to guide clinical summary exchange and other point-to-point exchange.

Through a contract with the Vermont Health Department, VHIE network is the transport mechanism for data exchange with the state Immunization Registry, and other public health registries will be added over time. Similarly, syndromic surveillance and notifiable lab result submissions will migrate to the HIE as the state IT systems' capabilities are modernized to enable connectivity to the HIE network. Interface development is underway for the delivery of radiology reports from hospitals to physician practices, electronic ordering of both lab and imaging tests and electronic reporting of immunizations to the Vermont Immunization Registry.



Office of the National Coordinator for Health Information Technology  
State Health Information Exchange Cooperative Agreement Program  
<http://www.HealthIT.hhs.gov>



**State:**  
Vermont

**HIT Coordinator:**  
Hunt Blair

**State Designated Entity:**  
Vermont Information  
Technology Leaders

**Award Amount:**  
\$5,034,328

**Contact:**  
Hunt Blair

**Website:**  
<http://www.vitl.net/>  
<http://www.hcr.vermont.gov>

**Other Related ONC funding in  
Vermont:**

Health Information Technology  
Regional Extension Centers (RECs)  
\$6,762,080

## Highlights

- **Supporting Health Reform Initiatives: Vermont's Blueprint for Health:** Participating medical homes and community health teams have access to a registry, reporting, and a clinical data repository tool which can be populated directly or through feeds from EHRs and other sources (such as labs) directly and via the VHIE. This is part of Vermont's larger health reform strategy and, with the exception of a portion of the VHIE network, is not funded under this grant. The Blueprint for Health is financially supported by a State appropriation and a multi-insurer payment model. There is a central data repository for aggregating data from multiple sources participating in the Blueprint for Health initiative. Once the data is aggregated, it is transmitted to the Blueprint Registry, which provides access to analyze the aggregated data and generate reports for patient case management and care coordination. Access to other data remains federated, with each health care organization assigned its own local repository. There is a master person index (MPI), which uses demographic feeds from each participating provider and algorithms to accurately match records located in the various repositories to a unique individual.
- **Public Health Reporting:** Through a contract with the Vermont Health Department, the VHIE is the transport mechanism for data exchange with the state Immunization Registry, and other public health registries will be added over time. Similarly, syndromic surveillance and notifiable lab result submissions will migrate to the HIE as the state IT systems' capabilities are modernized to enable connectivity to the VHIE network.
- **Legal and Regulatory Support for Exchange:** The VHIE has clear statutory authority and direction and is also referenced in the Blueprint for Health authorizing legislation. 18 V.S.A. chapter 219 § 9351 requires the overall coordination of a statewide HIT plan, and 18 V.S.A. chapter 219 § 9352 establishes VITL as the exclusive statewide HIE for Vermont. The law requires that policy direction remain with the State. Act 128 places certain requirements on providers, particularly hospitals, to connect to the VHIE in order to participate in the Blueprint for Health. (However, it should be noted that a provider is not required to participate in the Blueprint for Health in order to connect to the VHIE.)
- **Interstate Exchange:** Vermont is active in the New England States Consortium Systems Organization (NESCSO) to further interstate activities. It was one of the first States to sign the Memorandum of Understanding (MOU) between NESCSO members in order to begin work on a regional provider index. The regional master provider index is currently envisioned as an internet based query system utilizing NHIN Direct global addressing, if available, that providers can access to locate routing and other key information for any provider in the region. This is critically important for care coordination as many patients cross into neighboring States for care. In 2008, 21% of discharges for VT residents occurred in New Hampshire, New York or Massachusetts; 14% of discharges in Vermont were for out of state residents. The New England states and New York are actively working together to establish the specifications and timeline of the project. NESCSO is pursuing financial support through a response to an RFP for Specialized Consulting Services to the Massachusetts Technology Collaborative.
- **Direct Interstate Exchange:** Vermont is working with New Hampshire to connect Dartmouth Hitchcock Memorial Hospital to the VHIE in 2011.



# Meaningful Use

	<b>Landscape</b>	<b>Strategy</b>
<b><u>E-Prescribing</u></b>	Allscripts/SureScripts report that 93% of Vermont pharmacies are accepting electronic prescribing and refill requests. 12% of prescriptions are being submitted electronically.	VITL is working with pharmacies as part of a HRSA funded project, which provides incentives and education to help community pharmacies enable e-prescribing. VITL also operates a program called the ePrescribe Vermont Program, which is a statewide initiative to help Vermont providers use e-prescribing technology. This program offers providers either incentives to upgrade systems to enable e-prescribing or access to a free, web-based e-prescribing application. In addition, VITL has partnered with Allscripts and Medmetrics, the pharmacy benefit manager for the Medicaid program. Medmetrics is building a formulary that will be loaded into the Allscripts e-prescribing system.
<b><u>Structured Lab Results</u></b>	<p>The vast majority of lab tests are performed by VT hospitals and two major commercial labs: Quest and LabCorp. Currently, 50% of VT hospitals are delivering lab results using the HIE. HIE connectivity to LabCorp is being finalized and VITL is in the process of negotiating with Quest.</p> <p>The rest of the CLIA-certified labs in the state serve the internal needs of providers and the results of these labs will be captured by the HIE through the connectivity to the provider.</p>	Lab results transmission is a current capability of the HIE. The VHIE receives the results from several hospitals, normalizes the results using LOINC and transmits them to the provider EHR where they are stored in a structured way. By mid-2011, all hospital labs will be connected to the VHIE. By the end of 2010, LabCorp will be connected. Quest is expected to be connected shortly thereafter.
<b><u>Patient Care Summary</u></b>	Clinical summaries are currently being transmitted from practices participating in the Blueprint for Health to the Blueprint Registry. The summary is either transmitted as a C32 CCD or an HL7 MDM which is transformed into a CCD by the HIE. Currently, none of the available releases of EHRs can consume the contents of the CCD though most can read the information as a document.	The State has several phases of implementation to reach complete bi-directional exchange of CCDs across the state. In the first phase (already complete) providers use the CCD to send clinical information to the Blueprint Registry. Next, providers connected to the HIE will have the ability to push and consume a CCD through secure routing and a statewide provider directory. The State anticipates using the NHIN Direct specifications to guide clinical summary exchange. The statewide provider directory is planned for completion in mid-2011. In the final phase, the exchange will enable a provider to pull summaries from disparate sources to create a holistic view of the patient's status and care. This will require opt-in consent in VT. The State is delaying this final implementation phase until late 2011 or 2012 to incorporate emerging State and Federal policy and to remediate current vendor limitations.



# HIE Inventory

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

*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: <http://www.statehieresources.org>*



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