VERMONT INFORMATION TECHNOLOGY LEADERS

January 2010 Progress Report

Our Vision: A transformed health care system where health information is secure and readily available when people need it, positioning Vermont as a national example of high quality, cost effective care.

-- VITL Vision Statement

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January 15, 2010

Secretary of Administration
Commissioner, Dept. of Information and Innovation
Commissioner, Dept. of Banking, Insurance, Securities & Health Care Admin.
Director of the Office of Vermont Health Access
Secretary of Human Services
Commissioner, Dept. of Health
Commissioner, Dept. of Mental Health
Commissioner, Dept. of Disabilities, Aging, and Independent Living
Commission on Health Care Reform
Senate Committee on Health and Welfare
House Committee on Health Care

Dear Legislators and Administration Officials:

Enclosed please find the Vermont Information Technology Leaders, Inc. (VITL) Annual Progress Report through January 15, 2010.

2009 was a year of significant transition for VITL. Many of the initiatives to deploy Health IT to VT providers continued. Meanwhile, the organization prepared for substantial increases in the rate of deployment of Electronic Health Record (EHR) and Health Information Exchange (HIE) adoption envisioned by the ARRA HITECH Act.

VITL prepared to support the deployment of EHR's and HIE statewide by strengthening its management team and supporting the Deputy Director of Health Care Reform in revising the State HIT Plan. VITL applied to become the Regional HIT Extension Center for Vermont in order to better support practices' deployment of EHR's.

VITL achievements: The Clinical Transformation Program was expanded to assist a total of nine independent primary care practices with electronic health record (EHR) adoption and workflow redesign, ensuring that EHRs are deployed for maximum benefit in improving patient outcomes and efficiency. As a result of this work, VITL is in an excellent position to quickly expand its assistance to Vermont physician practices under the federal Regional Health Information Technology Extension Centers program.

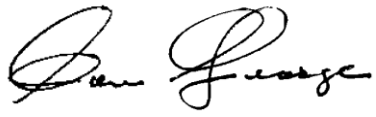
In 2009, VITL expanded the number of providers on its EHR Connectivity Service, which enables hospitals to deliver electronic test results directly to physician EHRs. This service is critical for physicians implementing EHRs, and it lays the foundation for bi-directional health information exchange, which VITL expects to deploy in early 2010.

Progress was made in providing data services to the Vermont Blueprint for Health. Interfaces enabled physicians to send data to the DocSite system, which is used to support the patient-centered medical home initiative. VITL will continue its development efforts in 2010 to connect clinicians in several more Vermont communities.

VITL launched an electronic prescribing initiative in the fall of 2009 with a federal grant secured by U.S. Senator Patrick Leahy. Education and outreach to physician practices is underway, and will continue through the fall of 2010. Increased use of electronic prescribing will improve patient safety and the quality of care and will position participating practices to take additional steps toward a full EHR under the CMS EHR incentive program.

VITL board members and advisors put in hundreds of volunteer hours in 2009 working on governance and finance issues, as well as privacy and security policy development. We would like to thank them for their devotion and willingness to share their expertise. VITL also thanks the General Assembly and the Administration for its support. We look forward to your continued collaboration in 2010.

Respectfully submitted,



Don George
Chair, VITL Board of Directors

David Cochran, MD
VITL President and CEO

Table of Contents

1. Introduction 5
2. Vermont Health IT Fund 6
3. Preparation for HITECH Act 8
4. Act 61 of 2009: An Act Relating to Health Care Reform 11
5. EHR Deployment Programs 12
   - 5.1 Clinical Transformation Program 13
   - 5.2 Pre-Screened EHR Products 13
   - 5.3 Preferred Vendor Program 14
6. EHR Connectivity Service 14
7. Health Information Exchange 15
   - 7.1 Privacy and Security Policies 15
8. Medication History Service 16
9. Support of the Blueprint for Health Initiative and Public Health Programs 17
   - 9.1 Blueprint Support 17
   - 9.2 Immunization Registry 17
10. Electronic Prescribing 18
11. Vermont Health Information Technology Plan Update 18
12. Health Information Security and Privacy Collaboration 19
13. Outreach and Education 19
14. Statistical Snapshot of VITL Projects 19
15. Status of VITL Projects 20
16. Conclusion and 2010 Outlook 21

1. Introduction

Vermont Information Technology Leaders, Inc. (VITL), is a 501(c)(3) non-profit organization which functions as a public-private partnership. VITL was incorporated in Vermont on July 22, 2005, and is funded by both the state and federal governments through grants. VITL is a multi-stakeholder organization formed by a broad base of health care providers, payers, employers, consumers, and state agencies. These various constituencies are represented by volunteers who serve on VITL's board of directors, its two board-level advisory committees, and other advisory groups.

VITL is a component of Vermont's overall health reform initiative. VITL's success depends on its ability to support programs, such as the Blueprint for Health, transform the care that Vermonters receive. At the General Assembly's direction, VITL is designated in the Vermont Health Information Technology Plan to operate the exclusive statewide health information exchange network. VITL has conducted health information technology pilot projects, and operated several long-term programs financed by the Vermont Health IT Fund and federal grants. The programs' primary objectives are to facilitate the adoption of electronic health records systems (EHRs), improve the quality and efficiency of patient care through clinical transformation in physician offices, control health care costs, and foster health information exchange (HIE) among health care provider organizations. VITL contracts with the Vermont Department of Health to provide data services to support the Blueprint for Health Initiative and other public health programs.

VITL collaborates with the Deputy Director of Healthcare Reform and acting state HIT coordinator to ensure that the state's HIT policy objectives are articulated and achieved. The efforts of VITL are coordinated with other state and federal initiatives, including the National Health Information Network (NHIN) of the federal Office of the National Coordinator for Health Information Technology, the national eHealth Initiative, and the Vermont Blueprint for Health. VITL's work helps to facilitate communication among Vermont's privacy and health information technology experts and creates the foundation for future health information technology collaboration.

2. Vermont Health IT Fund

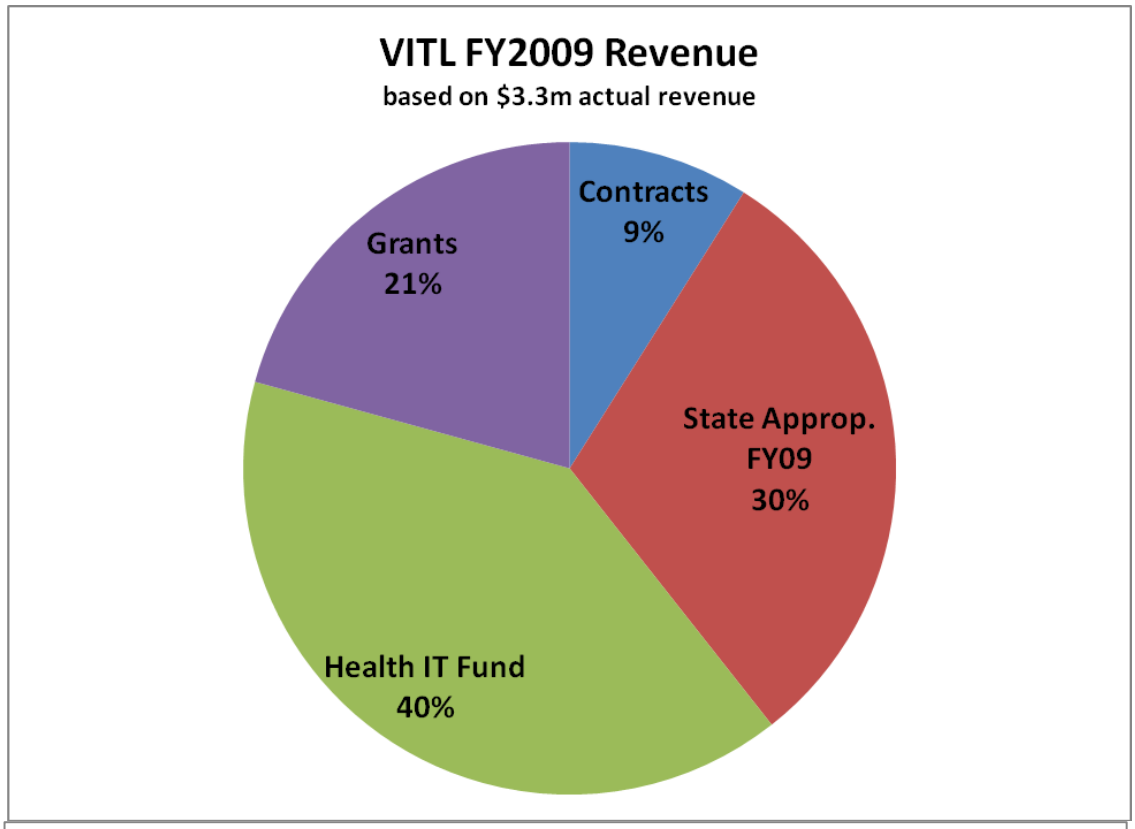
In the FY2009 Appropriations bill, the Legislature created the Vermont Health IT Fund for use by VITL and state entities to advance health information technology. The revenue for the fund is 0.199 percent of all health care claims paid by Vermont insurers or a fee determined by BISHCA based on the insurer's market share.

> **8 VSA 4089k:** *(a) Quarterly, beginning October 1, 2008, each health insurer shall pay a fee into the health IT-fund established in section 10301 of Title 32. The health insurer may choose either of the following fee options:*
>
> *(1) 0.199 of one percent of all health care claims paid by the health insurer for its Vermont members in the previous fiscal quarter, or*
>
> *(2) an annual fee payable quarterly, to be calculated on or before August 1, 2008 and on or before August 1 of each succeeding year by the department of banking, insurance, securities, and health care administration, or by an agent retained by the department, in consultation with the secretary of administration, based on the proportion which the health insurer's total annual health care claims for the most recent four quarters of data available to the department bears to the total health care claims for all health insurers for the most recent four quarters of data available to the department, multiplied by the total fee revenue which would be raised if all health insurers chose the fee option established in subdivision (1) of this subsection.*

Administration of the Vermont Health IT Fund was transitioned from the Secretary of Administration to OVHA and the Office of Health Care Reform. It is used for the advancement of medical health care information technology programs and initiatives such as those outlined in the Vermont Health Information Technology Plan.

> **32 VSA 10301:** *The fund shall be used for the development of programs and initiatives sponsored by VITL and state entities designed to promote and improve health care information technology, including:*
>
> *(1) a program to provide electronic health information systems and practice management systems for primary care practitioners in Vermont;*
>
> *(2) financial support for VITL to build and operate the health information exchange network;*
>
> *(3) implementation of the Blueprint for Health information technology initiatives and the advanced medical home project; and*
>
> *(4) consulting services for installation, integration, and clinical process re-engineering relating to the utilization of healthcare information technology such as electronic medical records.*

VITL's total revenues for FY2009 were $3.3m (chart 1). The HIT Fund was 40% ($1.4m) of the total revenue (chart 2).


VITL FY2009 Revenue
based on $3.3m actual revenue
Contracts
9%
State Approp.
FY09
30%
Health IT Fund
40%
Grants
21%

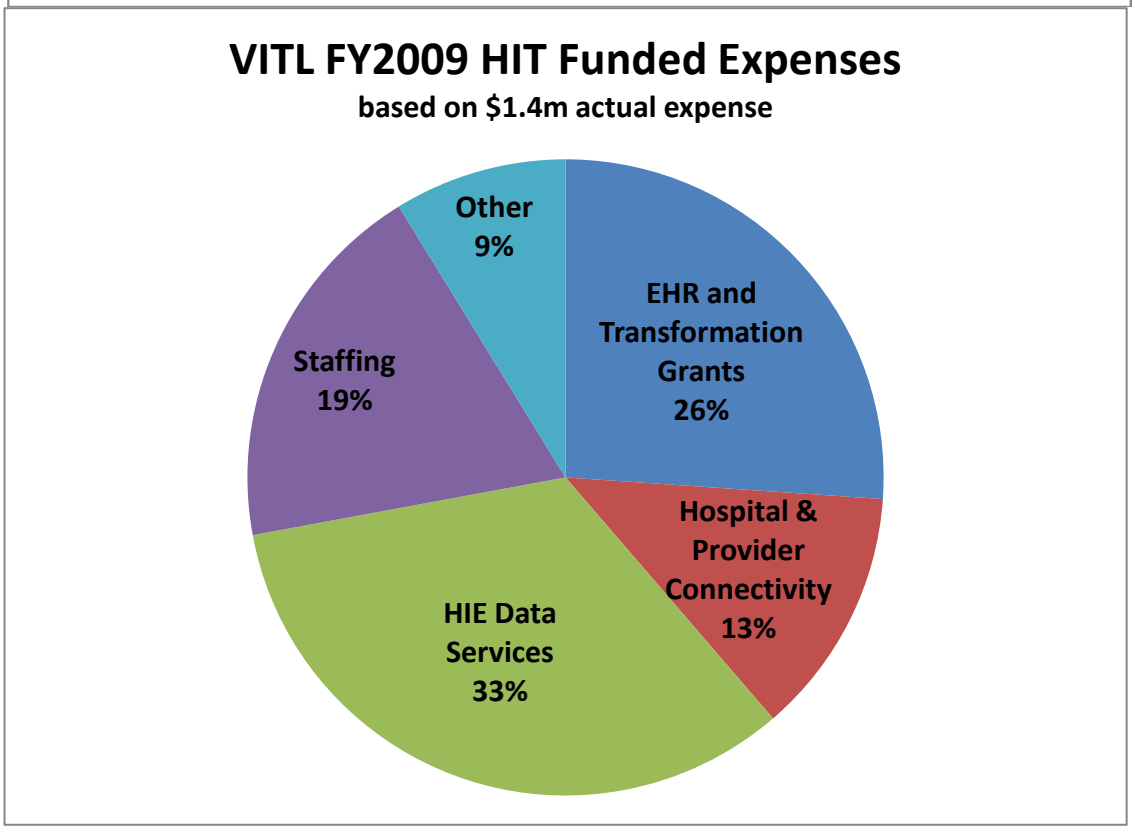

VITL FY2009 HIT Funded Expenses
based on $1.4m actual expense
EHR and
Transformation
Grants
26%
Hospital &
Provider
Connectivity
13%
HIE Data
Services
33%
Staffing
19%
Other
9%

Chart 1 and 2

3. Preparation for HITECH Act

An important component of the 2009 American Recovery and Reinvestment Act (ARRA) was the Health Information Technology for Economic and Clinical Health Act better known as the HITECH Act. HITECH provides incentives to hospitals and providers participating in the Medicaid and Medicare programs for the adoption and meaningful use of electronic health records. Provider incentives through Medicare can be as high as $44,000 and over $60,000 for those qualifying for the Medicaid incentives (Table 1).

VITL has worked with the Deputy Director of Health Care Reform positioning Vermont to be able to take full advantage of the provisions of the federal HITECH Act. In addition to providing incentives to providers and hospitals, the federal Office of the National Coordinator for Health IT (ONC) is providing grants to states, state-designated entities and qualified not-for-profit organizations to provide planning and operation support to improve the prospects of successful HIT deployment. Our overarching strategy has been to leverage the state HIT Fund to match federal dollars and, thereby, maximize our capacity to provide support to practices in the state.

The Deputy Director of Health Care Reform, with VITL's active collaboration, took the lead in developing an update to the Vermont HIT Plan. This was one of the requirements to receive HITECH dollars and part of the state's HIT-HIE Cooperative Agreement with ONC. The HIT-HIE Cooperative Agreement will provide just over $5 million dollars over four years to support operational planning and the deployment and administration of the Vermont Health Information Exchange (VHIE). About $4 million of this cooperative agreement will come to VITL to administer the VHIE. VITL administers the VHIE under a contract with GE Healthcare.

Successful deployment and meaningful use of EHR's requires a high level of coordinated coaching and support for clinicians. VITL has applied to be Vermont's Regional HIT Extension Center (RHITEC) to support this effort. The RHITEC is charged with providing education, training and direct on site project management and coaching in support of providers' efforts to deploy and meaningfully use EHR's. This support is focused on priority primary care providers defined as primary care providers practicing in groups of ten or less. Since the majority of Vermont's physicians practice in groups of three or less, most will qualify for RHITEC support. If our application is approved, it is expected that VITL will receive about $8 million in federal funds over four years.

The major ONC funding opportunities and the schedule of decision-making is laid out below (Table 2). VITL and the state should have a much better idea of what funding will be available to support the state's HIT plan by the end of the first quarter of the calendar year 2010.

ARRA Medicare and Medicaid Incentives

	Medicare	Medicaid
Eligible Professional (EP)	Excludes hospital based providers (such as radiologists, pathologists)	Excludes hospital based providers (such as radiologists, pathologists)
	Physicians including doctors of medicine, osteopathy, dental surgery, dental medicine, podiatry, and optometry; and chiropractors. Medicare Advantage physicians also qualify.	Physician, dentist, certified nurse midwife, nurse practitioner, physician assistants (in rural clinics/ FQHCs) with 30% Medicaid Patients. Pediatricians with 20% Medicaid patients. Rural Clinic/FQHC 30%Medicaid patients [b]
Incentives for Achieving Meaningful Use (MU)	75% of allowed charges for all Medicare covered services. Max. is $44k if 1st MU is achieved in 2011-2012. Max. is $41k if MU achieved after 2012. Payments end in 2016. If MU not achieved before 2015, penalties apply. [d] Medicare or Medicaid, not both.	States may provide up to 85% of net average allowable cost of certified EHR. Max. is $63,750 for 5 years. Pediatricians get 66% ($42,500 max.) unless Medicaid share is at least 30%. No penalties. Medicare or Medicaid, not both. Net of other sources.

Table 1

HITECH Funding

Summary of Funding Opportunities for HITECH ONC Funds

Sect. #	Cooperative Agreements	Minimum Eligibility Requirements include:	Total Funding	# of Awards	Average Award	Floor	Ceiling	Project Period (budget cycle)	Matching Funds
3013	**State HIE**	Planning phase to develop operational plan; implementation phase to advance HIE in 5 domains (governance, finance, technology, business operations, legal policy)	$564m	one per state	VT ~$5m	$4m	$40m	4 years	FY10 no match; FY11 10-1; FY12 7-1; FY13 3-1
3012	**RHITEC *** Rounds 1 & 2 (VITL applying for both)**	State Designated, non-profit; provide direct assistance to 1,000 priority care providers (at least 20% of PCPs) to achieve "meaning use"; vendor selection & group purchase, practice & workflow redesign, connecting to HIE; involved with workforce development & National Center	$640m	70	$8.5m	$1m	$30m	4 years (2 yr budgets)	Yrs 1-2 90%-10%; Yrs 3-4 10%-90%
3012									
3011	**Beacon Communities ****	urban areas => 30% providers with EHRs, rural => 25% EHRs; 40% for full credit, goal 60%; partner with HIE, RHITEC, others	$220m	~15	n/a	$10m	$20m	3 years	No Match Required
3016	**Curriculum Development Centers**	non-profit higher education; integrate HIT into curriculum, 20 content areas, each center 7-10 content area	$10m	Up to 5 awards; each ~$1.82m; one National Training/Dissemination Center up to $900k				2 years	No Match Required
3016	**Community College Consortia to Educate HIT Professionals**	5 Regions; Region E (N.E., NY, Mid-Atlantic): 17-23 community colleges, at least 2,550 students; one lead organization	$70m	5	Total for Region E: $17m			2 years	No Match Required

* Goal: Vision of the Future using HIT and HIE; Metrics must include one competence at community level: HIE Infrastructure; Practice Redesign and Care Coordination; Monitoring and Feedback. HIE must include unaffiliated organizations. (Table 2)

4. Act 61 of 2009: An Act Relating to Health Care Reform

In Act 61 of 2009, the legislature addressed several issues shaping the direction of HIT and HIE activities in Vermont, including:

1. Clarified the roles and responsibilities for HIT policy and HIE governance placing the responsibility for overall coordination of Vermont's statewide health information technology plan with the Secretary of Administration who has delegated this responsibility to the Office of Vermont Health Access, Division of Health Care Reform.

2. Assigned responsibility to annually update the Vermont HIT Strategic Plan to the Secretary of Administration or designee and seek recommendations from VITL.

3. Required the secretary of administration or designee to apply for HIT grants from HHS.

4. Required HIT policy and implementation to be consistent with the HIT/HIE provisions of ARRA including:
    a. Ensuring privacy and security protocols comply with the HIPAA provisions in ARRA.
    b. Requiring HIT grant applications to ONC and other federal agencies be reviewed by the Secretary of Administration.

5. Assigned VITL the responsibility (if necessary by federal law) to certify meaningful use of HIT and EHRs as defined in ARRA.

6. Excluded VITL's activities as constituting the practice of medicine.

7. Required the secretary of administration to receive funds from HHS and place them in a "loan fund" within the HIT fund (created by legislation in 2008). These funds are to be used for loans and grants to providers for initiatives sponsored by VITL. This provision assumed ONC would make ARRA section 3014 grants available to the states. This was an optional provision of ARRA which ONC has not implemented.

8. Provided the Secretary of Administration the option of contracting with VITL or others to make available low or zero interest loans to providers. The loans would be used for implementing certified electronic health record programs and would be repaid by the provider using Medicare and Medicaid incentive payments.

9. Required the Secretary of Administration to convene a group of higher education stakeholders to evaluate federal grant opportunities to expand medical health informatics education programs.

10. Required the state to consult with and consider the recommendations of a broad group of HIT stakeholders including providers, insurers, consumers, HIT vendors, state agencies and higher education organizations in developing a loan and grant program.

11. Reaffirmed that BISHCA would use the Vermont HIT Plan as the basis for independent review of certificate of need (CON) applications for HIT and state information technology procurements.

5. EHR Deployment Programs

A pilot EHR Program was launched in early 2008 with the award of grants to five independent primary care practices. The $1 million pilot was funded with voluntary contributions from Blue Cross Blue Shield of Vermont, CIGNA, MVP Health Care, the Office of Vermont Health Access (OVHA), and the Community Grant Foundation of the Vermont Association of Hospitals and Health Systems.

More than 30 applications for grants were received from independent primary care practices in Vermont. A selection committee reviewed the applications and nominated grant recipients based on a number of criteria, including the percentage of patients who are Medicaid beneficiaries. Under the pilot project, grants of up to $45,000 per FTE provider were made to each practice. Practices were expected to pay up to 25 percent of the cost. The initial round of grants covered 22 clinicians (18 FTEs). The grant recipients who proceeded with the program were:

- Bennington Family Practice, Bennington
- Brookside Pediatrics & Adolescent Medicine, Bennington
- Mount Anthony Primary Care, Bennington
- Northern Tier Center for Health, Richford

All of the four practices in the pilot project are live with their EHR and successfully using the required components. VITL is in the process of closing out the pilot project.

The state Health IT Fund allowed VITL to make grants to five additional practices in 2009 with a total of 25 providers (20 FTE). Those practices are in the process of implementing their EHR systems, with completion expected in 2010.

Practices receiving grants are expected to:

- Participate in the Vermont health information exchange.
- Implement VITL's privacy and consent policies and procedures.
- Comply with VITL's information security practices and procedures.
- Participate in the state's Blueprint for Health Initiative or at least one chronic care management initiative.
- Attend VITL-sponsored education programs related to implementation.
- Track and report at least one quality improvement metric related to EHR deployment.
- Establish baseline productivity data, track and report changes in provider productivity following EHR deployment.
- One year after implementation, demonstrate use of the following functional components:
  -- E-prescribing
  -- Lab and imaging results and orders (if ordering available at time of implementation)
  -- Clinical messaging
  -- Chronic care management and population reporting
- Serve as a resource to other VT providers implementing EHRs.

The requirements for the grant practices has prepared VITL to provide effective support to practices seeking to implement EHR's and receive CMS incentives for their meaningful use.

5.1 Clinical Transformation Program

VITL's role has been to not only support the deployment of EHR's but also to ensure that they are used to their maximum benefit. The Clinical Transformation Program was created to achieve this goal. The primary care practices who have received grants to subsidize the direct costs of software, hardware, and training have also received funding to cover a portion of the indirect costs associated with EHR deployment, including consultative support for workflow redesign, implementation preparation, contract review, and budgeting assistance.

VITL recognizes that technology alone cannot resolve the challenges a practice faces in trying to provide quality care while maintaining financial viability. Applying technology without first addressing fundamental workflow issues is often the root cause of implementation failures. The philosophy of VITL's Clinical Transformation Program is that clinical process improvement knowledge and skills must be mastered prior to, or in conjunction with, adding the technology layer. Installing information technology without practice redesign will only enable the same care to be delivered faster, not better. The technology, in the form of electronic health records and electronic health information exchange, is best added to an efficient system to achieve desired quality of care and return on investment.

5.2 Pre-Screened EHR Products

VITL announced a Pre-Screened list of EHR vendors in January 2008, after a panel of expert advisors reviewed and scored the 27 vendor responses to VITL's request for information. Vendors on the pre-screened list had to be certified EHR's that had demonstrated the capability to connect to the Health Information Exchange. Grant recipients had to select a vendor from the pre-screened list. Practices receiving grants were also able to take advantage of favorable pricing that VITL negotiated with the vendors on the list.

The products chosen for the Pre-Screened EHR Product List were:

- Allscripts HealthMatics
- Allscripts TouchWorks
- eClinicalWorks
- GE Healthcare Centricity EMR
- McKesson Practice Partner
- NextGen EMR

The products on the list are certified by the Certification Commission for Healthcare Information Technology (CCHIT) and have met VITL's criteria for functionality, service and support, technology, the vendor's vision for the future, and the company's ability to execute that vision. VITL will continue to update the pre-screened list as the market of EHR vendors evolves.

5.3 Preferred Vendor Program

In preparation for the much more rapid deployment of EHR's required under the HITECH Act, VITL developed a preferred vendor program. In addition to being a certified vendor, the preferred vendor needed to agree to preconfigure their product with all the required interfaces to the Health Information Exchange, include all of the functionality required to achieve meaningful use, provide a service plan for providers in VT and provide a readily understandable approach to pricing to allow easy comparisons for providers. A provider panel viewed product demonstrations and VITL staff reviewed the proposals.

VITL established a Preferred Vendor Program for EHR, technology and service companies. Allscripts and EPIC have been selected as Preferred EHR Vendors. SymQuest has been selected as a Preferred Technology Vendor. Additional vendors are expected to be named in 2010.

6. EHR Connectivity Service

When a physician switches from paper medical records to an electronic health records system, one of the first things he or she asks about is the availability of electronic data. For primary care physicians in particular, there is a high volume of information that must be incorporated into the medical record – lab test results, radiology exam reports, hospital discharge summaries, emergency department visit reports, notes from specialists, etc. If this data is not available electronically from its sources, the physician office staff must scan paper reports into the EHR. This is time consuming, inefficient, and results in a lack of discrete data in the EHR's database. That in turn means the system is not being used to its fullest potential to improve patient care.

To meet the demand for electronic data, VITL has developed its EHR Connectivity Service. Data from hospitals and other sources is routed through the VITL HIE to the EHR. Lab test results and other data are transmitted in real-time to the physician's EHR in-box. The physician reviews the incoming data and then decides whether to accept it into the patient's electronic medical record.

A lab results interface with Northwestern Medical Center in St. Albans went live in Sept. 2008, sending lab values directly into the EHRs of physician practices that subscribe to the service. Interfaces between VITL and Southwestern Vermont Medical Center in Bennington, Rutland Regional Medical Center in Rutland, and Brattleboro Memorial Hospital in Brattleboro all went live in 2009. Development of a lab results interface with Fletcher Allen Health Care is nearing completion, with go-live expected in early 2010. Work is also underway to expand the service to include radiology reports delivery.

Physicians using VITL's EHR Connectivity Service report that often they receive lab test results via the interfaces on the same day the test was ordered. They see the results in their EHR immediately, rather than having to wait for staff to sort through stacks of paper. With electronic data fed into the EHR, test results are no longer missing from the chart. Physicians say that receiving results electronically helps speed up treatment, which in turn increases patient satisfaction.

"It is allowing the lab results to come through really as soon as they are done at the lab, they come directly into our computer. Often we will have those results the very same day," said Toby Sadkin, MD, of St. Albans Primary Care, the first practice to use the results messaging service.

7. Health Information Exchange

The EHR Connectivity Service is largely meant to send data from hospitals and other data sources to physician EHRs. It forms the foundation for the launch of a service which will allow for health information to be shared among health care organizations. The interfaces and other infrastructure investments made for the EHR Connectivity Service will continue to be used when the upgrade is made to two-way communication with the deployment of the Vermont health information exchange.

VITL's health information exchange is ready to use and was demonstrated at the VITL Summit, held at the Hilton Burlington in September. Vendors of different EHR systems showed attendees how data can follow patients as they travel between primary care physicians, specialists, and hospitals. Two scenarios were used (emergency treatment and follow-up care for a heart attack, and management of diabetes) to illustrate how patient care is improved and outcomes are better when data can be shared among clinicians in different organizations.

Within the EHR, the clinician clicks on a button or tab to see which documents for a consenting patient are available from other health care organizations participating in the exchange. The documents are shown in a list, which includes a short description of the document's contents and the date it was created or updated. When the clinician clicks on one of the documents, it opens immediately on the computer screen. If the clinician wishes, data from other organizations can be imported to the EHR, making it part of the patient's electronic medical record.

Viewing and importing data from other EHR systems is facilitated by compliance with national standards adopted by the Health Information Technology Standards Panel (HITSP). Major EHR vendors have also adopted the same standards. That means data can be exchanged between different EHR systems without having to develop customized interfaces, thereby speeding up deployment and lowering costs.

7.1 Privacy and Security Policies

VITL plans to deploy the advanced health information exchange in one or more Vermont communities during 2010, now that operational privacy and security policies have been adopted by the VITL Board of Directors.

In April 2008, VITL undertook a six-month process to solicit input from health care providers and consumers regarding development of privacy and security policies for the Vermont health information exchange network. A set of policies was drafted and circulated for comment in the fall of 2008. In December 2008, the U.S. Department of Health and Human Services, through its Office of Civil Rights, issued a guidance document to implement the National Privacy and Security Framework for Electronic Exchange of Individually Identifiable Health Information. VITL's Board, staff and legal counsel analyzed these guidelines in the context of HIPAA, federal and state law, and VITL operations. The analysis informed the development of policies which were adopted by the VITL Board in April 2009.

The policies were updated in Sept. 2009 to comply with provisions in the HITECH Act passed by Congress in early 2009. An update of the secondary use policy was adopted in Dec. 2009, which enables health plans to use data from the VHIE for quality review purposes if the patient consents.

8. Medication History Service

More than 100,000 patients in Vermont hospital emergency departments have participated in VITL's Medication History Service since its inception in April 2007. If a patient gives permission for his or her medication history to be accessed, VITL's system generates a list of the patient's prescription medications paid by insurers within the last six months. Data on prescription drug claims is obtained from pharmacy benefit managers participating in the national SureScripts-RxHub network.

The benefits of VITL's Medication History Service include:

- Patients don't have to struggle to remember all the medications they are taking, when asked by emergency department clinicians for their medication list.
- A more complete and accurate medication history is immediately available, which assists in speedy diagnosis and treatment.
- Clinicians do not have to spend time calling pharmacies to compile lists of patient medications.
- Fewer adverse drug events caused by newly-prescribed medications interacting with existing medications that patients forgot to tell clinicians about.
- Physicians can determine if patients are taking multiple doses of the same drug, if they are taking drugs that possibly could interact with each other, or if they are skipping medications that they should be taking for their conditions.

VITL's Medication History Service is considered by SureScripts-RxHub, a national pharmacy claims data network, to have the highest success rate in the country for matching inquiries and delivering data. All four of Vermont's major payers – Blue Cross Blue Shield of Vermont, MVP Health Care, CIGNA, and Vermont Medicaid – have agreed to participate in VITL's Medication History Service and make their pharmacy claims data available. Because of this high level of cooperation, on average 75 percent of the inquiries sent from participating hospital emergency departments are matched and data is returned for clinicians to use when making treatment decisions.

Another measure of success is the patient opt-in rate. On average, more than 95 percent of emergency department patients agree to have their medication history data accessed.

The two pilot sites for the Medication History Service were RRMC and Northeastern Vermont Regional Hospital. Those hospitals continued to participate in the service after the pilot concluded in late 2007. In 2008, a third site was added: Brattleboro Memorial Hospital in Brattleboro.

VITL has discussed expansion of the Medication History Service to other hospitals. Unfortunately, the cost of the service is a considerable barrier for hospitals. The model used for this program is that hospitals subscribing to the service pay for the transaction costs. VITL has priced the service as low as possible, but the fees are still more than most hospitals are willing to accept.

As the participating hospitals implement EHRs with built-in medication reconciliation and medication history functions, the need for VITL's separate medication history service may diminish. VITL expects to either modify the service to make it more cost effective or to phase it out if hospitals no longer need it.

9. Support of the Blueprint for Health Initiative and Public Health Programs

One of VITL's core objectives is to support the state's health reform initiatives delivered through the Blueprint for Health. VITL is also committed to helping public health agencies leverage health information technology and Vermont's health information exchange investments. In 2008, a large amount of work was done to achieve this objective, culminating in the successful go-live of the Blueprint for Health's Web-Based Clinical Information System, known as DocSite. The service was expanded to additional communities in 2009.

9.1 Blueprint Support

Data from sources such as hospital labs and physician EHRs is transmitted via secure interfaces to a clinical data repository at VITL's data center, hosted by GE Healthcare in South Burlington. VITL's master person index technology uses demographic information to accurately match various records for the same person. Data is then transmitted to the DocSite application, which allows clinicians and members of the Blueprint's Community Health Team to run analytical reports to determine if there are opportunities to improve preventive care or chronic disease management, such as diabetes and hypertension.

Seven physician practice sites in the St. Johnsbury area are participating in the Blueprint's integrated medical home pilot project. Interfaces between the first of those practices and VITL's data center went live in early December 2008. Two physician practices in the Burlington area are also currently using the system and physicians in the Bennington area will begin to use it as well, all as part of the medical home pilot project. Four additional communities (Windsor, central Vermont, Rutland, and Springfield) are slated to become DocSite users in 2010. As of the end of 2009, a total of 1.4 million Blueprint transactions had been processed, and there were 102,215 unique patients registered.

9.2 Immunization Registry

VITL is working with the Vermont Department of Health to develop interfaces that allow physicians to send immunization data from their EHRs to the Vermont Immunization Registry.

Submission of both childhood and adult immunization information to the Vermont Department of Health is required by Vermont law and consistent with Centers for Disease Control and Prevention recommendations. The Vermont Immunization Registry collects and stores immunization information from across the state and provides complete immunization histories to practitioners.

The main features of the Vermont Immunization Registry include demographic information and a consolidated immunization history for each patient, a vaccine forecaster to determine when immunizations are due, reminder/recall and reporting features, and vaccine inventory management capabilities. Over time, it is expected that the Vermont Immunization Registry will grow to contain a lifelong record of immunizations. Currently, immunization data is submitted by practitioners to the registry through a web-based user interface. Some practitioners submit flat-text files which are processed by Vermont Department of Health staff.

The Immunization Registry Interface project involves developing a computer interface to enable the submission of data about immunizations given at physician practices to the Vermont Immunization Registry. Rather than using the web-based user interface, which requires practices to input data manually, the Immunization Registry Interface will enable data to be transmitted from a physician practice electronic health records system to the Vermont Immunization Registry, via the Vermont health information exchange. This direct transmission of data from the physician practice system to the Vermont Department of Health's registry will save time, increase efficiency, and lower costs. Direct submission will also satisfy a specific requirement for providers seeking Medicare and Medicaid meaningful use incentives.

10. Electronic Prescribing

After VITL and the General Assembly's Health Care Reform Commission conducted a joint feasibility study of electronic prescribing in 2008-2009, VITL used a portion of a federal grant to develop an implementation plan. That work was completed in June 2009. VITL applied for a federal grant from the Health Resources and Services Administration, which was secured with the assistance of U.S. Senator Patrick Leahy. The $1 million grant was awarded in Sept. 2009. The electronic prescribing initiative, called ePrescribe Vermont, was launched in Oct. 2009 with a press conference attended by Sen. Leahy.

ePrescribe Vermont is conducting an education and outreach program to all Vermont physician practices, to inform them of the benefits of using electronic prescribing technology. A brochure has been developed, along with an 8-minute video and a 17-minute demonstration of the Allscripts ePrescribe system. These are available both on DVD and on VITL's website.

VITL is offering any Vermont health care provider free access to the Allscripts ePrescribe system, which is web-based and accessible from any location. VITL is also providing free on-site training and Allscripts is providing both email and telephone support. The Allscripts ePrescribe system is targeted to physician practices that still use paper medical records. For those practices that have switched to electronic medical records, but do not have electronic prescribing enabled on their system, VITL will help reimburse the costs of eprescribing module activation.

About 30 independent Vermont pharmacies do not participate in the Surescripts network, which enables pharmacies to receive electronic prescriptions from physician practices. VITL is offering both a financial incentive and technical assistance to pharmacies to join Surescripts.

The federal grant for ePrescribe Vermont initiative will continue until Sept. 2010.

11. Vermont Health Information Technology Plan Update

VITL initiated a revision and update of the Vermont HIT Plan in early 2009. Act 61 transferred primary responsibility for the update to the Deputy Director of Health Care Reform as well as the transfer of policy leadership for HIT to the Division of Health Care Reform. VITL leadership worked closely with the Deputy Director of Health Care Reform to perform the update in a manner that was consistent with both the requirements of the state and the federal Office of the National Coordinator.

12. Health Information Security and Privacy Collaboration

In 2009, VITL continued its involvement in the Health Information Security and Privacy Collaboration (HISPC), along with 42 other states and territories. The purpose of this federally-sponsored collaborative has been to assess variations in HIE policy and law across the states in order to promote interoperability while preserving the necessary privacy and security requirements set by local communities.

VITL has participated in all three phases of the HISPC project, which began in June 2006. The current third phase, which began in April 2008, involved the creation of seven multi-state collaborative projects focused on consent, privacy, consumer engagement, provider education, standards, and inter-organizational agreements. VITL is a contributing member of one of two consent collaboratives and also participates in cross-collaborative activities. VITL's involvement in HISPC has allowed Vermont to play a role in national privacy and security activities, and has also provided funding opportunities to further privacy and security-related work on existing HIE projects within the state.

13. Outreach and Education

In 2009, VITL increased its efforts to reach out to health care practitioners and the general public to educate them about VITL's programs and services, as well as the benefits of EHRs and health information exchange.

The annual VITL Summit continues to be an important mechanism for reaching out to physicians, practice administrators, hospital executives, and health information technology managers. The 2009 VITL Summit attracted attendance of more than 190, as well as a full exhibit hall of 21 vendors. The 2010 Summit is scheduled for this fall.

VITL also exhibited at more than half a dozen conferences for health care professionals during 2009. Updates on VITL and its programs are routinely sent by email to a list of more than 600 interested parties. VITL is in the process of redesigning its website, which will be implemented in January 2010. The website includes several videos that have been produced to inform health care providers about the benefits of EHRs, eprescribing, and health information exchange.

In 2010, education and outreach efforts will be intensified under the Regional Health Information Technology Extension Centers program. The exact campaign is being developed, but it is likely to include a series of demonstration days at locations around the state, and appointing physician EHR champions in each hospital service area.

14. Statistical Snapshot of VITL Projects

- Medication histories delivered to date : 98,685 successful transactions
- Blueprint transactions to date: 692,385 demographic transactions, and 709,775 clinical and lab transactions for a total of 1,402,160
- Lab results delivered from Sept. 2008-Jan. 2010: more than 250,000
- Pilot site EMRs: 82,000 Patient Visits a Year
- Unique patients registered in the Enterprise Master Person Index (EMPI): 102,215

15. Status of VITL Projects

VITL: Status of Major Projects (as of January 15, 2010)						
	Project	**Target Market**	**Prospects**	**Signed contract with Client**	**System Dev. and Implement**	**Live**
1	Medication History	Hospitals	0	3	3	3
3	EHR 2nd group	Primary care	4	4	2	2
4	Lab Results	Practices	1	5	4	10
5	Lab Orders	Practices	3	2	1	
6	Clinical Summary	Practices	3	2		
7	Blueprint	Practices	7	3	16	9
8	Immunization	Practices	9			
		Total	**27**	**19**	**26**	**24**

	Additional Major Projects	**Date Started**	**Completed or Target Date**	**Status**
9	ONC Grant Preparations	Fall 2009	Ongoing	RHITEC & State HIE applications submitted
10	Update the Plan	Summer 2008	March 2009	In process
11	Privacy and Security Policies and Procedures	Summer 2008	March 2009	In process

Table 3

16. Conclusion and 2010 Outlook

2009 was an important transitional year for VITL as the organization prepared to address the challenge of deploying EHR's and connection to the HIE much more rapidly as part of the federal HITECH Act.

- VITL supported the Division of Health Care Reform in updating the State HIT Plan and preparing the submission for the federal HIT-HIE Cooperative Agreement.
- VITL applied to ONC to be named a Regional HIT Extension Center.
- From Bennington to Richford, VITL is working with physicians to transform their clinical practices and implement electronic health records systems.
- In several communities, VITL is building interfaces to hospitals and physician practices so that lab test results and other data can be transmitted securely in real time.
- Clinicians are using the Blueprint for Health's web-based clinical information system, which is powered by VITL's interfaces and data center.
- In Rutland, St. Johnsbury, and Brattleboro, hospital emergency department patients benefit from clinicians being able to access their prescription medication history through VITL's data center.

2010 will be an exciting year for VITL and Vermont. The federal support from the HITECH Act will enable VITL to ramp up its activities and support an aggressive rollout of EHR's and HIE in support of the state's overall health reform initiatives. The e-prescribing program will provide a significant bridge to EHR adoption and accomplish an important goal of meaningful use. The expansion of the Blueprint for Health will provide the opportunity for care in Vermont to continue its transformation supported by readily available information provided through the Vermont HIE.