



VERMONT INFORMATION TECHNOLOGY LEADERS

January 2011 Progress Report

18 V.S.A. § 9352 (e)

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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VERMONT INFORMATION TECHNOLOGY LEADERS

Commissioner, Dept. of Banking, Insurance, Securities & Health Care Admin.
Commissioner of the Department 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, 2011.

2010 was an exciting year for Health Information Technology nationally and here in Vermont. VITL was able to leverage its experience with deployment of Electronic Health Records (EHR) and Health Information Exchange (HIE) to be an early recipient of the federal HITECH funds. VITL was identified as the Regional Extension Center for Vermont in the first group of organizations identified by the federal Office of the National Coordinator for Health IT (ONC).

VITL will support the deployment of EHR's and HIE statewide with strengthened management and deployment teams. VITL continued to support the Deputy Director of Health Care Reform in revising and updating the State HIT Plan in order to qualify for expanded federal funding.

VITL achievements: VITL began to enroll eligible primary care providers in the Regional Extension Center program at mid-year. The program allows VITL to support primary care practices in the evaluation, selection, implementation and meaningful use of EHR's. At year end, over 400 eligible providers had signed up for VITL services and over 200 were live on EHR's.

In 2010, 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.

VITL worked with the Vermont Blueprint for Health to ensure that the infrastructure is in place to support the Blueprint's statewide rollout as required by Act 128. 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 2011 to insure that all hospital service areas are able to participate in the Blueprint program.

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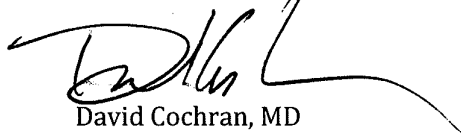
VITL launched an electronic prescribing initiative in the fall of 2009 with a federal grant secured by U.S. Senator Patrick Leahy. Support is being provided to providers and to pharmacies to enable e-prescribing. Increased use of electronic prescribing will improve patient safety and the quality of care and will position participating practices to take additional steps toward a full EHR under the CMS EHR incentive program.

VITL board members and advisors continued to contribute to VITL's success working on governance and finance issues, as well as guiding the organization's expanded responsibilities. 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 continued collaboration in 2011.

Respectfully submitted,



Don George
Chair, VITL Board of Directors



David Cochran, MD
VITL President and CEO

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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 vision is to support health reform 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 (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. The Vermont Department of Health contracts with VITL to provide data services to support the Blueprint for Health Initiative and other public health programs.

VITL is the recipient of a cooperative grant from the federal Office of the National Coordinator for Health Information Technology (ONC) to be the Regional Extension Center (REC) for Vermont. In that role, it is expected to help eligible primary care providers implement and meaningfully use Electronic Health Records (EHRs).

VITL collaborates with the Deputy Director of Healthcare Reform and 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 health information technology experts and creates the foundation for future health information technology collaboration.

2. Federal Health Care Reform and Vermont

The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 seeks to improve American health care delivery and patient care through an unprecedented investment in health information technology. HITECH also directed CMS to implement Medicare and Medicaid EHR Incentive Programs. These programs provide

incentive payments to eligible professionals, eligible hospitals and critical access hospitals (CAHs) as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology. To receive incentives, providers must meet the requirements of the CMS Final Rule on Meaningful Use of Certified EHR technology.

2.1 HITECH Provisions

The provisions of the HITECH Act are designed to work together and include:

- providing the necessary assistance and technical support to providers,
- enabling coordination and alignment within and among states
- establishing connectivity to the public health community in case of emergencies
- assuring the workforce is properly trained and equipped to be meaningful users of EHR technology

Together, these programs (see Figure 1) build the foundation for every American to benefit from an electronic health record, as part of a modernized, interconnected, and vastly improved system of care delivery. Vermont is participating in the following ONC programs initiated in 2010:

HITECH Program	ONC Awards	Vermont Participation
<p><u>State Health Information Exchange Cooperative Agreement Program</u>: A grant program to support States or State Designated Entities (SDEs) in establishing health information exchange (HIE) capability among healthcare providers and hospitals in their jurisdictions.</p>	<p>\$548 million was awarded to 56 states, eligible territories, and qualified State Designated Entities (SDE)</p>	<p>Vermont was awarded a \$5.034m grant to expand the services and number of users of the Vermont Health Information Exchange (VHIE). VITL, under a grant from DHVA, will perform the work. .</p>
<p><u>Health Information Technology Extension Program</u>: A grant program to establish Health Information Technology Regional Extension Centers (REC) to offer technical assistance, guidance and information on best practices to support and accelerate health care providers' efforts to become meaningful users of Electronic Health Records (EHRs).</p>	<p>\$677 million was awarded to 62 organizations to support a nationwide system of RECs that cover every geographic region of the United States.:</p>	<p>VITL was awarded \$6.7m to support 1,100 primary care providers achieve meaningful use of EHR technology. This is a four year grant with a biennial evaluation.</p>

HITECH Program	ONC Awards	Vermont Participation
<p><u>Regional Extension Center Support to Rural and Critical Access Hospitals</u> provides additional funds to RECs to assist rural and critical access hospitals (CAHs) in their efforts to adopt certified EHR technology</p>	<p>\$20 million in additional funding was awarded to 46 existing RECs.</p>	<p>VITL received an additional \$108k to support Vermont's Rural and Critical Access Hospitals.</p>
<p><u>Community College Consortia to Educate Health Information Technology Professionals Program</u>: A grant program that seeks to rapidly create health IT education and training programs at Community Colleges or expand existing programs. Community Colleges funded under this initiative will establish intensive, non-degree training programs that can be completed in six months or less. This is one component of the Health IT Workforce Program.</p>	<p>\$36m awarded to five regional groups of more than 70 community colleges in all 50 states.</p>	<p>Community College of Vermont (CCV), as a part of the Eastern Regional Consortium, received \$580k to train 225 students in 3 roles: Practice Workflow and Information Management Redesign Specialist, Implementation Support Specialist, and Technical/Software Support Staff</p>

Table 1: ONC Grants

2.2 CMS Meaningful Use of Certified EHR Technology

The Medicare and Medicaid EHR Incentive Programs provide a financial incentive for the "meaningful use" of certified EHR technology to achieve health and efficiency goals. By putting into action and meaningfully using EHR technology, providers will reap benefits beyond financial incentives—such as reduction in errors, availability of records and data, reminders and alerts, clinical decision support, and e-prescribing/refill automation.

ARRA and the CMS Meaningful Use Rules specify three main components of Meaningful Use:

1. The use of a certified EHR technology in a meaningful manner, such as e-prescribing.
2. The use of certified EHR technology for electronic exchange of health information to improve quality of health care.
3. The use of certified EHR technology to submit clinical quality and other measures.

Simply put, "meaningful use" means providers need to show they are using certified EHR technology in ways that can be measured significantly in quality and in quantity.

2.3 The Medicare EHR Incentive Program

The **Medicare** EHR Incentive Program will provide incentive payments to eligible professionals, eligible hospitals, and CAHs that demonstrate meaningful use of certified EHR technology.

- Participation can begin as early as 2011.
- Eligible professionals can receive up to \$44,000 over five years under the Medicare EHR Incentive Program. There is an additional incentive for eligible professionals who provide services in a Health Professional Shortage Area (HPSA).
- To get the maximum incentive payment, Medicare eligible professionals must begin participation by 2012.
- Incentive payments for eligible hospitals and CAHs are based on a number of factors, beginning with a \$2 million base payment.
- For 2015 and later, Medicare eligible professionals, eligible hospitals, and CAHs that do not successfully demonstrate meaningful use will have a payment adjustment in their Medicare reimbursement.

2.4 The Medicaid EHR Incentive Program

The **Medicaid** EHR Incentive Program will provide incentive payments to eligible professionals, eligible hospitals, and CAHs as they adopt, implement, upgrade, or demonstrate meaningful use of certified EHR technology in their first year of participation and demonstrate meaningful use for up to five remaining participation years.

- The Medicaid EHR Incentive Program is voluntarily offered by individual states and territories and may begin as early as 2011, depending on the state. Vermont plans to start the Medicaid incentives program in the third quarter of 2011.
- Eligible professionals can receive up to \$63,750 over the six years that they choose to participate in the program.
- Eligible hospital incentive payments may begin as early as 2011, depending on when the state begins its program. The last year a Medicaid eligible hospital may begin the program is 2016. Hospital payments are based on a number of factors, beginning with a \$2 million base payment.
- There are no payment adjustments under the Medicaid EHR Incentive Program.

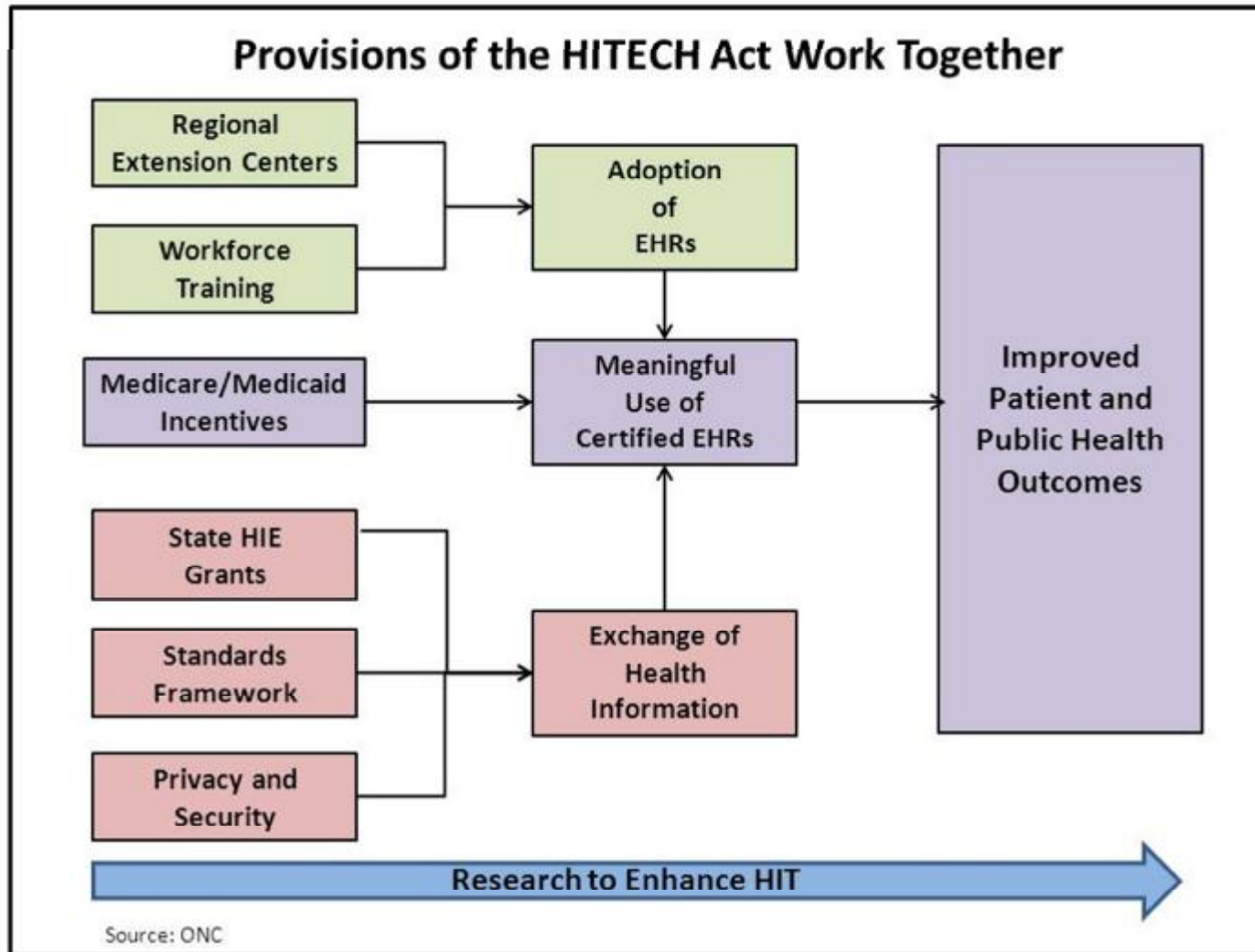


Figure 1: Provisions of HITECH Act

3. Vermont Act 128 of 2010

Act 128 leverages the resources provided by the HITECH Act of 2009. Act 128 includes initiatives to accelerate the expansion of the Blueprint for Health, including a requirement that the Blueprint expand to at least two primary care practices in each hospital service area by July 2011 and to all primary care practices who wish to participate by October 1, 2013. The Centers for Medicare & Medicaid Services (CMS) demonstration grant to Vermont will support Medicare participation in the Blueprint and funding for community health teams. VITL provides data services to the Blueprint Registry under a contract with the Vermont Department of Health (VDH).

Act 128 also requires hospitals to participate in the Blueprint for Health by creating and maintaining connectivity to the state's health information exchange network by July 1, 2011. The Director of Health Care Reform will establish criteria for hospitals connecting to the Vermont Health Information Exchange (VHIE). Hospitals are not required to create a level of connectivity that the state's exchange is not able to support.

4. VITL Sources of Funding

In calendar year 2010, VITL received \$3.5m in funding from the following federal and state sources:

- Federal Funds
 1. ONC Regional Extension Center Grant
 2. ONC Critical Access Hospital Grant
 3. Health Resources and Services Administration grant
 4. Bi-State FQHC Project (HRSA grant)
- State Funds
 1. Vermont Health Information Technology Fund
 2. VDH contract to support the Blueprint for Health

Expenses for CY2010 were \$3.8m to fund the following:

1. EHR Implementation
2. HIE Expansion
3. Administrative expenses

The following charts show the percent of funding from each revenue source and the percent of expenditures for each major project:

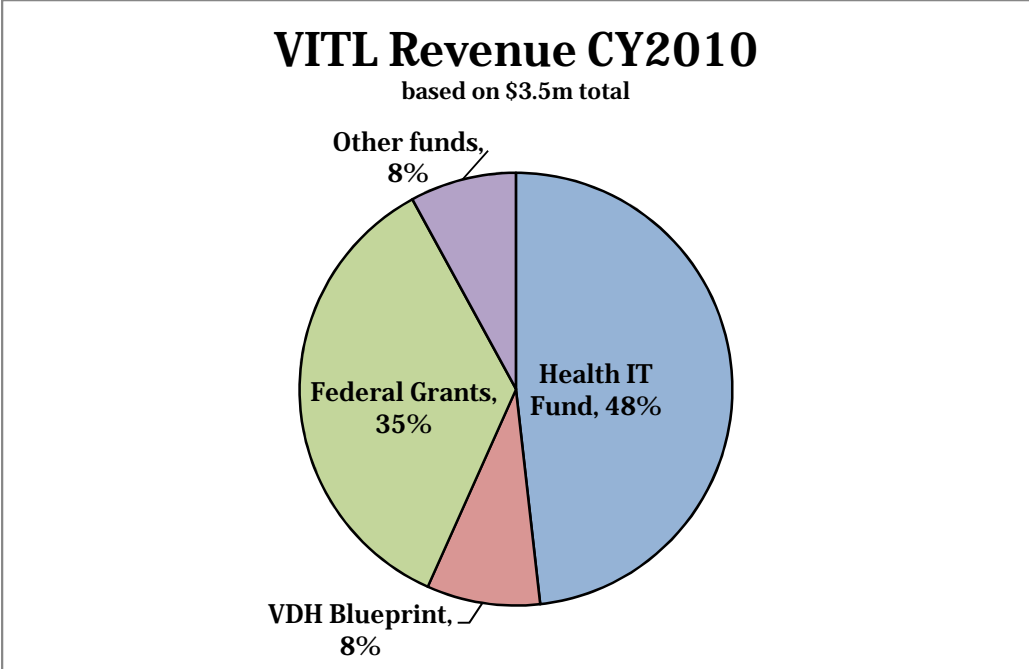


Figure 2: VITL Revenue

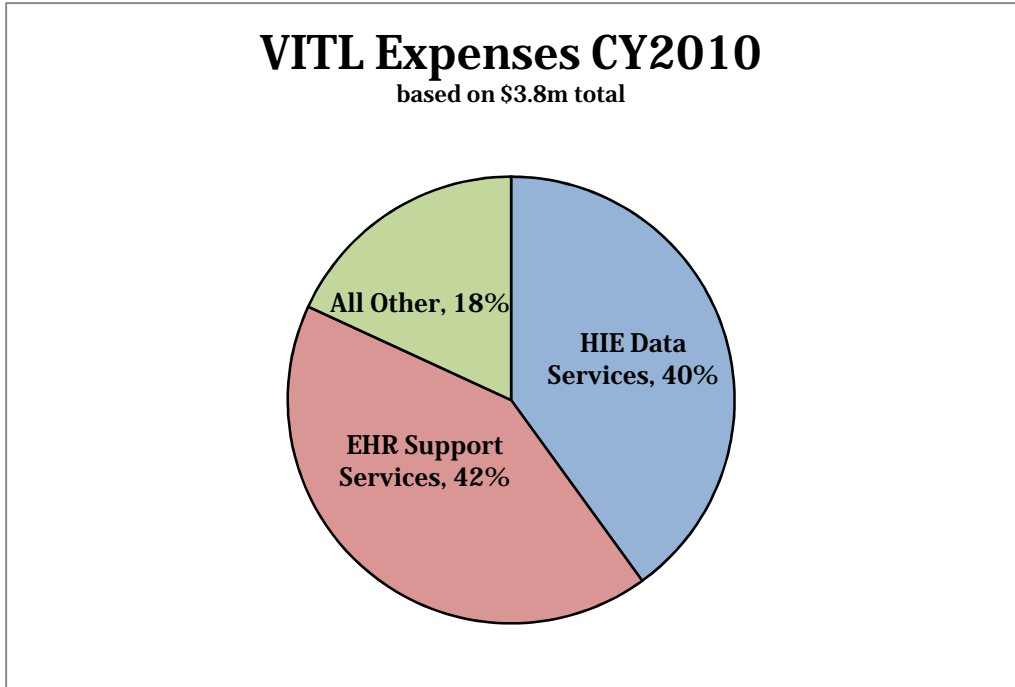


Figure 3: VITL Expenses

(Note: VITL operates on a fiscal year basis aligned to the state fiscal year. Revenues and expenses for a calendar year may appear out of balance. The difference has to do with contract dates, accounting adjustments and federal and state payment schedules).

4.1 Vermont Health Information Technology Fund

Act 61 of 2009 (Sec. 18, 8 V.S.A. § 4089k) modified the original legislation that created the Vermont Health IT Fund as a revenue source to support health information technology advancement in Vermont. The assessment is 0.199 percent of all health care claims paid by commercial Vermont insurers or a fee determined by BISHCA based upon the insurer's market share.

Administration of the Vermont Health IT fund has transitioned from the Secretary of Administration to Department of Vermont Health Access (DVHA) and the Division of Health Care Reform. The fund is used for the advancement of health care information technology programs and initiatives as outlined in the Vermont Health Information Technology Plan including.

- *A program to provide electronic health information systems and practice management systems for primary care practitioners in Vermont;*
- *Financial support for VITL to build and operate the health information exchange network;*
- *Implementation of the Blueprint for Health information technology initiatives and the advanced medical home project; and*
- *Consulting services for installation, integration, and clinical process re-engineering relating to the utilization of healthcare information technology such as electronic medical records.*

5. Regional Extension Center

The HITECH Act authorizes a Health Information Technology Extension Program. The extension program consists of Health Information Technology Regional Extension Centers (RECs) and a national Health Information Technology Research Center (HITRC).

The HITRC will gather information on effective practices and help the RECs work with one another and with relevant stakeholders to identify and share best practices in EHR adoption, meaningful use, and provider support.

Under HITECH, \$677 million is allocated to support a nationwide system of RECs that cover every geographic region of the United States to ensure plenty of support to health care providers in communities across the country.

The RECs will support and serve health care providers to help them quickly become adept and meaningful users of EHR technology. RECs are designed to make sure that primary care clinicians get the help they need to use EHRs.

As a Regional Extension center, VITL will:

- Provide training and support services to assist doctors and other providers in adopting EHRs
- Offer information and guidance to help with EHR implementation
- Give technical assistance as needed

The national goal is to provide outreach and support services to at least 100,000 priority primary care providers within 2-4 years. VITL's target is to assist 1,000 – 1,100 eligible primary care providers achieve meaningful use of certified EHR technology and qualify for the Medicare or Medicaid incentives. While the focus is primarily on providers, we will also provide assistance to the nine Rural and Critical Access Hospitals in Vermont.

5.1 Outreach and Education

In 2010, VITL increased its efforts to reach out to health care practitioners and the public to educate them about VITL's programs and services, as well as the benefits of EHRs and health information exchange.

5.1.1 VITL 2010 Annual Summit

The annual VITL Summit continues to be an important mechanism for engaging physicians, practice administrators, hospital executives, and health information technology managers. The 2010 VITL Summit attracted 230 providers, administrators and policy makers. Twenty-four EHR technology and HIT vendors displayed their products in the exhibit hall.

David Blumenthal, MD, the National Coordinator for HIT, was the keynote speaker at the 2010 VITL Summit. VITL also organized tours of two physician practices (Winooski Family Health and Community Health Center of Burlington) with EHRs for Dr. Blumenthal and set up meetings with several Vermont hospital CEOs, health plan executives, physicians, and legislators. VITL arranged for Dr. Blumenthal to be interviewed by WPTZ-TV and Vermont Public Radio. Dr. Blumenthal spoke about the benefits patients will experience through their provider's meaningful use of EHR technology and the exchange of their health information between their primary care provider and specialists.

5.1.2 Plans for VITL's 2011 Annual Summit

The 2011 VITL Summit is scheduled for Sept. 7, 2011 at the Sheraton Burlington and will feature five educational breakout session tracks and a keynote address by John D. Halamka, MD, MS, chief information officer of Beth Israel Deaconess Medical Center in Boston, chief information officer at Harvard Medical School, chairman of the New England Healthcare Exchange Network (NEHEN), chair of the US Healthcare Information Technology Standards Panel (HITSP), co-chair of the HIT Standards Committee, and a practicing emergency physician.

5.1.3 Expansion of Outreach and Education

In 2010, VITL exhibited at more than half a dozen conferences for health care professionals. Updates on VITL and its programs are routinely sent by email to a list of more than 1,200 interested parties. VITL redesigned its website in early 2010, adding several online videos that have been produced to inform health care providers and consumers about the benefits of EHRs, eprescribing, and health information exchange.

The most significant expansion of outreach and education activities in 2010 came under VITL's federally funded Regional Extension Center program. VITL contracted with the Burlington-based marketing firm of Kelliher Samets Volk (KSV) to assist with the development of a communications campaign designed to educate primary care practitioners about the benefits of EHRs and the details of the CMS Medicare and Medicaid EHR incentive programs. KSV conducted market research, which provided useful insight into how physician practices view EHRs.

The research yielded several useful ideas for how to reach out to physician practices, including noontime "lunch and learn" sessions held with physicians in their offices. In 2010, VITL conducted more than a dozen lunch-and-learn sessions, and organized three open houses at practices with EHRs. These sessions enable physicians considering an EHR to hear about the challenges and benefits physicians experience using EHRs.

By the end of 2010, VITL had signed up more than 400 Vermont primary care practitioners to assist them with adopting and implementing an EHR and achieving meaningful use to qualify for the Medicare/Medicaid incentives. In 2011, VITL will continue to work towards its goal of signing up more than 1,000 Vermont primary care practitioners for EHR assistance.

5.2 EHR Implementation Process

VITL has established a federally and state funded Regional Extension Center (REC) to assist health care providers implement EHR technology. Our services are delivered in

one-on-one meetings, in group settings, and via electronic means. Direct assistance to the practices includes:

- technical support
- coaching in EHR vendor selection
- budgeting
- review of vendor contracts
- workflow analysis
- practice culture assessment
- hardware selection
- data standardization and entry
- data loading and scanning
- go-live preparation
- project management
- privacy/security

5.3 Progress Achieving Meaningful Use

In July 2010, CMS published a Final Rule on the Medicare and Medicaid EHR Incentive Program. To qualify for financial incentives, eligible professionals must achieve “Meaningful Use of Certified EHR Technology.” This means eligible professionals must implement and demonstrate specific levels of EHR use across a range of diagnostic and record-keeping criteria, including ePrescribing, maintaining patients’ medical problems, allergies and medications, recording patient demographics, charting changes in vital signs, generating lists of patients with specific conditions for quality improvement efforts, reporting quality measures, sending patient reminders and supporting clinical decisions. The EHR technology must be certified using a process developed by ONC.

VITL’s REC team is currently working with more than 250 providers to help them achieve their meaningful use objectives. REC Team Implementation Specialists provide self-assessment tools, metrics, gap analysis and remediation assistance.

CMS is developing the Meaningful Use rules in three stages:

- Stage 1 (2011-2012) focuses on capture of structured data in EHRs
- Stage 2 (2013-2014) will emphasis robust exchange of health information
- Stage 3 (2015 and beyond) will concentration on the improvement of health care outcomes.

As new guidelines are released, VITL will work with practices to ensure that they remain on track to achieve full compliance in order to receive all possible incentives.

5.4 VITL Preferred Partner Program

VITL established a preferred vendor program in 2009 to ease the vendor selection process for providers. VITL's Preferred Partner Program grew in 2010 ending the year with four EHR Partners, two technology services partners, and three implementation services partners.

The genesis of the Preferred Partner Program was the observation that physician practices were finding it difficult and time-consuming to know with whom they should be doing business once they had made the decision to use an EHR. The process of "shopping" for the right EHR technology, the appropriate hardware, and finding help in deploying the technology was a serious obstacle for practices. The good intentions of moving forward were interrupted by the vast diversity of choices available to practices.

The Preferred vendor program is designed to allow practices to select vendors with confidence knowing that pricing, service and interoperability have been evaluated by VITL.

Each category of partner has different requirement:

- EHR Partners must offer transparent pricing to Vermont practices, be fully interoperable with the Vermont Health information Exchange, include eight standard interfaces in the base price of their product and have a strong service program in the state.
- Technology partners must offer discounted pricing for Vermont practices, have a strong local support team, and have the skills to provide full network security services.
- Implementation partners are required to have demonstrated skills in assisting small practices with EHR deployment, have a strong local presence, and offer discounted prices.

Current EHR Partners are Allscripts, athenahealth, EPIC/PRISM, and Greenway. Technology partners are SymQuest and C2. Implementation partners are MBA Health Group, Concordant, and Technical Services Program of UVM.

VITL continues to review applications from vendors in all categories.

6. Health Information Exchange

The Health Information Exchange program consists of EHR Connectivity Services and Advanced Health Information Exchange.

The EHR Connectivity Service provides the mechanism for sending electronic data from hospitals, medical laboratories and other data sources to physician EHRs, and from physician EHRs to other practices and to clinical and public health registries. The

interfaces and other infrastructure investments are the foundation for the Vermont Health Information Exchange (VHIE).

Advanced Health Information Exchange permits clinicians to pull together summaries of clinical information from disparate sources for patients who have consented to make their information available. This capability was demonstrated at the VITL Summit in 2009. Vendors of different EHR technology showed attendees how data could follow patients as they travel among 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 when data is shared among clinicians in different organizations.

Within the EHR, the clinician is able to see which documents for a consenting patient are available from other health care organizations participating in the exchange. When the clinician clicks on one of the documents, it is displayed on the computer monitor. If the clinician wishes, data from other organization can be imported into the EHR, making it part of the patient's electronic medical record.

Advanced Health Information Exchange is dependent on evolving privacy and security guidance, EHR capabilities that are not yet mature and broad communication with Vermonters and providers about the value of exchange. VITL anticipates that the Advanced HIE as described here will not become operational before calendar year 2012.

6.1. 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. 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 other providers, etc. If this data is not available electronically, the physician office staff must scan paper reports into the EHR or perform manual data entry. 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.

To meet the demand for electronic data, VITL has developed its EHR Connectivity Service that will include the following functionality:

- Patient demographic data is sent from the physician practice to the VITL HIE to the Blueprint Registry. This allows the Blueprint community health teams to assist with disease management using a specialized reporting registry.
- Laboratory orders are sent to laboratories electronically rather than by phone or fax. This creates a more readable order when it arrives at a lab.

- Lab test results are transmitted to the physician's EHR in-box, and matched with the electronic order if one has been sent. The physician reviews the incoming data and then decides whether to accept it into the patient's electronic medical record.
- Radiology orders are sent to radiology departments electronically, rather than by phone or fax. This creates a more readable order when it arrives at a radiology department.
- Radiology results are transmitted to the physician's EHR in-box, and matched with the electronic order if one has been sent. The physician reviews the incoming data and then decides whether to accept it into the patient's electronic medical record.
- Transcribed reports are transmitted to the physician's EHR in-box as an unsolicited (not ordered) result. Examples of transcribed reports include a patient's history, physical exam and discharge summary.
- Clinical summaries are sent from the physician practice to the VHIE to the Blueprint Registry. This allows the community health teams to assist with management of the appropriate patient population. These summaries will also be able to be transmitted from one provider to another as part of the referral process.
- Immunization data is sent from the physician practice to the VHIE. VITL assigns the appropriate Immunization Registry identifier and validates the immunization data, then forwards the correctly identified immunization data to the Vermont Department of Health.

The EHR Connectivity Service provides multiple benefits including:

- An audit trail to reconcile any misunderstandings is automatically created for all electronic transactions.
- Lab and Radiology results become available to the physician sooner than faxes or other manual means of report distribution. The result is automatically filed in the EHR if it matches an existing electronic order, improving accuracy and reducing duplicate data entry.
- If a practice receives transcribed paper reports, the reports are added to a paper record, or scanned into an electronic record. Receiving transcribed reports electronically enables the report to be included in the patient's electronic medical record, although as unstructured data.

- Clinical summaries are used to provide current clinical patient data to the Blueprint Registry. This enables teams of community providers to proactively engage in patient care management. The Blueprint works to help Vermonters stay as healthy as possible – improving their quality of life and avoiding the need for complex care later when illness is harder to treat.
- Pediatric and family practices must submit immunization data to the Vermont Department of Health's Immunization Registry. VITL is in the process of enabling connectivity from an EHR through VITL to VDH. This will eliminate duplicate data entry to the VDH web site, and reduce the need for patient matching by the VDH.

Physicians using VITL's EHR Connectivity Service report that they receive results much sooner, and with reduced data entry.

6.2 Privacy and Security Policies

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 Health Insurance Portability and Accountability Act (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 September 2009 to comply with new privacy and security 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 Vermont Health Information Exchange (VHIE) for quality review purposes if the patient consents.

The Department of Vermont Health Access (DVHA) is responsible for coordinating the future development of the HIE privacy and security policies. DVHA has adopted the policies developed by VITL as the basis for its own policies, but intends to solicit additional input from various stakeholders before revising and finalizing its policies. In December 2010, DVHA held the first meeting of its privacy policy advisory group and will continue meeting throughout 2011. VITL is participating in the DVHA privacy policy advisory group and will support DVHA's policy development effort as needed.

7. 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. Data flowing from practices and hospitals through the Vermont Health Information Exchange (VHIE) to the Blueprint Registry provides the foundation for the work of the Community Health Teams.

7.1 Blueprint Support

Data from sources such as hospital labs and physician EHRs is transmitted via secure interfaces to the Vermont Health Information Exchange. The Vermont Health Information Exchange's Master Person Index (MPI) technology uses demographic information to accurately match various records for the same person. Data is then transmitted to the Blueprint Registry. Clinicians and members of the Blueprint's Community Health Team produce analytical reports from the registry to determine if there are opportunities to improve preventive care or chronic disease management, such as diabetes and hypertension. (See Figure 4: Blueprint HIT Infrastructure)

At the close of 2010, twenty-nine practices in five hospital service areas were providing data to the Blueprint Registry:

Hospital Service Area	Practices using Blueprint Registry
Barre	13
Brattleboro	1
Burlington	6
St. Johnsbury	7
White River Junction	2
Total	29

Table 2: Blueprint Practices

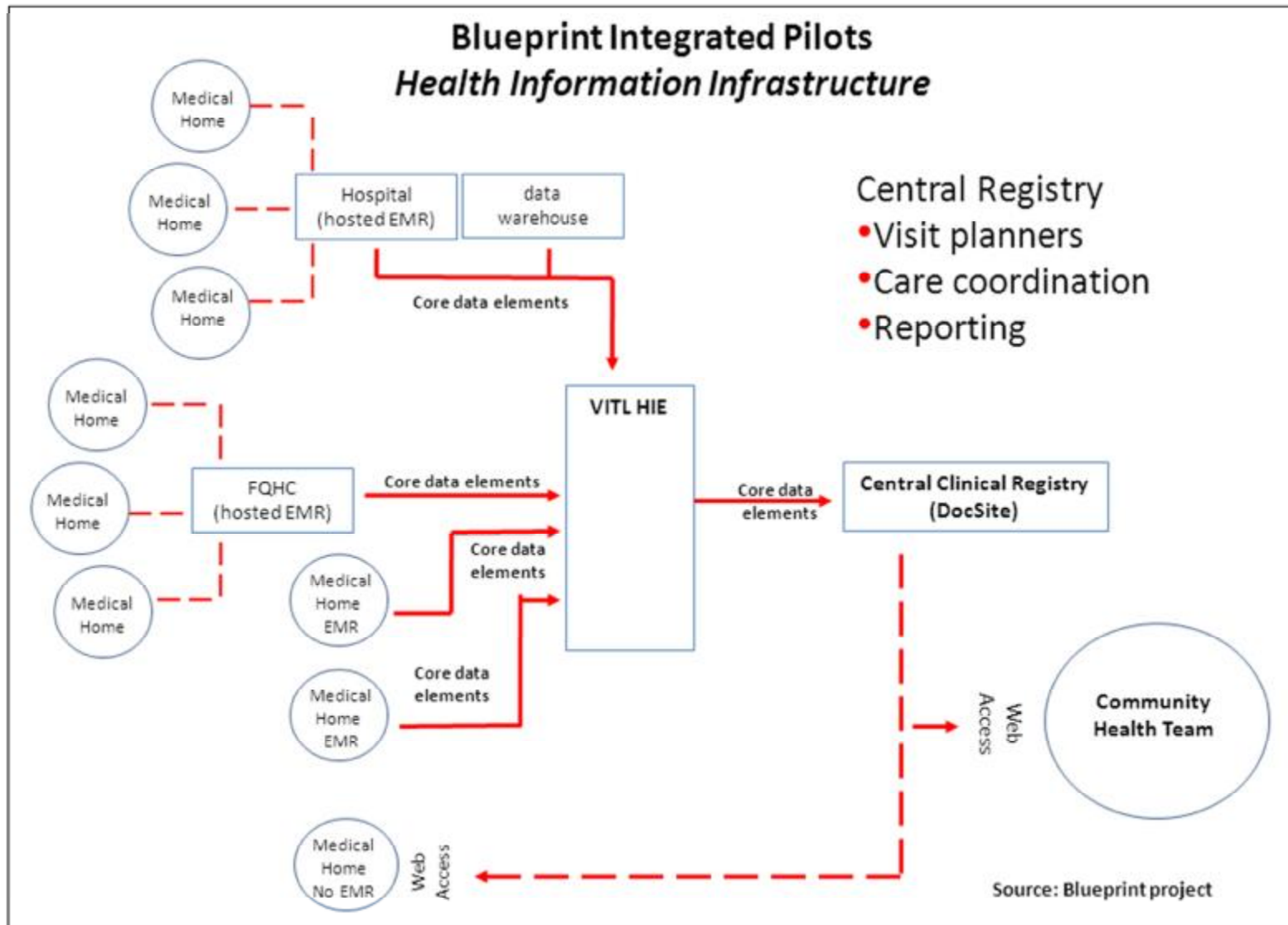


Figure 4: Blueprint HIT Infrastructure

7.2 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 is 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 data files that 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 administered at a physician practice 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 (VHIE). 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 meaningful use incentives.

Three practices are expected to participate in the pilot phase of the Immunization Registry Interface project during the first half of 2011, with more practices to follow in the second half of 2011. When possible, VITL is also working with EHR vendors to help drive the implementation of vendor "hubs," which would allow more rapid and consistent interfaces to be implemented across the state.

8. Electronic Prescribing

In early 2010, VITL launched its ePrescribe Vermont initiative, which is funded by part of a \$1 million HRSA grant to VITL secured by U.S. Sen. Patrick Leahy. During 2010, VITL accomplished the following with this program:

- Secured a perpetual statewide license from Allscripts for its ePrescribe Deluxe web-based application. VITL is offering free use of ePrescribe Deluxe to all Vermont prescribers.
- Educated VITL's outreach staff on how to train physician practice personnel to use ePrescribe Deluxe.
- Conducted a communication campaign to Vermont licensed prescribers, which included a video and recorded demonstration on a DVD and an information packet.
- Enrolled 38 practices in ePrescribe Deluxe, consisting of 84 prescribers who wrote more than 42,000 electronic prescriptions during 2010.
- Offered an incentive of up to \$500 per prescriber for practices with EHRs, but without the eprescribing function enabled, to adopt and implement the eprescribing module. Thirty-eight providers added eprescribing using this incentive in 2010.
- Offered an incentive of \$3,500 per independent Vermont pharmacy to join Surescripts and begin accepting electronic prescriptions. Eleven independently owned Vermont pharmacies added eprescribing in 2010 using this incentive.
- Contracted with MedMetrics, the pharmacy benefit manager for Vermont's Medicaid program, to develop a Vermont Medicaid eprescribing formulary for Allscripts users. The formulary has been developed and will go live in 2011.

VITL plans to continue the ePrescribe Vermont initiative in 2011 under an extension of the federal grant, and will continue recruiting Vermont physician practices and independent pharmacies to do electronic prescribing.

9. Vermont Health Information Technology Plan

The 2010 edition of the *Vermont Health Information Technology Plan (VHITP)* incorporates the collaborative efforts of VITL, state policy makers, administrative officials, and a broad cohort of health care providers, professionals, and consumers. The 2010 edition responds to several state and federal initiatives:

- Vermont Act 61 of 2009 (18 V.S.A. chapter 219 § 9351), requires the Department of Vermont Health Access (DVHA), Division of Health Care Reform, to be responsible for the overall coordination of Vermont's statewide health information technology plan. The statute requires that the plan shall include:
 - Ø the implementation of an integrated electronic health information infrastructure for the sharing of electronic health information among health

care facilities, health care professionals, public and private payers, and patients.

- Ø standards and protocols designed to promote patient education, patient privacy, physician best practices, electronic connectivity to health care data, and, overall, a more efficient and less costly means of delivering quality health care in Vermont.
- ONC's State Health Information Exchange Cooperative Agreement Program requires each state to produce and submit Strategic and Operational Plans as a condition of funding. Vermont's plan was approved by ONC at the end of 2010.
- CMS issued two letters, the September 2009 State Medicaid Directors Letter (SMD #09-006) and the August 2010 letter (SMD #10-016), charging states with development of a State Medicaid HIT Plan (SMHP) as a condition of Federal financial participation (FFP) for expenditures related to implementation and administration of the Medicaid incentive payment program authorized by Section 4201 of ARRA. Technically, Vermont's SMHP is a "chapter" of the Vermont's HIT Plan (VHITP). DVHA is finalized the SMHP for submission to CMS in early 2011.

VITL will continue to collaborate with the State HIT Coordinator to update Vermont's HIT Plan.

10. Bi-State Primary Care Association / FQHC Project

The Vermont Rural Health Alliance, a program of Bi-State Primary Care Association was funded in June 2010 by the Health Resources and Services Administration (HRSA) to implement a Health Information Technology Project on behalf of Vermont's Federally Qualified Health Centers (FQHCs). The objective is to ensure that data in health center electronic health records is structured, reliable, and complete and that EHR systems are connected to Vermont's Health Information Exchange (VHIE) and the Blueprint Registry.

This two-year project will enable the health centers to conduct quality improvement activities and will ensure their maximum participation in state and federal health care reform opportunities, including a role in the forefront of the statewide expansion of the Vermont Blueprint for Health. The project has three main components:

- Data integrity / practice redesign
- Development of interfaces
- Network-level quality improvement activities

Under a contract with Bi-State, VITL is providing EHR Connectivity Services to the FQHCs to enable the exchange of health information with other providers using the VHIE.

11. Status of VITL Projects - 12/31/2010

Funding Source	Projects	Metrics	Activities	Universe	Totals
ONC REC Grant	Achieving Meaningful Use	# of Priority Primary Care Providers (PPCPs)	Signed Agreements	1100	418
			PCPs with functional EHRs	1100	241
			PCPs to Meaningful Use	1100	0
ONC HIE Grant to State of VT	Hospital Connectivity to VHIE*	# of VT Hospitals	Participation Agreements	14	10
			Demographic Data (ADT)	14	6
			Lab Results, Lab Orders, Immunizations	14	7
			Transmit Clinical Summary	14	2
	Practice Connectivity to VHIE*	# of Primary Care Practices	Participation Agreements	310	109
			Demographic Data (ADT)	310	8
			Lab Results, Lab Orders, Immunizations	310	20
			Transmit Clinical Summary	310	7
	Commercial Labs to VHIE*	# of labs	Results/Orders	2	0
	VDH	Blueprint	# of Practices	HIE Services to Blueprint Practices	310
HRSA	e-prescribing	SureScripts Licenses	Incent Practices with EHRs to use e-Rx	50	16
			Incent Practices without EHRs to use e-Rx	260	33
		# of pharmacies	Incent Pharmacies to use e-Rx	15	11
Bi-State (HRSA Grant)	FQHC connectivity to VHIE*	# of FQHCs	Connectivity to VHIE*	8	2
		# of interfaces	Connectivity to VHIE*	64	3

*Vermont Health Information Exchange

Table 3: Status of VITL Projects

12. Conclusion and Outlook for 2011

2010 was the first year of a multi-year initiative to leverage the federal HITECH program to transform the information infrastructure of the Vermont health system in support of the state's ambitious health reform initiative.

- VITL supported the Division of Health Care Reform in gaining federal approval for the State HIT Plan and implementation of the federal HIT-HIE Cooperative Agreement.
- VITL was named a Regional Extension Center and had enrolled nearly 40% of the state's eligible primary care providers by the end of 2010. VITL is working with these physicians to transform their clinical practices and implement electronic health records systems.
- VITL is building interfaces between hospitals and physician practices so that lab test results and other data can be transmitted securely in real time.
- VITL is working in collaboration with the Blueprint for Health to provide the health information infrastructure for the statewide Blueprint expansion envisioned in Act 128.

2011 will be another exciting year for VITL and Vermont.

- VITL anticipates signing up almost all eligible primary care providers to participate in the Regional Extension Center Program and move along the process of EHR implementation and 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.
- The BiState initiative will insure that Vermont's Federally Qualified Health Centers (FQHCs) FQHC's are leading participants in the health system's transformation.
- The e-prescribing program will continue to provide a significant bridge to EHR adoption.

Appendix A: Abbreviations

ARRA	American Recovery and Reinvestment Act of 2009
CAH	Critical Access Hospital
CMS	Centers for Medicare and Medicaid Services (federal)
CY	Calendar year
DVHA	Department of Vermont Health Access (State Medicaid agency)
EHR	Electronic Health Record
FQHC	Federally Qualified Health Center
FY	Department of Health and Human Services (federal)
HIE	Health Information Exchange (as verb or noun depending on context)
HITECH	Health Information Technology for Economic and Clinical Health Act
HITRC	Health Information Technology Research Center (federal)
HITSP	Health Information Technology Standards Panel (federal)
HRSA	Health Resources and Services Administration (federal)
ONC	Office of National Coordinator for Health Information Technology (federal)
REC	Regional Extension Center
SDE	State Designated Entity
SMHP	State Medicaid Health Information Technology Plan
VDH	Vermont Department of Health
VHIE	Vermont Health Information Exchange
VHITP	Vermont Health Information Technology Plan
VITL	Vermont Information Technology Leaders, Inc.