

# State of Vermont

## State Medicaid Health (SMHP)

*Second Edition, Version 2.2 Final;*



## Information Technology Plan

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Department of Vermont Health Access,  
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### Revision History



Version	Date	Author(s)	Revision Notes
1.0	12/23/2010	Bequette	Initial Draft submitted
1.1	3/24/2011	Bequette	Added Revision History; TOC; Index of Tables and Figures; Preface to Version 1.1; Respond to CMS Comments; Expanded CHIPRA discussion; Updated Figures and Diagrams; grammar and spelling edits
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## Preface

As detailed in the pages that follow and in the Vermont Health Information Technology Plan (VHITP) found in Appendix B, Vermont is providing The Centers for Medicare & Medicaid Services (CMS) with this State Medicaid Health Information Technology Plan (SMHP) update to establish a common understanding of the organization, governance, vision and goals related to our Electronic Health Record Incentive Program (EHRIP), Health Information Technology (HIT) and Health Information Exchange (HIE) activities, and the Vermont Health & Human Services Enterprise Platform (HSEP).

There are many health care payment, delivery, and health data infrastructure reform or development efforts across multiple agencies and departments in Vermont. As one of the first-round SIM grant states, there is a rich portfolio of activities that can be found on the Vermont Health Care Innovation Project (VHCIP) website: <http://healthcareinnovation.vermont.gov/>. All the VHCIP health data projects work is coordinated with HIT/HIE program initiatives. These projects are detailed in the SIM Performance Period Year 2 Annual Report found in Appendix I. Where applicable throughout this document, those projects are also discussed.

The Vermont Blueprint for Health (Blueprint) is a state-led, nationally-recognized initiative that helps health care providers meet the medical and social needs of people in their communities. Medical Homes are the foundation of the Blueprint, and work together with Practice Facilitators and Community Health Teams. The Blueprint also helps design innovative interventions, like Support and Services at Home (SASH) for elders and Hub & Spoke Medication Assisted Therapy for individuals battling opioid addiction. Health data needs in support of Blueprint initiatives are supported by HIE/HIT program goals and objectives as outlined in Appendix J and discussed in applicable sections of this SMHP.

The Vermont EHRIP is an integral part of the HIE/HIT program, establishing electronic health records as a source of clinical data for transmission to the HIE. It began in 2011 and to date, has awarded over \$47 million dollars in incentive payments to approximately one thousand eligible providers and hospitals enrolled in the program. Vermont's EHRIP program is designed to support providers' adoption of certified electronic health record technology to improve the quality, safety and efficiency of patient health care. The specifics of program





operations are contained in sections C and D of this SMHP. Current goals and objectives of the program as outlined in the latest IAPD-u submission (Version 2.6 15Aug,2016) can be found in section E1.1.

The HIE/HIT program in Vermont is organizationally housed in the Department of Vermont Health Access (DVHA); the Vermont Medicaid Enterprise. The Vermont Health Information Exchange (VHIE) is a Medicity platform with enhanced local capabilities operated exclusively (by statute) by Vermont Information Technology Leaders (VITL). Working closely with the VHCIP program and partnering with other departments within the Vermont Agency of Human Services, the HIE/HIT program provides facilitation, HITECH funding and technical support for meaningful use as well as health data and infrastructure needs across the health care landscape in Vermont. Through health data accessibility, the VHIE aims to enhance care coordination, health care data analytics, and population health management. Vision and goals of the program are articulated in the Vermont Health Information Technology plan found in Appendix B as well as the current IAPD-u submission in Section E1.1. The program website can be found here: <http://healthdata.vermont.gov/>

The Agency of Human Services' (AHS) Health & Human Services Enterprise (HSE) is Vermont's approach to transform legacy systems into an environment of coordinated and integrated service delivery. Vermont has established a Health & Human Services Enterprise Platform (HSEP) architecture based on a Service Oriented Architecture (SOA) as described in the first edition SMHP. This platform is fundamental to and supports Vermont's concept of the HSE which encompasses the Vermont Health Connect (VHC) insurance exchange, Integrated Eligibility & Enrollment (IE&E), Medicaid Management Information System (MMIS), and HIT/HIE. Components of note in the HSEP include a rules engine, an Electronic Service Bus (ESB), and an anticipated Master Data Management (MDM) solution, including enterprise Master Person Index (eMPI), a Provider Directory, and a consent management solution. This architecture was deployed first to establish the Health Insurance Exchange, MAGI Medicaid, and Dr. Dynasaur.

Since 2008, the Secretary of Administration has been statutorily obligated to be responsible for the overall coordination of Vermont's statewide Health Information Technology Plan. In 2011, Act 48 passed requiring the Director of Health Care Reform in the Agency of Administration (AOA) to be responsible for coordination of health care system reform efforts among Executive Branch agencies, departments, offices of state government. AOA has delegated many of the VHITP and SMHP responsibilities to DVHA, but retains some oversight activities, and coordination on IT-related matters with the Green Mountain Care Board (GMCB) and the Vermont legislature. AOA also provides leadership on the VHCIP, which is funded by the State's SIM testing grant.

The GMCB is responsible for payment and delivery system reform, review and approval of the State HIT Plan, approval of the VITL budget for VHIE operation, and has oversight of insurance and hospital rates in Vermont, among other responsibilities. More information about the GMCB can be found at: [gmcbboard.vermont.gov](http://gmcbboard.vermont.gov).





DVHA includes Medicaid services, the Vermont Blueprint for Health, the EHRIP, the HIT/HIE program as well as significant leadership with the HSEP. AHS, including DVHA, and the GMCB and the Director of Health Care Reform in the Agency of Administration work closely together to achieve the States' health reform goals. Governance occurs through the specific interactions spelled out in legislation (e.g., the GMCB reviews and approves the State HIT Plan, developed by DVHA), as well as through the PMO which oversees all major projects of the HSEP. DVHA itself is a Department within the Agency of Human Services which contains most other organizational entities involved in the delivery of major human services.

These combined responsibilities provide Vermont with a powerful engine for delivery system change, as well as creating a focused perspective for managing the comprehensive IT and other systems changes being led by DVHA in support of that system change. Many of these delivery system changes affect the Agency of Human Services along with many private and community organizations.

In support of Vermont's aggressive payment and delivery reform goals, the State has identified the following IT initiatives:

- Implement technological solutions, including data warehouses and point-of-care tools, in support of Vermont's All-Payer Model Agreement and Medicaid 1115 Global Commitment to Health waiver;
- Build out of the statewide HIE network to provide connectivity for clinical and financial data transfer;
- Implement core components of SOA infrastructure to support the Agency of Human Services and its partners;
- Re-procure the Medicaid Management Information System (MMIS) in a modular approach as a more comprehensive and integrated enterprise solution;
- Provide statewide outreach to and support for EHR adoption, implementation, upgrade and meaningful use;
- Continue technical support for the statewide expansion of the Blueprint for Health patient-centered medical home, that includes the build out of a statewide clinical data registry, decision support, and clinical messaging system integrated with HIE and EHR systems to support both Meaningful Use and implementation and evaluation;
- Develop and implement technology in support of population health including Vermont's Immunization Registry, Prescription Management System, and other public health reporting functions through the HIE;
- Develop and implement an upgrade to AHS' eligibility and enrollment systems, Integrated Eligibility (IE), which will include integration with the state Health Insurance Exchange; and
- Expand or replace AHS' CSME (Central Source for Measurement and Evaluation), which is the Agency-wide data warehouse to support Medicaid and other Agency program operations, reporting, evaluation, and planning.





## SECTION A: The State's "As-Is" HIT Landscape

### *I. The State's "As-Is" HIT Landscape:*

In this section of the SMHP we describe Vermont's As-Is Landscape as it relates to Health Care Reform (HCR), particularly Health Information Technology (HIT) and Health Information Exchanges (HIE). Topics included in this section are:

1. Electronic Health Record (EHR) technology adoption rates;
2. The role of Broadband in Vermont's HIT/E efforts;
3. Federally-Qualified Health Center (FQHC) networks;
4. Status of Veterans Administration (VA) clinical facilities;
5. Identification of stakeholders engaged in existing HIT/E activities;
6. HIT/E relationships with other entities;
7. Governance structure of Vermont's existing HIE;
8. Role of MMIS in our current HIT/E environment;
9. Current activities underway to plan and facilitate HIE and EHR adoption;
10. Relationship of the State of Vermont's Medicaid agency to the State HIT Coordinator;
11. Any potential impact of state laws or regulations on the implementation of the EHRIP
12. Potential Impact of State Laws or Regulations on the Implementation of the EHRIP
13. HIT activities that cross state borders;
14. Current interoperability status of the State Immunization (IZ) Registry and Public Health Surveillance reporting database; and
15. Other HIT-related grants.



**A1 EHR Adoption Rates**

As of 9/8/2016, combined payment data from both the State of Vermont Medicaid and Medicare Electronic Health Record Incentive Programs identified 17 hospitals and 1,693 unique providers that are using Certified Electronic Health Record Technology. Of the 1,693 unique providers, 1,336 have achieved Meaningful Use.

<b>17 Hospitals by Specialty</b>	
CRITICAL ACCESS HOSPITAL	5
END-STAGE RENAL DISEASE FACILITY (ESRD)	2
GENERAL HOSPITAL	2
OTHER	2
REHABILITATION UNIT	1
SKILLED NURSING FACILITY	4
SWING-BED APPROVED	1
<b>Grand Total</b>	<b>17</b>

<b>1,693 Providers by Specialty</b>			
ADDICTION MEDICINE	2	MEDICAL ONCOLOGY	8
ALLERGY/IMMUNOLOGY	1	NEPHROLOGY	10
ANESTHESIOLOGY	26	NEUROLOGY	26
CARDIAC ELECTROPHYSIOLOGY	2	NEUROSURGERY	3
CARDIOVASCULAR DISEASE (CARDIOLOGY)	36	NURSE PRACTITIONER	146
CERTIFIED NURSE MIDWIFE	30	OBSTETRICS/GYNECOLOGY	58
CHIROPRACTIC	35	OPHTHALMOLOGY	19
CLINICAL NURSE SPECIALIST	6	OPTOMETRY	33
COLORECTAL SURGERY (PROCTOLOGY)	3	ORAL SURGERY (DENTIST ONLY)	1
CRITICAL CARE (INTENSIVISTS)	5	ORTHOPEDIC SURGERY	40
DERMATOLOGY	13	OSTEOPATHIC MANIPULATIVE MEDICINE	2
EMERGENCY MEDICINE	1	OTOLARYNGOLOGY	14
ENDOCRINOLOGY	9	PATHOLOGY	3
FAMILY PRACTICE	228	PEDIATRIC MEDICINE	119
GASTROENTEROLOGY	13	PHYSICAL MEDICINE AND REHABILITATION	6
GENERAL PRACTICE	4	PLASTIC AND RECONSTRUCTIVE SURGERY	4
GENERAL SURGERY	18	PODIATRY	7
GERIATRIC PSYCHIATRY	1	PSYCHIATRY	45
GYNECOLOGICAL ONCOLOGY	2	PULMONARY DISEASE	12
HAND SURGERY	3	RADIATION ONCOLOGY	5
HEMATOLOGY	2	RHEUMATOLOGY	10



HEMATOLOGY/ONCOLOGY	11	SURGICAL ONCOLOGY	3
INFECTIOUS DISEASE	10	UNKNOWN	531
INTERNAL MEDICINE	122	UROLOGY	5
Grand Total: 1693			

## Environmental Scan

The Department of Vermont Health Access Health Information Exchange (HIE)/Health Information Technology (HIT) Unit conducted a survey, also known as an “Environmental Scan,” in May of 2016 to: assess awareness and utilization of Electronic Health Records (EHRs), identify barriers that may prevent connection to Vermont’s Health Information Exchange (VHIE)/regional health information exchanges, and identify provider populations that would benefit from certified electronic health record technology (CEHRT) adoption assistance. We aimed to understand challenges, opportunities, and success among providers to inform future improvements and promote the State’s HIE objectives: accessibility, connectivity, and data quality.

**Environmental Scan Methodology:** The survey was sent via email. The survey population was identified from a list of providers (individuals and organizations) from the CMS National Plan & Enumeration System (NPPES) that had a practice location address in the state of VT. This list of providers was then limited to those that had an Active status in the VT Medicaid Management Information System (MMIS), that were of the EHR Incentive Program (EHRIP) provider types (physicians, physician assistants, nurse practitioners, licensed midwives, dentists, and general hospital), and had associated email addresses. The email addresses on file in MMIS may not go directly to a provider, but instead to a provider representative or practice staff. We removed 86 organization emails to avoid provider survey fatigue because those same entities were being sent an EHRIP Awareness survey (This was a separate survey conducted to gauge awareness of the VT EHRIP and Meaningful Use requirements. See Section A9 for results.) The EHRIP Awareness survey was a separate dataset that was not incorporated in these results. In addition, we sent this survey to 81 Blueprint practices (obtained from the DVHA Blueprint team), including Naturopathic Physician offices, that were not on the initial list to improve our review. A total of 792 surveys were successfully delivered to email addresses and 159 surveys were completed and submitted, resulting in a 20% response rate. The Survey Monkey system collected partial data from an additional 82 individuals that did not complete the survey in its entirety and did not actually submit their survey results. Individuals may have thought the survey was too burdensome or did not want to submit the required contact information. Initial data analysis is limited to the 159 respondents that submitted their survey results.

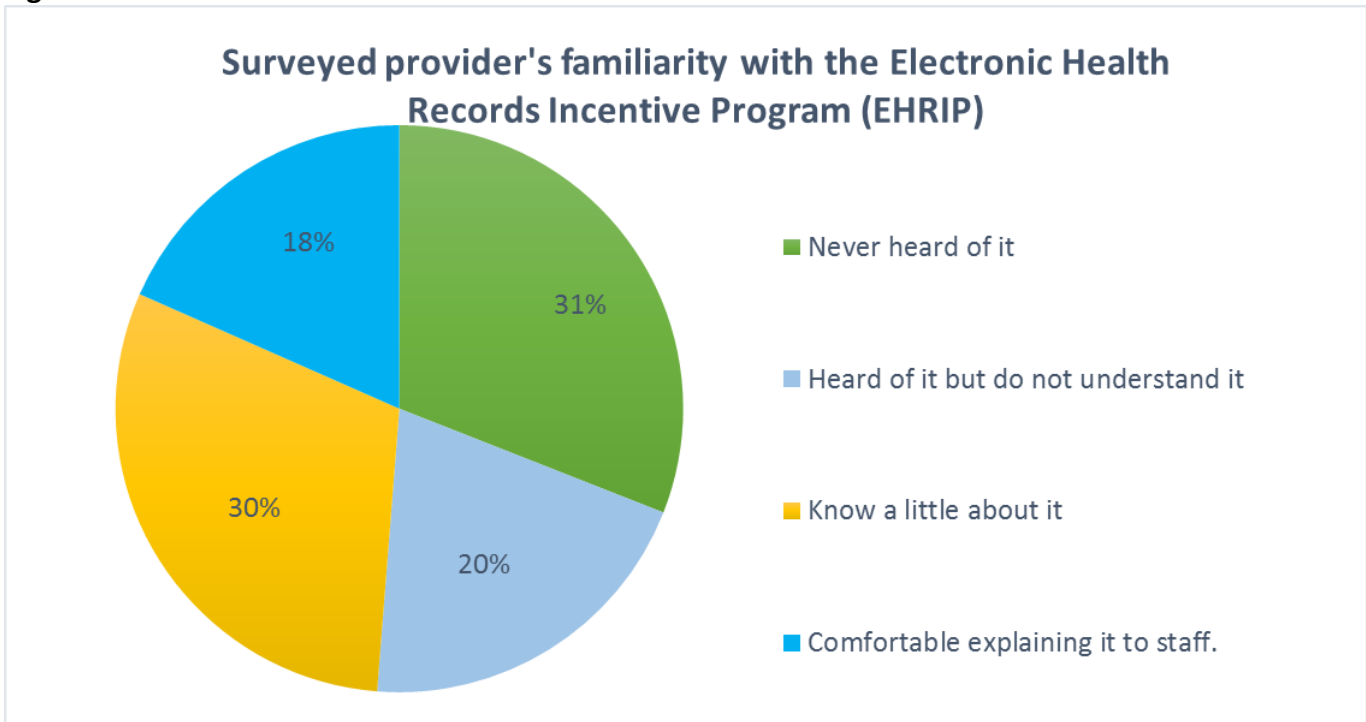
In this section, we will focus on the three most informative survey results related to EHR adoption and we will include other survey results regarding HIE familiarity and participation in section A9.

Observable in one of the first provider survey question, in **Figure 1.1** below shows that half of the respondents have minimal to no familiarity with the Electronic Health Records Incentive Program (EHRIP).



Nurse Practitioners and Physicians were most familiar with the program, while Dentists were the least familiar with it.

**Figure 1.1**



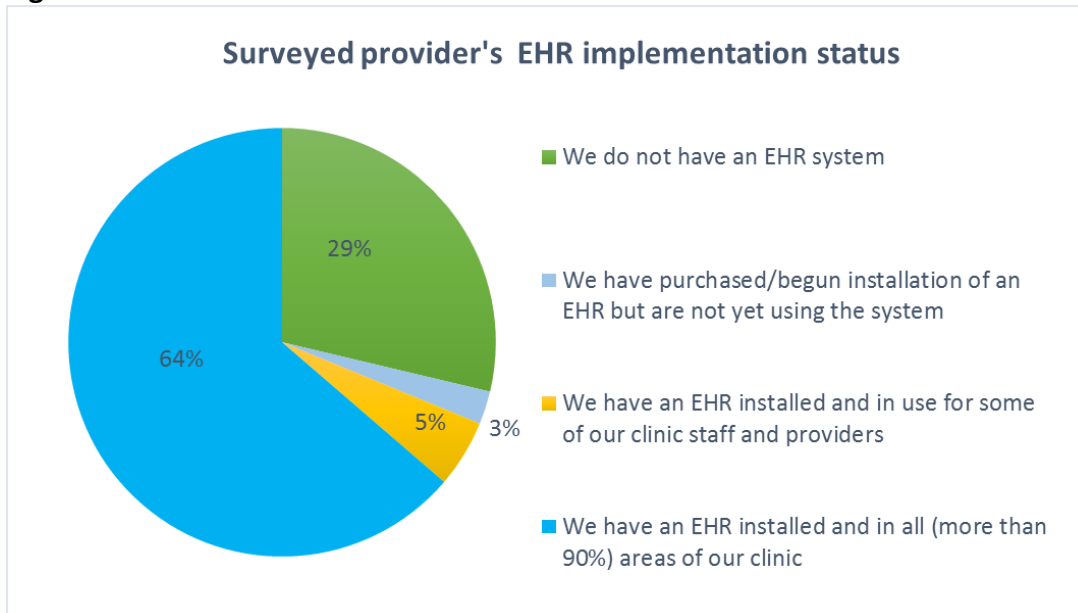
**Figure 1.2**

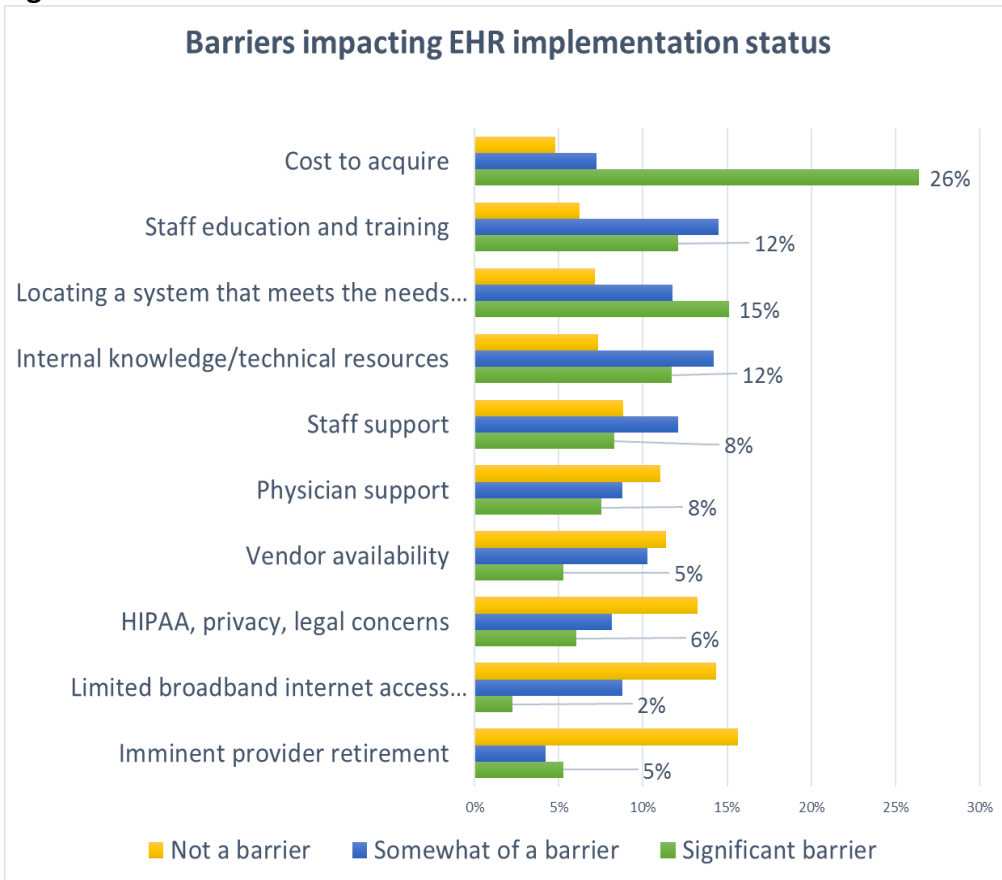
Survey Question: What is your familiarity with the Electronic Health Records Incentive Program (EHRIP)?

Provider Type	Comfortable explaining it to staff.	Heard of it but do not understand it	Know a little about it	Never heard of it	(blank)	Grand Total
DENTIST	1	6	8	12		27
LICENSED MIDWIVES	1	2		2		5
NATUROPATHIC PHYSICIAN	1			1		2
NURSE PRACTITIONER	4	4	6	7		21
PHYSICIAN	21	19	33	27	1	101
PHYSICIAN ASSISTANT	1	1	1			3
Grand Total	29	32	48	49	1	159

As evident in **Figure 1.3**, Health Care Organizations (HCOs) still need assistance in procuring an EHR system. 29% of the respondents do not have an EHR system implemented. The reason for non-EHR implementation is indicated in the "Barriers impacting EHR implementation status" bar graph below, **Figure 1.4**. Additionally, more than 50% of Dentists do not have an EHR system, while the majority of Physicians, Nurse Practitioners, and Physician Assistants do have an EHR installed as seen in **Figure 1.5**.

**Figure 1.3**



**Figure 1.4**


**Figure 1.5**

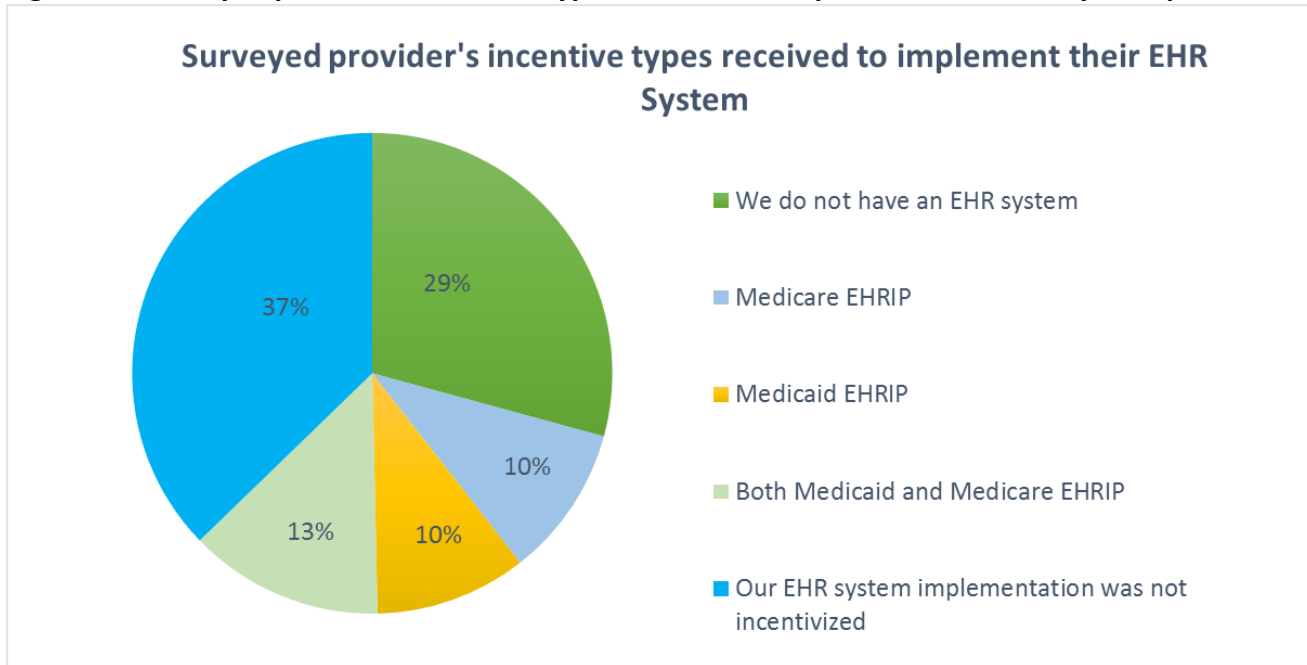
Survey Question: Which statement best describes your EHR system?				
Provider Type	We do not have an EHR system	We have an EHR installed and in all (more than 90%) areas of our clinic	We have an EHR installed and in use for some of our clinic staff and providers	We have purchased/begun installation of an EHR but are not yet using the system
DENTIST	15	8	1	3
LICENSED MIDWIVES	3	1	1	0
NATUROPATHIC PHYSICIAN	0	2	0	0
NURSE PRACTITIONER	3	15	2	1
PHYSICIAN	24	71	4	0
PHYSICIAN ASSISTANT	0	3	0	0
Grand Total	45	100	8	4

**Figure 1.6** represents the percentage of surveyed providers who receive incentive payments versus the providers who did not receive incentive payments. The majority of respondents were incentivized to implement an EHR system. The respondents who report that they did not receive an incentive payment may or may not have been eligible for an incentive payment. As you can see in the respondent table, **Figure 1.7**, dentists and midwives either do not have an EHR system or, if they do have one, they did not receive an incentive payment.





**Figure 1.6 Surveyed provider's incentive types received to implement their EHR system pie chart**



**Figure 1.7 Surveyed provider's incentive types received to implement their EHR system provider type data**

Survey Question: Was your EHR system implementation incentivized through an Electronic Health Record Incentive Program (EHRIP)?

	DENTIST	LICENSED MIDWIVES	NATUROPATHIC PHYSICIAN	NURSE PRACTITIONER	PHYSICIAN	PHYSICIAN ASSISTANT	Grand Total
Both Medicaid and Medicare EHRIP	0	1	0	2	15	0	18
Medicaid EHRIP	1	0	0	1	12	0	14
Medicare EHRIP	0	0	0	0	13	1	14
Our EHR system implementation was not incentivized	9	1	2	11	26	2	51
We do not have an EHR system	14	3	0	3	20	0	40
(blank)	3	0	0	4	15	0	22
Grand Total	27	5	2	21	101	3	159



**Provider Participation in EHRIP has made the following clinical quality measures available**

Vermont’s providers report their clinical quality measures (CQMs) for Medicaid in addition to commercial CQM’s. Vermont’s Medicaid EHRIP annual report to CMS was reviewed to identify a standard list of clinical quality measures. Of the 64 CQM’s that providers can select to report on, 15 were identified that align with CMS’ ACO Shared Savings Program quality measures. The following table shows the 15 CQM’s that overlap with some ACO measures. This data can be used for a variety of comparison and decision making purposes as the State implements the All-Payer ACO Model.

The ACO shared savings program is ending soon as the State transitions to a Next Generation-style ACO program under the All-Payer Model which has some differences in quality measurement. Once the new clinical quality measures are available, the state will review and compare with EHRIP’s standard list as we strive for alignment between measures.

Clinical Quality Measure (CQM) Aggregate Data for EPs using the 2014 CQM Definitions									
State/ Territory/ District		VT							
Report As Of Date		03/31/16							
Total Unduplicated Providers(EPs) to ever receive		324							
<p><b>INSTRUCTIONS:</b> Provide the statistical data listed in the headings below for the Aggregate Measure data for each Clinical Quality Measure selected by a provider during attestation. The statistical data Average and Standard Deviation is representative of the aggregate measure responses to meet the threshold. Please note that Exclusion or Exception count and percentage represents the providers who entered data for an exclusion or exception on the measure (when applicable) that was greater than 0. The # of unduplicated providers who selected column refers to the count of unique providers who selected the measure.</p>									



Clinical Quality Measures	Description	Average	Standard Deviation	# of Exclusions	Exclusion %	# of Exceptions	Exception %	# of unduplicated providers who selected	# of providers who entered 0 in the denominator
<b>CMS 2/NQF 0418 /ACO 18 GPRO PREV-12</b> Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan	Percentage of patients aged 12 years and older screened for clinical depression on the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen.	7.5 %	15.1 %	8	8.8 %	0	0.0 %	91	0
<b>CMS 22/ACO 21 /GPRO PREV-11</b> Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	Percentage of patients aged 18 years and older seen during the reporting period who were screened for high blood pressure AND a recommended follow-up plan is documented based on the current blood pressure (BP) reading as indicated.	36.6 %	17.8 %	9	13.2 %	0	0.0 %	68	3



Clinical Quality Measures	Description	Average	Standard Deviation	# of Exclusions	Exclusion %	# of Exceptions	Exception %	# of unduplicated providers who selected	# of providers who entered 0 in the denominator
<b>CMS 68/NQF 0419 /ACO 39 /GPRO CARE-3</b> Documentation of Current Medications in the Medical Record	Percentage of visits for patients aged 18 years and older for which the eligible professional attests to documenting a list of current medications using all immediate resources available on the date of the encounter. This list must include ALL known prescriptions, over-the-counters, herbals, and vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosage, frequency and route of administration.	80.5%	28.4%			0	0.0%	280	9



Clinical Quality Measures	Description	Average	Standard Deviation	# of Exclusions	Exclusion %	# of Exceptions	Exception %	# of unduplicated providers who selected	# of providers who entered 0 in the denominator
<b>CMS 69/NQF 0421 /ACO 16 /GPRO PREV-9</b> Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up - Population 1	Percentage of patients aged 18 years and older with a BMI documented during the current encounter or during the previous six months AND with a BMI outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the current encounter.	30.6%	27.2%	4	2.2%			178	51
<b>CMS 122/NQF 0059 /ACO 27 /GPRO DM-2</b> Diabetes: Hemoglobin A1c Poor Control	Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period.	47.4%	42.6%	2	1.5%			131	19
<b>CMS 127/NQF 0043 /ACO 15 /GPRO PREV-8</b> Pneumonia Vaccination Status for Older Adults	Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine.	54.1%	30.0%					102	5



Clinical Quality Measures	Description	Average	Standard Deviation	# of Exclusions	Exclusion %	# of Exceptions	Exception %	# of unduplicated providers who selected	# of providers who entered 0 in the denominator
<b>CMS 130/NQF 0034 /ACO 19 /GPRO PREV-6</b> Colorectal Cancer Screening	Percentage of adults 50-75 years of age who had appropriate screening for colorectal cancer.	2.3 %	11.9 %	14	18.9%			74	9
<b>CMS 131/NQF 0055 /ACO 41 /GPRO DM-7</b> Diabetes: Eye Exam	Percentage of patients 18-75 years of age with diabetes who had retinal or dilated eye exam by an eye care professional during the measurement period or a negative retinal exam (no evidence of retinopathy) in the last 12 months prior to the measurement period.	16.6%	35.1 %	0	0.0 %			11	1



Clinical Quality Measures	Description	Average	Standard Deviation	# of Exclusions	Exclusion %	# of Exceptions	Exception %	# of unduplicated providers who selected	# of providers who entered 0 in the denominator
<b>CMS 138/NQF 0028 /ACO 17 /GPRO PREV-10</b> Preventive Care and Screening: Tobacco Use: Screening and	Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation	76.6%	52.2%			0	0.0%	282	16
<b>CMS 139/NQF 0101 /ACO 13 /GPRO CARE-2</b> Falls: Screening for Future Fall Risk	Percentage of patients 65 years of age and older who were screened for future fall risk during the measurement	30.8%	43.3%			0	0.0%	14	5
<b>CMS 144/NQF 0083 /ACO 31 /GPRO HF-6</b> Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)	Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) <40% who were prescribed beta-	0.0%	0.0%			0	0.0%	0	0





Clinical Quality Measures	Description	Average	Standard Deviation	# of Exclusions	Exclusion %	# of Exceptions	Exception %	# of unduplicated providers who selected	# of providers who entered 0 in the denominator
<b>CMS 147/NQF 0041 /ACO 14 /GPRO PREV-7</b> Preventive Care and Screening: Influenza Immunization	Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported	30.3 %	23.9 %			0	0.0%	229	4
<b>CMS 159/NQF 0710 /ACO 40 /GPRO MH-1</b> Depression Remission at Twelve Months	Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at twelve months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosis and existing depression who current PHQ-9 score indicates a need for treatment.	0.0 %	0.0 %	0	0.0 %			3	3



Clinical Quality Measures	Description	Average	Standard Deviation	# of Exclusions	Exclusion %	# of Exceptions	Exception %	# of unduplicated providers who selected	# of providers who entered 0 in the denominator
<b>CMS 164/NQF 0068 /ACO 30 /GPRO IVD-2</b> Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	Percentage of patients 18 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90)  CMS 147/NQF 0041 /ACO 14 /GPRO PREV-7 Preventive Care and Screening: Influenza Immunization Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who	36.8 %	33.4 %					27	5
<b>CMS 165/NQF 0018 /ACO 28 /GPRO HTN-2</b> Controlling High Blood Pressure	Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90)	54.4 %	34.3 %	20	14.7%			136	18

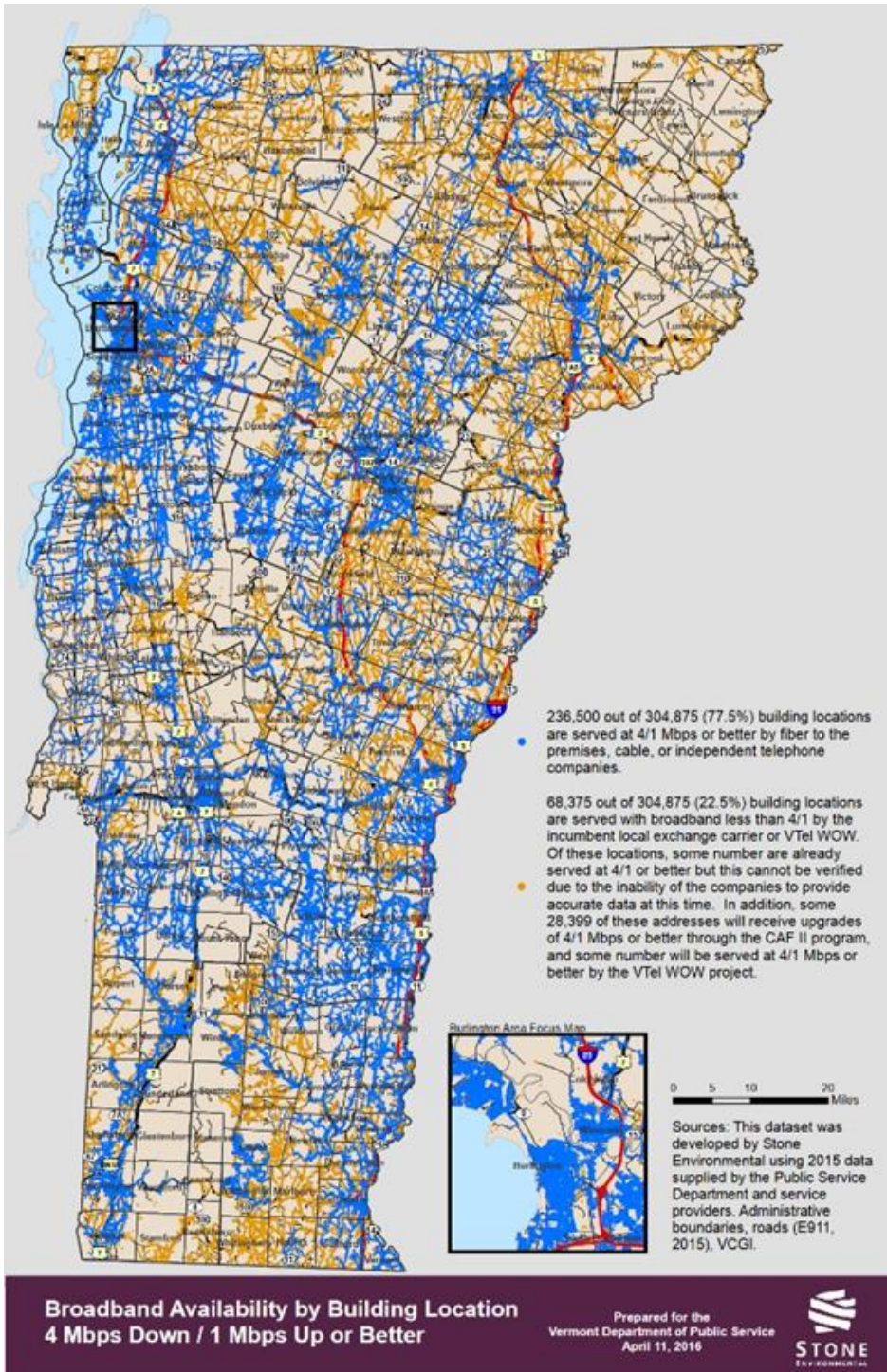


## A2 The role of Broadband in Vermont's HIT/E efforts

Broadband efforts in Vermont are led by the Department of Public Service. On August 14, 2015, the Department retained Stone Environmental (Stone), a firm with expertise in data mapping and analysis, to compile and analyze access data collected from broadband, cable and telephone providers. Based on the information submitted by the service providers, Stone calculated availability for each service provider at each of the 304,875 building locations in the state. The map in **Figure 1.8** depicts roads that are served by 4Mbps/1Mbps service in BLUE and less than 4Mbps/1Mbps service in ORANGE.

The Public Service Department, through its Division for Telecommunications and Connectivity, offers grant funding under the Connectivity Initiative to deploy broadband to under-served communities throughout Vermont. In 2015, Phase 1 was initiated with \$886,000 awarded from the Connectivity Initiative to Comcast, FairPoint, and ECFiber. Phase 2 began in May of 2016. The Department published a list of locations eligible to receive support from the Connectivity Fund and there is \$556,273.00 available in funding for this round of grants.



**Figure 1.8 Broadband Availability by Building Location**


### A3 Federally-Qualified Health Center (FQHC) networks

Vermont has 12 Federally Qualified Health Centers (FQHC), 6 rural health clinics, 11 Planned Parenthood of Northern New England clinics, 10 clinics for the uninsured, and the area Health Education Center Network. Vermont's FQHCs work together through the VT Rural Health Alliance (VRHA). The VRHA collaboration involves Bi-State Primary Care Association's (BiState) members, the VT Office of Rural Health & Primary Care (VDH), and the Federal Office of Rural Health Policy (ORHP). In VRHA is a vehicle for Vermont's rural community health centers, clinics, and small hospitals to work collaboratively to put the state's ambitions health care reform agenda into practice. Bi-State is a nonprofit, 501(c)(3) charitable organization that promotes access to effective and affordable primary care and preventive services for all, with special emphasis on underserved populations in New Hampshire and Vermont. VRHA was initiated in 2007, when Bi-State received federal network planning grant funding. In Act 71 of 2007, the legislature appropriated matching funding for a federal rural health network development grant. In June 2010, VRHA received funding from the federal Bureau of Primary Health Care to support HIT goals, focusing on data integrity, HIE, and quality improvement. In September 2012, VRHA received Health Center Controlled Network funding through New Hampshire's Community Health Access Network (CHAN) which supports EHR adoption and use, quality improvement, and ICD10 preparation. VRHA has additionally applied for and received federal funding for telehealth, care coordination, and farmworker outreach.

The Vermont Department of Health operates an integrated Office of Rural Health and Primary Care (Office). The Office has supported and encouraged HIT development in Vermont, working with HRSA grantees on numerous projects implemented to support local implementation of state health reform initiatives at FQHCs, Rural Health Clinics (RHC), and Critical Access Hospitals (CAH). The Office funded the first statewide survey of EMR adoption in primary care practices and worked closely on development of two HRSA/ORHP funded rural health networks, one focused on building a statewide telemedicine infrastructure, the other supporting FQHC, RHC, and CAH integration with the Vermont Blueprint for Health and HIT/HIE initiatives.

FQHC growth in Vermont has been supported by legislation enacted in 2005. The growth comparison is shown in **Figure 1.9** below.

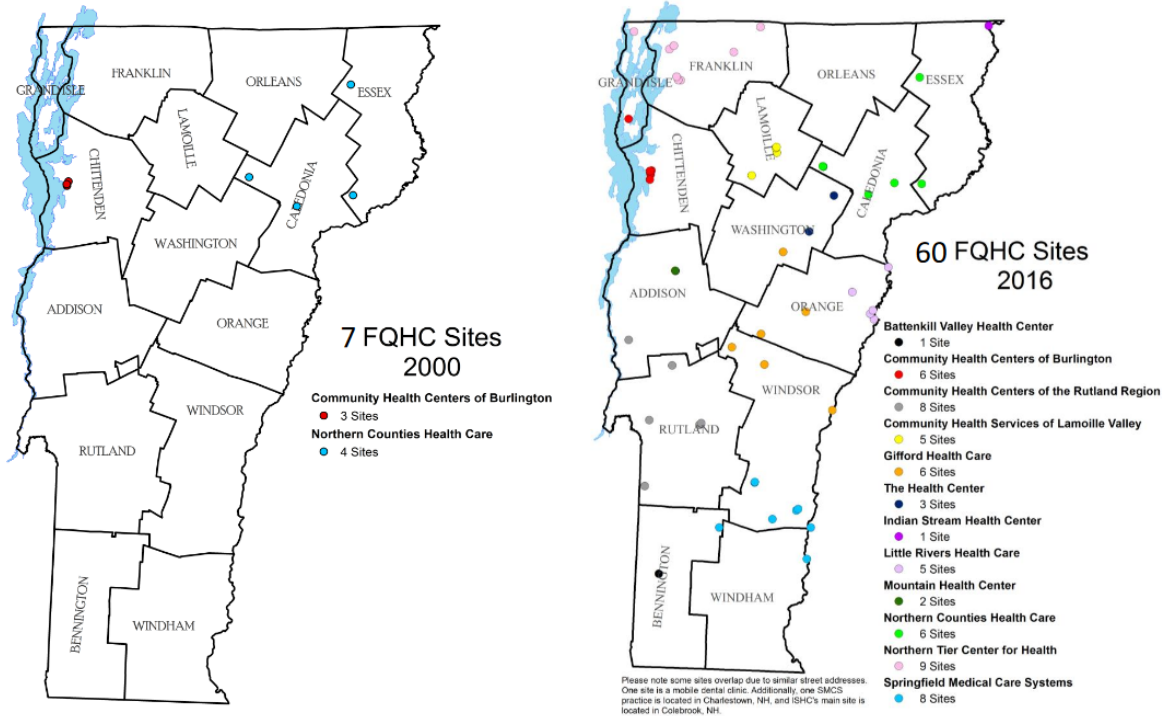




**Figure 1.9 Vermont FQHC Growth since 2000-2016**

**Vermont Federally Qualified Health Centers Growth since 2000**

“The goal shall be to ensure there are FQHC(s)... in each county in Vermont.” ~Act 71 of 2005, Section 277(f).



13

**A4 Status of Veterans Administration (VA) clinical facilities**

The Veterans Information Systems and Technology Architecture (VISTA) is a nationwide information system and Electronic Health Record developed by the U.S. Department of Veterans Affairs for use throughout the U.S. It is used by all 1200+ health care sites of the Veterans Health Administration (VHA). Veteran’s Health Information is exchanged easily between VA clinics and there is interoperability across state lines within VISTA’s Computerized Patient Record System (CPRS). VA clinical facilities in Vermont utilize CPRS software for their electronic health record-keeping system. As of September 2016, there is a connection being established between the VHIE (Vermont’s Health Information Exchange) and local VA clinics.

As of 2016, there are no Indian Health Service clinical facilities licensed in Vermont.



## A5 Identification of stakeholders engaged in existing HIT/E activities

Vermont has strong stakeholder engagement in our existing HIT/HIE activities. Stakeholders participate in numerous meetings convened by the State where consensus decision-making occurs. The meetings are convened in three major areas: through the Vermont Blueprint for Health; through the VHCIP, and through ad hoc meetings hosted by DVHA and the HIE/HIT Team. Additionally, Vermont engaged in a review and update of our Vermont Health Information Technology Strategic Plan (VHITP) from early 2015-2016. This review enabled us to identify new opportunities for ensuring appropriate stakeholder engagement. Because of these convening's, Vermont is in the process of refining the role of stakeholders in decision-making in this area. The specific refinement is still under development and is codified in Section 7 of the VHITP- Transition Plan.

### VHITP Review Process

The VHITP Review process included three stakeholder engagement activities: key informant interviews; in-person education and envisioning workshops; and an electronic survey.

*Key Informant Interviews:* Beginning in March 2015 and continuing through July 2015, the State's VHITP contractor conducted interviews with over 40 of Vermont's key HIT/HIE stakeholders. The interviews, mostly conducted by telephone, were described to the interviewees as confidential. The results of the interviews were then aggregated and summarized and used to develop recommendations.

*In-person education and envisioning workshops:* Additionally, the State hosted five education sessions and envisioning workshops, which were held in various locations around the state. The purpose of the workshops was to:

- Introduce stakeholders to the core project team and explain the VHITP update process.
- Uncover their specific wants and needs – not now being met – that are needed to support health care reform in Vermont.
- Understand what the participants regarded as barriers to having an HIT infrastructure that supports health care reform.
- Understand their perspectives on potential issues/challenges that arise with this kind of infrastructure change, especially because it is statewide and impacts so many stakeholders.
- Understand their view on the key elements of success for improving HIT/HIE in Vermont.

*Electronic survey:* The VHITP review process fielded an electronic survey to over 500 individuals throughout the State to gather feedback on planning efforts.





## VHCIP/SIM Stakeholder Efforts

Vermont convenes a Health Data Infrastructure, formerly the HIT/HIE, Work Group as part of its SIM efforts. This group explores and recommends technology and workflow solutions and best practices to achieve SIM's desired outcomes. It also guides and monitors investments in the expansion and integration of health information technology, including:

- Support for expanded connectivity to Vermont's Health Information Exchange, known as the VHIE, including remediation of identified data gaps;
- Work to improve data quality within the VHIE;
- Implementation of telehealth pilots;
- Work around data warehousing and care management tools; and
- Long-term HIE planning.

In a unique model, Vermont's SIM stakeholders make specific investment recommendations to a core leadership team after vetting projects. These recommendations are comprehensive and require significant evaluation by those participating stakeholders.

## Transition Planning Efforts

As discussed above, a key piece of feedback from stakeholders has been that there needs to be a refinement of our existing HIT/HIE governance processes. Specifically, stakeholders appreciate participating in more of the strategic planning decisions around systems that they are encouraged or required to use. Additionally, as the State moves towards more value-based payments, there is an increased need for data by stakeholders. Finally, Vermont continually seeks to avoid duplication of technology investment in support of these efforts. The transition planning activities, which are being done in conjunction with stakeholders, will provide a recommendation that will be submitted to the incoming Administration.

## A6 HIT/E Relationships with other Entities

The Vermont State Medicaid Agency (SMA, in VT, DVHA) does not have HIT/HIE relationships with any entities in support of MU and the SMA health reform goals other than the Vermont Health Information Exchange (VHIE).



**A7 Governance Structure of Vermont's Existing HIE**

Vermont Information Technology Leaders, Inc. (VITL<sup>1</sup>) is legislatively designated<sup>2</sup> to operate the Vermont health information exchange (VHIE), and is governed by a statutorily-defined<sup>3</sup> group of stakeholders.

18 V.S.A. § 9352 (a)(1) provides that:

The VITL Board of Directors shall consist of no fewer than nine nor more than 14 members. The term of each member shall be two years, except that of the members first appointed, approximately one-half shall serve a term of one year and approximately one-half shall serve a term of two years, and members shall continue to hold office until their successors have been duly appointed. The Board of Directors shall comprise the following:

(A) one member of the General Assembly, appointed jointly by the Speaker of the House and the President Pro Tempore of the Senate, who shall be entitled to the same per diem compensation and expense reimbursement pursuant to 2 V.S.A. § 406 as provided for attendance at sessions of the General Assembly;

(B) one individual appointed by the Governor;

(C) one representative of the business community;

(D) one representative of health care consumers;

(E) one representative of Vermont hospitals;

(F) one representative of Vermont physicians;

(G) one practicing clinician licensed to practice medicine in Vermont;

(H) one representative of a health insurer licensed to do business in Vermont;

(I) the President of VITL, who shall be an ex officio, nonvoting member;

(J) two individuals familiar with health information technology, at least one of whom shall be the chief technology officer for a health care provider; and

(K) two at-large members.

VITL's Board currently has 12 members on it and details about the Board members can be found here: <https://www.vitl.net/about/corporate-structure/board-directors>.

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<sup>1</sup> Vermont Information Technology Leaders, Inc. (VITL) is a nonprofit organization that assists Vermont health care providers with adopting and using health information technology, to improve the quality of care delivery, to enhance patient safety and to reduce the cost of care.

<sup>2</sup> Vermont statutes 18 V.S.A. § 9352(c)

<sup>3</sup> Vermont statutes 18 V.S.A. § 9352



**Health information exchange operation, budget and delegation:**

VITL is designated in statute and the Health Information Technology Plan to operate the exclusive statewide health information exchange network for this State. As defined in statute<sup>4</sup>, the Green Mountain Care Board (GMCB) has oversight and approval of VITL's core activities and budget, the Secretary of Administration has delegated responsibility to the Department of Vermont Health Access (DVHA, the state Medicaid agency) to enter into contractual agreements with VITL in support of HIE expansion, MU support, and HIT activities.

**Scope of participation and geographic reach:**

VITL currently has established connections between the VHIE and 275 health care organizations in Vermont and surrounding regions. **Figure 1.10** below provides a list of these types of organizations<sup>5</sup>.

**Figure 1.10**

Provider Type	Number of Known HCO Locations	Number of HCO Locations Connected to the VHIE <sup>b</sup>	Number of HCO Locations with Inbound Interfaces to the VHIE <sup>c</sup>	Number of HCO Locations with Outbound Interfaces from the VHIE
Specialty Care	897	68	50	30
Primary Care	159	91	84	35
Long-term Care Services	83	3	0	3
Federally Qualified Health Centers	82	57	48	31
Designated Agency	61	32	0	32
Home Health Agency	19	5	5	0
Hospital	19	17	17	2
Commercial Laboratory	3	3	3	0
Total	1,323	276	207	133

**Current plans to incorporate the VHIE into MU capabilities and HITECH systems to achieve state goals:**

The State Medicaid Agency (DVHA) collaborates and contracts with VITL on projects designed to address connectivity, data quality, and accessibility of health data to and from the VHIE to achieve the State's health goals. These projects are designed based on the health reform goals and the vision described in the State's VHITP. MU attestation support is a service provided by VITL and the Vermont Medicaid electronic

<sup>4</sup> Vermont statutes 18 V.S.A. § 9375(2)(C)

<sup>5</sup> This table is a point in time as of 30 June 2016.



health record incentive program (EHRIP) to promote electronic health record use and to establish a connection point from HCO to HIE.

## A8 Role of MMIS in Our Current HIT/E Environment

The Medicaid Management Information System (MMIS) Program is a collective initiative under the Health & Human Services Enterprise. The MMIS Program, with resulting solutions, will align with Federal and State regulations stemming from the Federal Affordable Care Act and Vermont's Act 48. In February, 2016 the Agency of Human Services cancelled the procurement process begun in June 2014 with the intent to move from a "big bang" holistic implementation to a MMIS environment will be built in a modular fashion that allows for a more effective and timely implementation and upgrade of desired functions.

One area of focus over the past year has been examination of utilization of the VHIE for transmitting claims data in addition to clinical data. In 2009, the legislature and the Division of Health Care Reform convened a work group to examine HIT and Payment Reform. It issued a 220 page report that provided an extensive look at the "as is" and "to be" states for both electronic eligibility checks and claims submissions and concluded that moving to "close to real time" claims adjudication should be deferred as a future priority. The burdens of implementing ICD-10 and 5010 and other IT priorities at commercial insurers mean it will likely be several years before evolving to the envisioned, more interactive "to be" state in which transactions would be completed in closer to real time.

Blue Cross / Blue Shield of Vermont enables electronic eligibility checks and electronic claims submissions. Vermont Medicaid can provide eligibility electronically and accepts electronic claims. While BCBS and Vermont Medicaid have not yet developed an electronic exchange, we are actively working with BC/BS for eligibility data sharing to improve the accuracy of third party liability and cost avoidance criteria. DVHA anticipates having specifications for its new claims processing Medicaid Management Information System (MMIS) that will include the capacity to adjudicate claims electronically in close to real time for many encounters and procedures. In addition, the State is continuing to work toward achieving a new Integrated Eligibility and Enrollment system for Medicaid and other public benefits programs across the Agency of Human Services.

Because the EHR incentive payment program has begun under the current MMIS system, we must transition to the new system when implemented. We also anticipate a more significant MMIS/HIE connection with implementation of the new MMIS. Integration efforts here could make Medicaid claims and encounters available to the HIE as well as making non-Medicaid providers available to the Medicaid program. This would support payment reform as well, and introduces the possibility of utilizing the HIE as a transport mechanism for financial, as well as clinical, transactions, for both Medicaid and commercial claims processing, with Medicaid leading the development. The New England Health Information Network (NEHIN) and the Utah Health Information Network (UHIN) operate under such a model.



Vermont HIE/HIT activities align with MITA maturity and the 7 conditions and standards. The table below references the conditions and standards and describes the Vermont approach to alignment.

**Figure 1.11**

#	Conditions and Standards	Vermont Approach
1	<p><u>Modularity Condition</u>. Use a modular, flexible approach to systems development, including the use of open interfaces and exposed application programming interfaces; the separation of business rules from core programming; and the availability of business rules in both human and machine readable formats.</p>	<p>Modularity is the key design principle that drives Vermont’s architecture.</p> <ul style="list-style-type: none"> <li>• HIT/HIE projects are evaluated against this principle and designed with a view of the Health Services Enterprise (HSE) and the opportunity for re-use of components.</li> <li>• Health Services Enterprise systems and applications are designed with a Service Oriented Architecture (SOA) approach.</li> <li>• HSE Applications are designed to expose services via the Oracle Enterprise Service Bus (ESB).</li> <li>• Model, View, and Controller are discrete elements of design, keeping data systems (Oracle DBs), display (Oracle WebCenter Portal and Siebel), and control logic (Oracle Policy Automation) separated.</li> <li>• The principles of modularity are explicitly required by non-functional requirements (NFR) as part of all contracted development and integration work.</li> <li>• Modular principles are enforced in design work on both state and vendor teams as part of acceptance process.</li> <li>• Vermont employs an iterative SDLC process that modularly deploys functionality, continuously incorporates feedback and appreciates</li> </ul>



#	Conditions and Standards	Vermont Approach
		<p>opportunities for improvement, and thereby, reduces risk by being adaptive to best solutions to meet business problems at any particular moment in time.</p>
2	<p><u>MITA Condition</u>. Align to and advance increasingly in MITA maturity for business, architecture, and data.</p>	<p>MITA is a central design standard that drives state work and is a written requirement incorporated into contracts with implementation partners.</p> <ul style="list-style-type: none"> <li>• Business Process modeling follows the MITA functional taxonomy.</li> <li>• Requirements are organized and related by MITA processes.</li> <li>• The State Self-Assessment (SSA) is an ongoing tool for the state to understand current state and prioritize improvement.</li> </ul>
3	<p><u>Industry Standards Condition</u>. Ensure alignment with, and incorporation of, industry standards: the Health Insurance Portability and Accountability Act of 1996 security, privacy and transaction standards; accessibility standards established under section 508 of the Rehabilitation Act, or standards that provide greater accessibility for individuals with disabilities, and compliance with Federal civil rights laws; standards adopted by the Secretary under section 1104 of the Affordable Care Act; and standards and protocols adopted by the Secretary under section 1561 of the Affordable Care Act.</p>	<p>All contracted work, as documented by a contract’s statement of work (SOW) and specified data privacy and security requirements in Appendix D of all agreements , explicitly requires compliance to a set of federal and industry open standards including:</p> <ul style="list-style-type: none"> <li>• ADA and Section 508 Compliance</li> <li>• Health Insurance Portability and Accountability Act (HIPAA)</li> <li>• Health Information Technology for Economic and Clinical Health Act of 1996</li> <li>• Privacy Act of 1974</li> <li>• Patient Protection and Affordable Care Act (ACA) of 2010, Section 1561</li> </ul>



#	Conditions and Standards	Vermont Approach
		<ul style="list-style-type: none"> <li>• Safeguarding and Protecting Tax Returns and Return Information (26 U. S, C. 6130 and related provisions)</li> <li>• National Institution of Standards &amp; Technology (NIST) Special Publications. NIST’s Special Publications are available at: <a href="http://csrc.nist.gov/publications/PubsSPs.html">http://csrc.nist.gov/publications/PubsSPs.html</a></li> <li>• National Security Agency (NSA) Security Recommendation Guide</li> </ul>
4	<p><u>Leverage Condition</u>. Promote sharing, leverage, and reuse of Medicaid technologies and systems within and among States.</p>	<p>Enabled by the Modularity Standard, reuse is a core capability of the Vermont architecture whereby the same processes and technologies can be leveraged across health and human services domains. By maintaining a broad design perspective, each implementation is conceived to be extensible and scalable, to bring on additional service programs as funding and development opportunities become available.</p> <p>For instance, the Business Rules Management project begins with health-care focused programs, but the design and implementation of the rules modeling and automation tools are being made in context of the complete catalog of agency policy and programs. This effort will utilize and extend technologies that were deployed through the build-out of Vermont’s health care exchange such as the OPA and Identity and Access Management systems.</p> <p>Through the SIM grant, our HIE vendor is working towards a more robust consent management solution for the VHIE that will be leveraged against our HSE Consent capability as part of a federated solution across Vermont Medicaid systems.</p>



#	Conditions and Standards	Vermont Approach
5	<p><u>Business Results Condition.</u> Support accurate and timely processing of claims (including claims of eligibility), adjudications, and effective communications with providers, beneficiaries, and the public.</p>	<p>By thoroughly understanding policy and other program constraints, desired outcomes, and business functions documented as business processes, Vermont has positioned itself to understand if its business is achieving its desired results.</p> <p>A good example of this dynamic is the integration of the eligibility services with real time determination, verification, and enrollment with robust reporting capability.</p> <p>Another example is the integration of MAPIR recoupment capabilities into our MMIS function to manage EHRIP audit findings with the ability to recoup future claims, or accept cash input.</p>
6	<p><u>Reporting Condition.</u> Produce transaction data, reports, and performance information that would contribute to program evaluation, continuous improvement in business operations, and transparency and accountability.</p>	<p>The EHRIP program team and HIT/HIE team both leverage various reports and performance data that inform strategic direction, the consistency of business operations, and to maintain auditable accountability for provider incentive payments/recoupments with the SLR and NLR.</p>
7	<p><u>Interoperability Condition.</u> Ensure seamless coordination and integration with the Exchange (whether run by the state or federal government), and allow interoperability with health information exchanges, public health agencies, human services programs, and community organizations providing outreach and enrollment assistance services.</p>	<p>The culmination of all the design standards and principles that drive the state’s architecture is towards a capability of interoperability. Business and technical system prioritization is informed by the need to operate seamlessly together, with high data quality and accuracy. Given the mixed array of legacy and modern systems across public and private domains, it can be challenging to link programs, registries, and agencies with the VHIE. This dynamic has led to prioritization of master-data tools and indexes, identity and access, and consent management in the HSE.</p>





## A9 Current Activities Underway to Plan and Facilitate HIE and EHR Adoption

Vermont is engaged in several activities related to facilitating HIE and EHR adoption. These activities include incentivizing and prioritizing connections to hospitals and labs, facilitating physician practice EHR adoption, and generally coordinating HIE and EHR adoption and Meaningful Use. The State's SIM grant has several projects identified which relate to or require HIE expansion and Meaningful Use of EHR technology to succeed.

Obtaining approval of this SMHP is a primary activity underway to plan and facilitate the ongoing HIE expansion and EHR Adoption. Other activities underway include: hospital, lab, and physician practice EHR adoption; and coordinating HIE and EHR adoption and Meaningful Use. The State's SIM grant has several projects identified which relate to or require HIE expansion and Meaningful Use of EHR technology to succeed.

The enrollment campaign is an important component of Vermont's EHRIP program. The outline below illustrates the steps taken to maximize the enrollment of Vermont eligible professionals in program year 2016.

The first step necessary to conduct our enrollment campaign was the identification of a target population. The step was completed by downloading data from the CMS Registration National Level Repository (NLR) and by doing a multi-level analysis on individual NPIs designated as Active Vermont Medicaid providers and their potential one-to-many affiliations with practices. We compared those NPIs against CMS NLR data where providers have any history of receiving payment for either the Medicare or Medicaid EHR Incentive Program participation. We also consolidated a data file of NPIs and practices that are potentially eligible, but have no history of registration/participation.

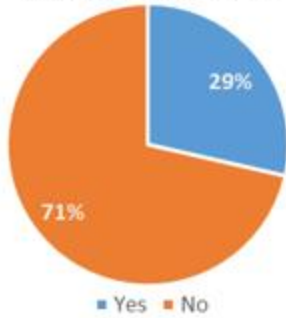
Our second step was to reach out to the target population. We conducted research to develop a database of email contacts associated with relevant NPIs and related practices. We then sent emails containing information about the 2016 Enrollment Campaign, along with a link to the VT Medicaid EHRIP Awareness Survey. The EHRIP Awareness Survey is a web-based tool that will remain available at the VT Medicaid EHRIP website with periodic analysis of the data collected on an ongoing basis. It consists of nine questions designed to:

- Assess a provider's basic awareness of the EHR Incentive Program
- Allow a provider or their representative to gauge a provider's potential eligibility
- Supply providers or their representatives with information resources on how to get started in Program Year 2016
- Collect feedback on barriers to acquiring or utilizing CEHRT
- Offer various methods to request assistance in getting started.

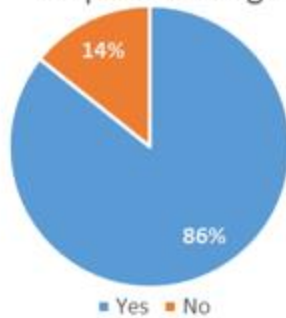
The VT Medicaid EHRIP Awareness Survey generated the following informative results:



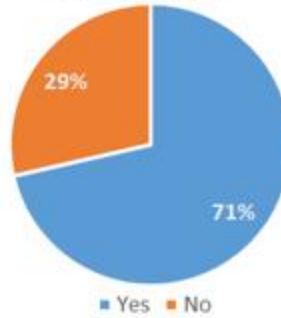
Aware of Medicare or Medicaid EHRIP?



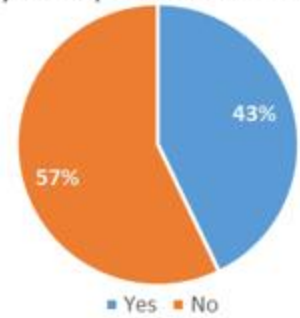
Fewer 90% services in hospital setting?



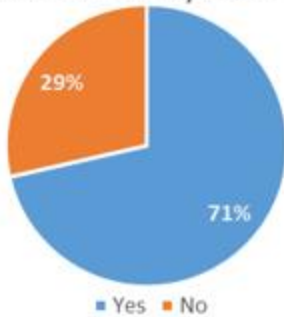
30% Medicaid encounters?



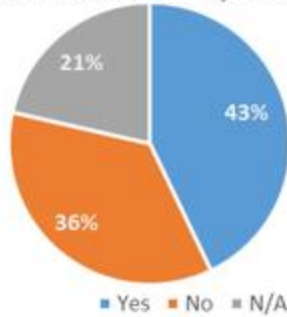
At least one provider you represent an EP?



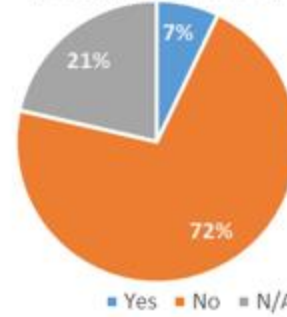
Does your practice use an EHR System?



If yes, is it an ONC Certified EHR System?



If no, will you acquire a CEHRT in 2016?



We proceeded with our enrollment campaign by outreaching provider organizations. The following organizations are included in specific outreach communications, receiving the 2016 EHRIP Enrollment Campaign details and the VT Medicaid EHRIP Awareness Survey: Bi-State Primary Care Association, Vermont Area Health Education Centers, Vermont Chapter of the American Academy of Pediatrics, Vermont Medical Society, Vermont State Dental Society. Additionally, we included our general, consistent outreach as a means of promoting our enrollment campaign. General outreach includes: Bi-weekly email communications to an enhanced email distribution list including EHRIP program participants and other interested parties. Medicaid Advisory Articles in the form of a bimonthly newsletter published by Vermont’s contracted Medicaid Fiscal Agent Provider Services Division, distributed to all registered Medicaid providers. Medicaid Remittance Advice Notification, specifically, all Medicaid Remittance Advice communications from May – June 2016 included notification of the 2016 EHRIP Enrollment Campaign and a link to the EHRIP Awareness Survey. Lastly, we have continuously updated website content. The VT Medicaid Website is updated at least weekly with policy and logistical assistance for program participants and other interested parties.



**Environmental Scan and Provider Surveys of Health Information Exchange Familiarity, Utilization, Connectivity, and Interoperability.**

There are four main surveys that were fielded in the past 2 years that provide the State with information about provider HIE familiarity, utilization, connectivity, and interoperability:

1. Environmental Scan
2. VHITP Survey
3. VITL Provider Survey
4. SOV Provider Survey

Section A1 of this document includes a detailed description of Vermont’s Environmental Scan goals and methodology. This section will discuss the three surveys and results not discussed in section A1.

**VHITP Survey:**

This survey was fielded as part of a more comprehensive review and update to Vermont’s Health Information Technology Strategic Plan (VHITP). This statewide survey was conducted to obtain additional stakeholder input on the relative importance of proposed HIT objectives. DVHA personnel distributed surveys to several stakeholder lists reaching out to hundreds of individuals.

Over 500 individuals completed the survey in which they were asked to rate the relative importance of the objectives. The list of objectives below shows the order of importance from the results of the survey.

**Figure 1.12  
VHITP Provider  
Objectives:**

1. People trust that health care data is secure, accurate, and current	9. Health information sharing in Vermont is sustainable
2. Health care information can be appropriately and securely accessed by authorized people and providers	10. Reporting processes are streamlined to assist providers in complying with mandated reporting requirements
3. People have the information needed to make informed decisions about their care	11. There is statewide transparency and coordination of all appropriate HIT/HIE projects
4. Health care information is readily shareable across all provider organizations where people receive care	12. Health care and health services information collected and maintained by State agencies is easily shared
5. Integrated/Coordinated care is the norm	13. People have expanded access to health care services and providers through technology
6. Consent for sharing physical health, mental health, substance use, and social services information is implemented consistently	14. People can manage the sharing of their health care information
7. High quality health care/services data are accessible and suitable for multiple uses	15. There is active data governance in place for health care/services data
8. The cost of HIT/HIE is not a barrier to Vermont providers in implementing and using technology	16. Vermont easily and appropriately shares health care information beyond its borders



**VITL's Provider Survey:**

This section discusses the survey results from VITL's provider survey. This survey was focused on health care providers' use of, and feedback on, electronic health records (EHR), VITLAccess, and other provider-related technologies. This survey is used by VITL to identify areas of future planning for their organization. A total of 388 completed surveys were received from licensed health care providers in the state of Vermont. The four-page survey was administered via postal mail. Responses were collected between May 20 and June 22, 2016.

The details represented below are highlights of the findings. Additional information on the methodology and full responses can be found here: [http://healthdata.vermont.gov/sites/healthdata/files/VITL\\_VT%20Provider%20Survey\\_June%202016\\_Final%20Report.pdf](http://healthdata.vermont.gov/sites/healthdata/files/VITL_VT%20Provider%20Survey_June%202016_Final%20Report.pdf). Responses to this survey included a high number of respondents who indicated "don't know" and "unsure" responses. Due to the informative nature of these responses, these options were not coded as missing values, but rather are presented as substantive responses for each item.

The highlighted findings are as follows:

- Overall, a plurality of respondents (44%) indicated that they have not heard of VITL.
- Only 11% of respondents indicated that they receive clinical data (such as lab results) into their EHR from VITL.
- The majority of respondents are not currently users of VITLAccess (78%).
- For both current users and non-users of VHIE data, the majority of providers indicated that clinical results into their EHR would or does improve their quality of care (with 76% of users indicating somewhat or greatly and 67% of non-users indicating that clinical data would somewhat or greatly improve their quality of care).
- Other questions about future technologies provide insight into strategic areas of focus for VITL. Real-time notification of patient admission and discharge being of most interest to providers.

The following statistics relate to the connections between various provider types and the Vermont Health Information Exchange (VHIE).

Below is the total number of outbound interfaces per Health Care Organization type:

<b><i>Organization Types</i></b>	<b><i>Number of Health Care Organizations</i></b>	<b><i>Number of Interfaces</i></b>
<i>Designated Agency</i>	<i>28</i>	<i>98</i>
<i>FQHC</i>	<i>31</i>	<i>116</i>
<i>Hospital</i>	<i>2</i>	<i>2</i>



<i>Long Term Care Services</i>	3	7
<i>Primary Care</i>	35	94
<i>Specialty Care</i>	34	97
<b><i>Grand Total</i></b>	<b>133</b>	<b>414</b>

For the provider portal VITLAccess:

- Hospital segment – 3 hospitals
- Hospital owned practice locations – 24
- Primary & Specialty Care practice locations – 55
- FQHC locations – 23 (7 FQHCs)
- Designated Agencies – 4
- Home Health Agency locations – 10 (5 home health agencies)
- Urgent Care locations – 5 (1 Urgent Care Organization)
- Other category (includes organizations such as Nursing Homes, Behavioral Health, the Department of Corrections, etc.) – 13 locations
- Total Number of VITLAccess users – 2156

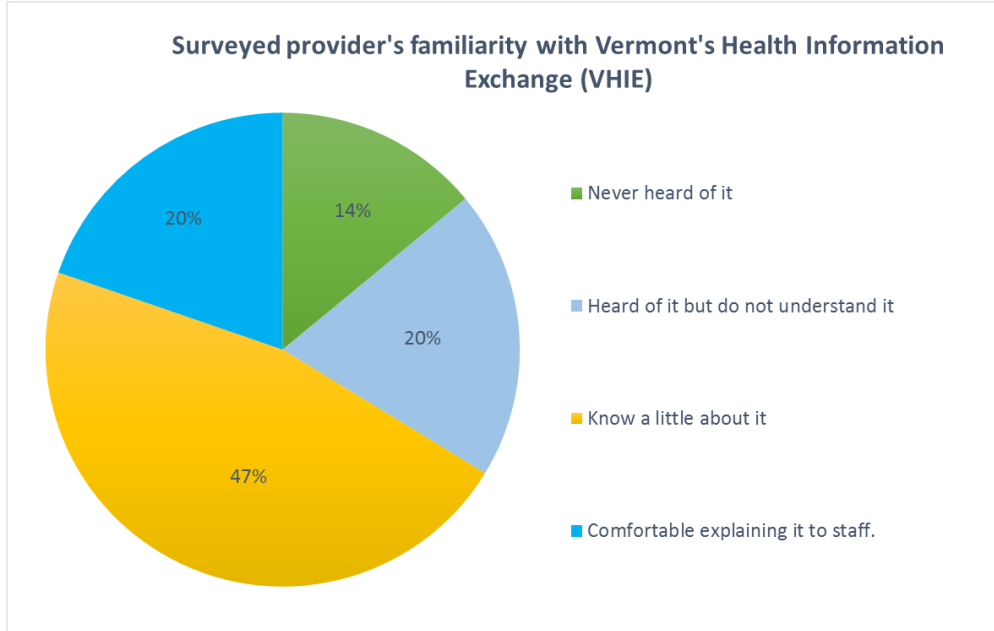
### HIT/HIT Provider Survey:

The recent HIE/HIT provider survey included several Health Information Exchange questions that were broadly answered by the providers who completed the survey. The results are summarized and visualized below in **Figure 1.13**.

The vast majority of these respondents have some familiarity with Vermont’s Health Information Exchange. Analysis in the table below, **Figure 1.14**, shows that the majority physicians (and their representatives) were familiar with the HIE, while most responses representing dentists have never heard of it or only know a little about it.



**Figure 1.13 Surveyed provider’s familiarity with Vermont’s Health Information Exchange pie chart**



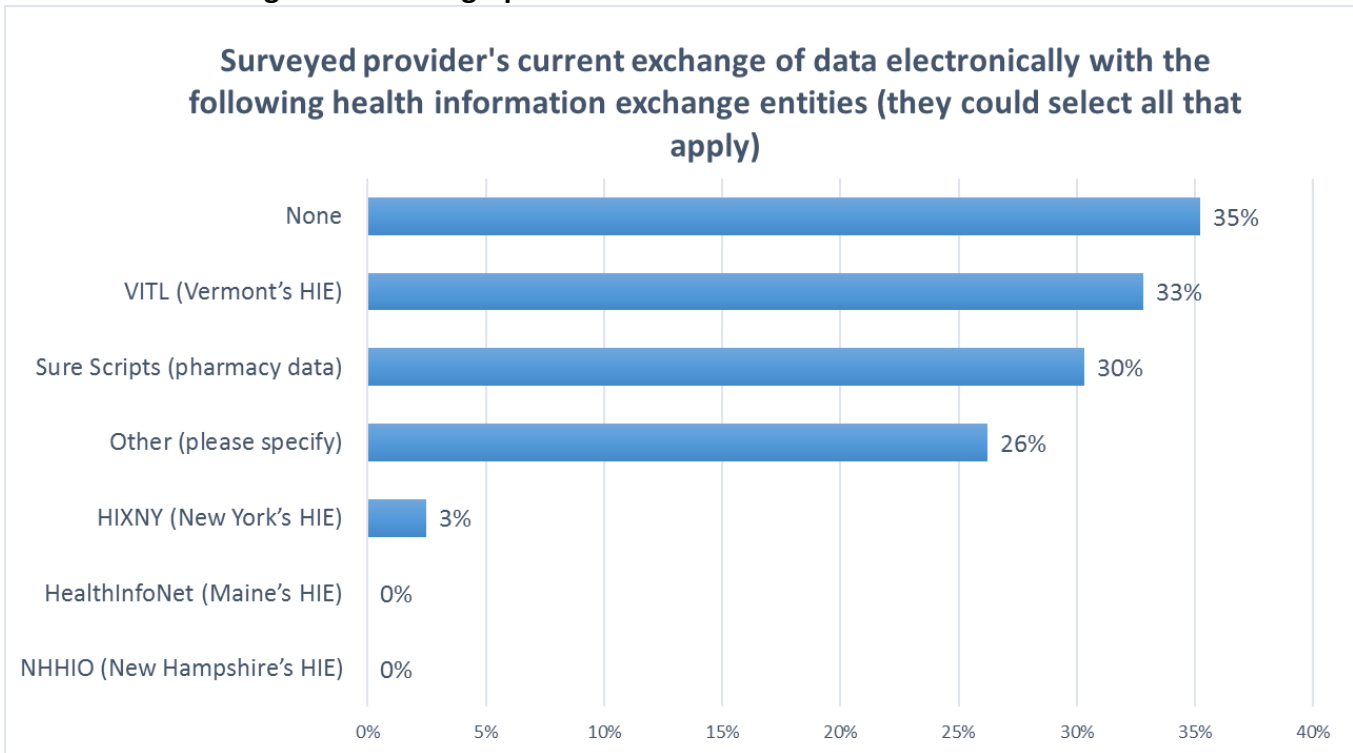
**Figure 1.14 Surveyed provider’s familiarity with Vermont’s Health Information provider type data**

Row Labels	Heard of it but do not				Grand Total	
	Comfortable explaining	understand it	Know a little about it	Never heard of it (blank)		
DENTIST	1	4	11	11	27	
LICENSED MIDWIVES (LAYP	1	2	1	1	5	
NATUROPATHIC PHYSICIAN	2				2	
NURSE PRACTITIONER	3	6	9	3	21	
PHYSICIAN	23	18	51	7	2	101
PHYSICIAN ASSISTANT	1	1	1		3	
<b>Grand Total</b>	<b>31</b>	<b>31</b>	<b>73</b>	<b>22</b>	<b>2</b>	<b>159</b>

The respondents also indicated a low degree of connectivity between health information exchange entities. The cause for the minimal exchange may be explained by question 13 in the survey which indicates that only 18% of Physician respondents are not exchanging data with an HIE, while 83% of Dentists are not. This is an area to explore and pursue to encourage interoperability. This information is provided in **Figure 1.15** below.



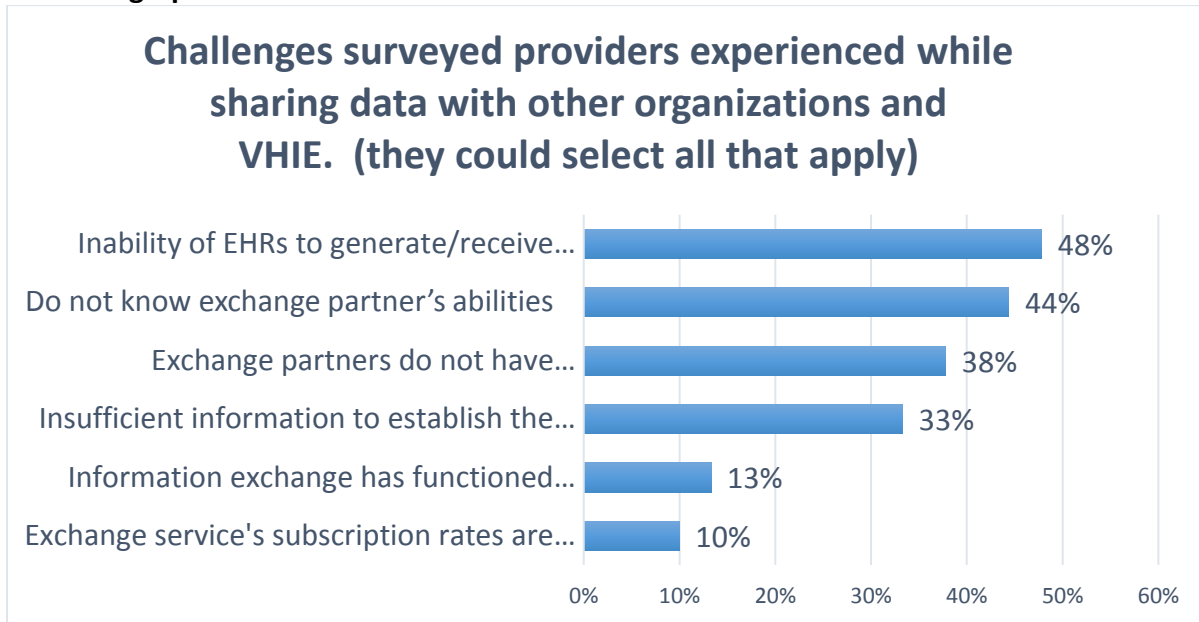
**Figure 1.15** Surveyed provider’s current exchange of data electronically with the following health information exchange entities bar graph



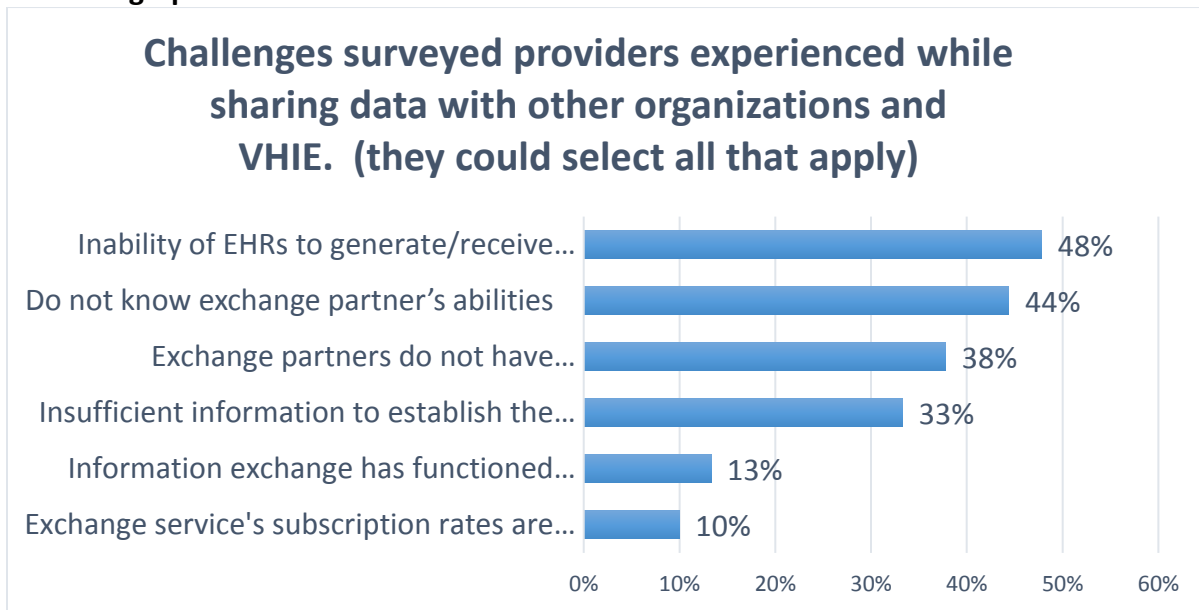
**Figure 1.16** below includes a bar graph that represents responses from question 13: “Please identify the following challenges that you experienced while sharing data with other organizations and VHIE. (Select all that apply)”. These responses indicate that there is a challenge or reluctance to connect to other health information entities due to integration challenges and a lack of knowledge of what interfaces could exist.



**Figure 1.16 Challenges surveyed providers experienced while sharing data with other organizations and VHIE bar graph**



**Figure 1.16 Challenges surveyed providers experienced while sharing data with other organizations and VHIE bar graph**

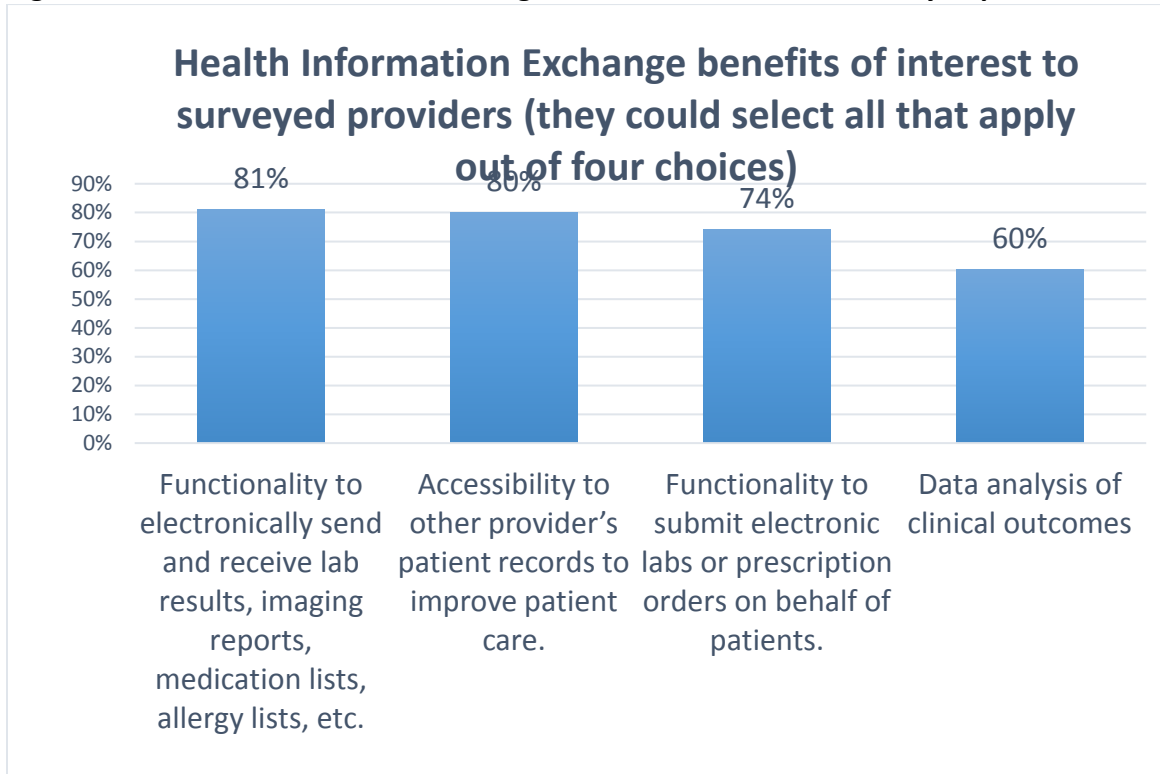


However, as provided in **Figure 1.17** below, there is significant interest in the potential of a highly functional health information exchange supported by intuitive and standardized EHR systems.





**Figure 1.17 Health Information Exchange benefits of interest to surveyed providers bar graph**



**A10 Relationship of the State of Vermont's Medicaid Agency to the State HIT Coordinator**

The State of Vermont's HIT Coordinator is a member of the HIT/HIE team in the Department of Vermont Health Access, (DVHA) the State of Vermont's Medicaid Agency. The State HIT Coordinator oversaw the ONC Cooperative Agreement Grant, which provided major funding for HIE expansion until the funds were fully expended by the end of 2013. The State HIT Coordinator also has primary responsibility for developing the SMHP, HITECH IAPD's, the Vermont HIT plan, manages the EHRIP program, and manages the HITECH contract and grant agreements for year-to-year DDI and M&O activities of the VHIE and other partner organizations and departments. The State HIT Coordinator's reporting structure insures full awareness and attention to expansion and integration needs across the SMA's span of HIT-HIE related interests.

**A11 SMA Activities Underway that will Influence the Direction of the EHR Incentive Program over the next Five Years.**

The Vermont Department of Vermont Health Access (DVHA) is seeking to establish service agreements with one or more Accountable Care Organizations (ACOs) for participation in a population-based payment model that is based on CMS' Medicare Next Generation ACO Model that would start January 1, 2017. This Medicaid model may identify a common measure set that could overlap with EHRIP eCQM's. Although the



Vermont Medicaid EHRIP does not require providers to report on eCQM's, there could be some common measures identified with other programs that may reduce provider reporting burden. 15 measures that currently overlap with ACO quality measures are identified in section A-1.

Vermont Medicaid is also preparing to enter a procurement process to replace the current MMIS system. The EHRIP program relies on the interactions between MAPIR and MMIS for updates to the NLR and for incentive payments and audit finding recoupments.

#### **A12 Potential Impact of State Laws or Regulations on the Implementation of the EHRIP**

There have not been any recent, or significant changes to State laws or regulations that would impact EHRIP operations.

#### **A13 HIT activities that cross state borders**

At the request of the State, VITL continues to work on ensuring that we can receive data from New York. New York State's Department of Health, which governs New York's consent policies, has implemented a different consent structure than that in place in Vermont. This means that we need to identify new solutions to ensure these data can consistently flow into the VHIE. The State is working with VITL on potential solutions.

On the New Hampshire side of our border, there are ADT, VXU, and LAB interfaces from Dartmouth Hitchcock Medical Center in Lebanon N.H. to the VHIE.

#### **A14 Current Interoperability Status of the State Immunization (IZ) Registry and Public Health Surveillance Reporting Database**

Vermont's Department of Health (VDH) manages the State Immunization Registry, Public Health Surveillance reporting databases, and Cancer Registry. Additionally, Vermont's Blueprint for Health has a specialized registry that supports the patient-centered medical home program.

There is now a connection between the VHIE and the Immunization Registry. Immunization messages are beginning to flow from providers through the VHIE to the Immunization Registry. VDH and VITL are doing joint outreach to bring more providers into the Immunization Registry through this connection.

VDH is now ready to accept Electronic Lab Reporting from the hospitals and commercial labs. As of 2015, all 15 hospitals are currently connected.

At this time, the Cancer Registry cannot be connected to the VHIE due to prioritization of other connectivity activities in 2016 and 2017.

Only one Hospital in Vermont is submitting data electronically to the Public Health Surveillance Reporting Database at the Vermont Department of Health (VDH). All others are currently submitting data manually to VDH for mandatory public health reporting. This is an opportunity to incorporate the VHIE and simplify the manual process.

The Blueprint for Health's clinical registry is functioning in support of the patient centered medical home concept. This registry is also connected to the VHIE.



## A15 Other HIT-related grants

The Vermont Health Care Innovation Project (VHCIP), is funded through a \$45 million State Innovation Models (SIM) Testing grant from the federal Center for Medicare & Medicaid Innovation (CMMI). VHCIP uses SIM funds to strive towards the Triple Aim:

- Better care;
- Better health; and
- Lower costs.

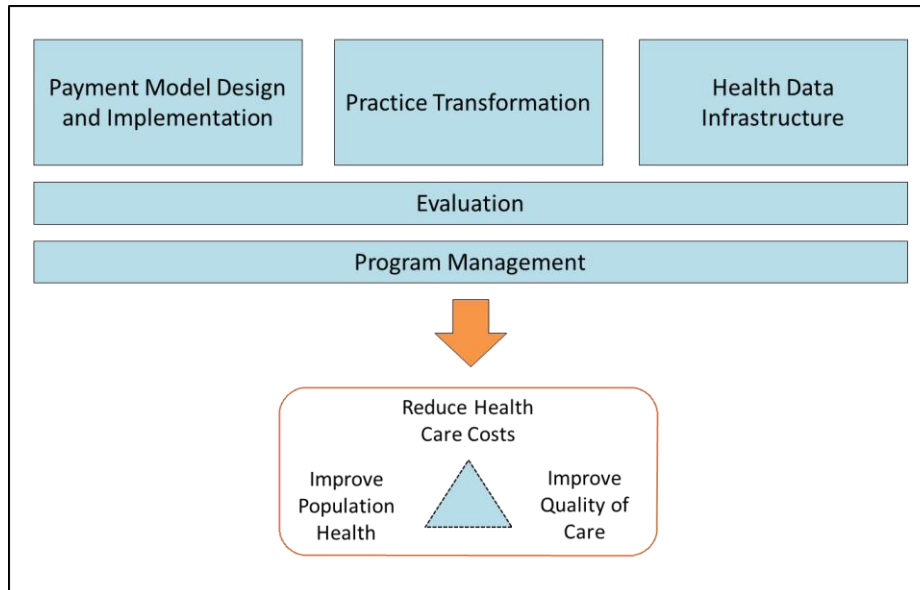
The Triple Aim is advanced through a series of tasks that fall under five major focus areas:

- **Payment Model Design and Implementation:** Supporting creation and implementation of value-based payments for providers in Vermont across all payers.
- **Practice Transformation:** Enabling provider readiness and encouraging practice transformation to support creation of a more integrated system of care management and care coordination for Vermonters.
- **Health Data Infrastructure:** Supporting provider, payer, and State readiness to participate in alternative payment models by building an interoperable system that allows for sharing of health information to support optimal care delivery and population health management.
- **Evaluation:** Assessing whether program goals are being met.
- **Program Management and Reporting:** Ensuring an organized project.

The project's five focus areas are depicted in Figure 1 below.

Figure 1: Vermont's SIM Focus Areas





**Health Data Infrastructure: Supporting provider, payer, and State readiness to participate in alternative payment models.**

Vermont SIM’s health data infrastructure development activities support the development of clinical, claims, and survey data systems to support alternative payment models. Vermont is making strategic investments in clinical data systems to allow for passive quality measurement – reducing provider burden while ensuring accountability for health care quality – and to support real-time decision-making for clinicians. VHCIP is also working to strengthen Vermont’s data infrastructure to support interoperability of claims and clinical data and predictive analytics.

These investments have yielded significant improvements in the quality and quantity of data flowing from providers’ electronic medical records into the Vermont Health Information Exchange (VHIE). We have also identified data gaps for non-meaningful use providers to support strategic planning around data use for all providers across the continuum.



## SECTION B: The State's "To-Be" HIT Landscape

### II. The State's "To-Be" HIT Landscape:

In this section of the SMHP we describe Vermont's To-Be Landscape as it relates to Health Care Reform (HCR), particularly Health Information Technology (HIT) and the statewide Health Information Exchange (HIE). Topics included in this section are:

1. Specific HIT/HIE Goals for the next five years, including Health Information Exchange and Medicaid;
2. IT architecture, including MMIS, for the next five years;
3. Providers interface with SMA IT systems related to EHRIP;
4. Governance structure for the next 5 years for HIT/E goals and objectives;
5. Steps during the next 12 months to encourage the adoption of EHRs;
6. Leveraging FQHCs with HRSA HIT/EHR funding to leverage adoption;
7. Help to providers to adopt and MU EHR technology;
8. Address special populations with EHRIP;
9. Leverage other grants to implement EHRIP; and
10. Anticipated new legislation to implement EHRIP.

### B1 Specific HIT/E Goals and Objectives Next Five Years

In Vermont, our early health information technology focus was on establishing the infrastructure of systems and exchange to support the generation and transmission of data related to health care. As the State transitions to a more integrated delivery system and value-based purchasing, we have identified several key areas in need of additional investment. The remaining work focuses on: expansion of connected organizations to more of Vermont's providers; ensuring data quality is sufficient for use in analytics and for payment; expanding accessibility of the high-quality data to providers, payers, ACOs, and the State.

In March 2015 Vermont began a project to update its health information technology plan. Interviews, surveys, and envisioning sessions were conducted with Vermont's stakeholders. The purpose of the workshops was to:

- Introduce stakeholders to the projects team and explain the VHITP updated process.
- Uncover their specific wants and needs to support health care reform in Vermont.
- Understand what the participants regarded as barriers to having an HIT infrastructure that supports health care reform.
- Understand their perspectives on potential issues and challenges that arise with this kind of infrastructure change.
- Understand their view on the key elements of success for improving HIT/HIE in Vermont.

Based on stakeholder interviews and after conducting several workshops, the core project team produced an initial set of HIT/HIE objectives.



1. People trust that health care data is secure, accurate, and current	9. Health information sharing in Vermont is sustainable
2. Health care information can be appropriately and securely accessed by authorized people and providers	10. Reporting processes are streamlined to assist providers in complying with mandated reporting requirements
3. People have the information needed to make informed decisions about their care	11. There is statewide transparency and coordination of all appropriate HIT/HIE projects
4. Health care information is readily shareable across all provider organizations where people receive care	12. Health care and health services information collected and maintained by State agencies is easily shared
5. Integrated/Coordinated care is the norm	13. People have expanded access to health care services and providers through technology
6. Consent for sharing physical health, mental health, substance use, and social services information is implemented consistently	14. People can manage the sharing of their health care information
7. High quality health care/services data are accessible and suitable for multiple uses	15. There is active data governance in place for health care/services data
8. The cost of HIT/HIE is not a barrier to Vermont providers in implementing and using technology	16. Vermont easily and appropriately shares health care information beyond its borders

After the HIT/HIE objectives were developed and a statewide survey was completed, gaps were identified and a series of initiatives were developed. The resulting initiatives are described in detail below:

- Establish (and run) comprehensive statewide HIT/HIE governance.  
Create an entity that has the appropriate authority, accountability, and expertise to promote and ensure the success of public and private HIT/HIE efforts in support of health care and payment reforms across the state of Vermont.
- Strengthen statewide HIT/HIE coordination.  
Provide overall coordination and communication of the statewide HIT/HIE related projects and activities.
- Establish and implement a statewide master data management program (data governance) for health, health care, and human services data.  
Establish a statewide master health data management program to address/manage the access, availability, quality, integrity, and security of data.
- Develop and implement an approach for handling the identity of persons that can be used in multiple situations.  
Develop an approach that will uniquely identify a person across systems and points of care that includes both health care and human services information.
- Oversee and Implement the State's Telehealth Strategy.  
Direct, manage, and update as needed the State's 2015 Telehealth Strategy.
- Provide bi-directional cross state border sharing of health care data.



Develop and implement an approach to easily share health information electronically with other states.

- Continue to expand provider EHR and HIE adoption and use.  
Continue to grow the numbers and types of providers who have access to, and use EHRs and HIE capabilities.
- Simplify State-required quality and value health care related reporting requirements and processes.  
Provide more efficient, streamlined processes and tools for providers to report on required health care metrics
- Establish and implement a sustainability model for health information sharing.  
Develop and implement an economic model that ensures that the on-going services, resources, funding, benefits, and cultural norms that foster broad health care information sharing are achieved and maintained over time.
- Centralize efforts for stakeholder outreach, education, and dialogue relating to HIT/HIE in Vermont.  
Consolidate efforts to convene and educate health care stakeholders, including clinicians, so that they can both obtain information on HIT/HIE efforts and engage in a dialogue that promotes ongoing participation and ownership of these efforts.
- Ensure that statewide health information sharing consent processes are understood and consistently implemented for protected health information – including information covered by 42 CFR Part 2 and other State and federal laws.  
Create a common approach, which is well understood by both providers and consumers that can be used statewide for complying with patient consent requirements.
- Ensure continued compliance with appropriate security and privacy guidelines and regulations for electronic protected health information.  
Ensure that all systems housing or transporting protected health data in State or statewide systems comply with the Security Rule and all other applicable privacy and security regulations.
- Ensure VHIE connectivity and access to health and patient information for all appropriate entities and individuals.  
Complete the implementation of all appropriate providers to VHIE. This includes all appropriate provider practices, regardless of size or location, providers of physical health, mental health, substance use, and support services.
- Enhance, expand, and provide access to statewide care coordination tools.  
Provide appropriate on-line tools that are organization-independent and broadly available to those involved in providing and coordinating health and human services.
- Enhance statewide access to tools (analytics and reports) for the support of population health, outcomes, and value of health care services.  
Develop and implement the infrastructure, tools, and processes needed for broad and timely access to analytics capabilities and reports that are needed to evaluate the effectiveness and value of health and human services.
- Design and implement statewide consent management technology for sharing health care information.





Develop a technical infrastructure and tools to support the common statewide patient consent approach and processes.

- Provide a central point of access to aggregated health information where individuals can view, comment on, and contribute to their personal health information. Implement tools and processes that enable individuals to access, comment on, add to, or correct their aggregated health information within a reasonable timeframe.

These initiatives above are the roadmap for Vermont’s HIT/HIE activities in the coming years. The Vermont HIT plan is currently under consideration for approval by the Green Mountain Care Board.

## B2 IT Architecture, Including MMIS, for the Next Five Years

### Health Services Enterprise Platform and the Health Services Enterprise

The Health & Human Services Enterprises (HSE) is a multi-year, multi-phased portfolio of programs whose goals are, in furtherance of the mission of the Agency of Human Services (AHS), to reshape and enhance internal business processes, improve public/private sector partnerships, optimize utilization of information, and modernize the IT environment within which AHS delivers benefits, care and services to beneficiaries in the State of Vermont. The HSE was expressly established by the Secretary of AHS to realize the “Agency of One” vision through a focus on integrating services, improving systems and the sharing of applicable data in a timely and effective manner (while comporting with relevant privacy requirements) to ensure:

- Vermonters receive the services critical to their success and can identify additional supports that will help them prosper;
- Vermonters will benefit from cross-departmental referrals and awareness – that there exists “no wrong door” for Vermonters seeking access to care and benefits;
- Policy and Public Health efforts have necessary data for program analysis and program service coordination.

Vermont continues to be nationally recognized for its expansive vision for the delivery and management for Health & Human Services. The HSE approach is to utilize an iterative project management structure to prioritize component implementation, consistent with Federal mandates, State guidelines, funding deadlines, financial impacts and State resources. Using this iterative approach supports the State in succeeding with incremental, smaller scoped efforts that will lead to ultimate achievement of a MITA compliant Integrated Eligibility and Enrollment system and the implementation of Modular MMIS Solutions.

At the heart of HSE initiatives is the **Human Services Enterprise Platform (HSEP)** - a shared suite of modern technology tools positioned to satisfy a significant portion of AHS’ software needs including







transactions, analysis, and infrastructure. Today these needs are supported by over 200 different, detached, disconnected software packages. Leveraging one system, over many, represents material savings for the State, and allows for rapid response to ever-changing regulatory, policy, and programmatic demands.

The State-Based Marketplace, **Vermont Health Connect (VHC)**, currently uses the HSEP's basic Health Insurance Exchange and Eligibility & Enrollment services and capabilities for access to Qualified Health Plans, MAGI Medicaid and Dr. Dynosaur.

The **Integrated Eligibility and Enrollment (IE&E)** Program will add capabilities to the HSEP allowing for automation and standardization of the health & human services case management and program administration systems (screening, application, eligibility determination and enrollment). This represents the integration of the Agency's remaining health programs and economic services into one system.

The **Medicaid Management Information System (MMIS)** is a claims processing and provider payment system that allows Vermont to maintain compliance with Federal and State regulations for administering Medicaid.

There are two key projects under the MMIS umbrella that are currently underway.

1. The **Pharmacy Benefit Management (PBM)** program represents clinical, operational, and business services that allow Vermont to meet the challenge of increasing pharmaceutical costs for consumers with a real solution. Vermont's PBM program is aimed at both reducing and controlling costs of drugs and providing the State with high quality, local pharmaceutical expertise. In FY2016, the PBM generated \$15.3 million in savings thanks to improved operational efficiency.
2. **Care Management** is a set of activities intended to improve clinical patient care and reduce the need for services by helping patients and caregivers more effectively manage health conditions and issues impacting health and well-being. **The Enterprise Care Management System** supports not only AHS care management staff but also hundreds of Vermont provider organizations engaged in direct care services. The Enterprise Care Management system offers some of the highest levels of sophistication in forecasting & analytics, and vastly improves Vermont's ability to utilize data to improve population-wide outcomes. The system will unite and integrate the Agency's related care management programs in a way that was never possible before.

To effectively and efficiently manage the Portfolio of Programs and Projects in the Health & Human Services Enterprise (HSE) Vermont has created a single organization to bring together key stakeholders. The HSE Portfolio Management Office (PMO) the HSE-PMO sits at the nexus of people, process, and technology driving best practice development of enterprise systems that allow AHS to take a cost-conscious approach to helping residents establish themselves as productive, contributory members of the Vermont community. The



PMO supports the HSE Governance through the scalability of its structure and ability to enable an enterprise approach with integrated management and decision-making.

### **B3 Providers Interface with State Medicaid IT Systems Related to the EHR Incentive Program**

Providers who are receiving incentive payments from the State of Vermont have registered at the federal level and use MAPIR for attestation at the state level.

Core MAPIR software releases (from the MAPIR collaborative) are interfaced to Vermont's MMIS with additional development and implementation services by Vermont's HP staff. Vermont is currently working with HP staff to establish a ticketing system to track issues related to MAPIR updates and Vermont customizations.

The Vermont EHRIP team uses a group email box for outreach and dialog with participating providers and preparers. All providers participating in the program receive weekly email communiques highlighting rules, changes, deadlines and other important information related to the program and specifically to the attestation process.

Vermont is currently leveraging the SLR to match participating provider NPI's to health care organizations connectivity to the VHIE. We are specifically targeting Buprenorphine prescribers who may not be participating in the EHRIP program or may be practicing at a location that is not connected to the VHIE. This will allow us to target specific outreach for EHRIP program enrollment or to leverage Medicaid Director's letter 16-003 (29 Feb,2016) for 90/10 matched funding for connection to HIE.

### **B4 Governance Structure for the Next Five Years for HIT/E Goals and Objectives**

#### **Governance Considerations - Five Year View:**

The 2016 revision of the Vermont Health Information Technology Plan (VHITP) identified the need to establish an entity that has the appropriate authority, accountability, and expertise to promote and ensure the success of public and private HIT/HIE efforts in support of payment and delivery system reforms across the State of Vermont. Vermont's Agency of Administration is leading this planning effort, which includes key public and private stakeholders. This planning effort is still ongoing and will result in recommendations made to Vermont's Secretary of Administration by the end of 2016.

A key aspect of this planning process is the identification of goals for Vermont's HIT/HIE planning. Below, please find a list of draft goals that are currently under discussion:

- Proposed Goal 1: Improve Access to Key Data Sources.



- Proposed Goal 2: Ensure funding, resources, and efforts for statewide initiatives covered by the HIT Strategic Plan are optimized.
- Proposed Goal 3: Ensure public and private entities in Vermont are accountable for aspects of health information data privacy, security, confidentiality, and validity within their control.
- Proposed Goal 4: Coordination role for those health data sources that are outside the HIT Plan.
- Proposed Goal 5: Make the HIT Governance program operations more transparent and involve stakeholders.
- Proposed Goal 6: Strategy for statewide governance and coordination. This includes within the state and between the state and others.
- Proposed Goal 7: Ensure that we implement the HIT Plan.
- Proposed Goal 8: Designate an entity that has appropriate authority, accountability, and expertise to ensure the effective, efficient use of resources for public and private HIT/HIE efforts in support of health care and payment reform across the state of Vermont.
- Proposed Goal 9: Increase accountability for programs/project covered by the HIT Strategic Plan.
- Proposed Goal 10: Develop a consistent way to do strategic planning.

#### **B5 Steps During the Next Twelve Months to Encourage the Adoption of EHRs**

See section A9 for information on the EHRIP enrollment campaign as well as section E1 below for information on a Buprenorphine prescriber focus.

#### **B6 Plans to Leverage FQHCs with HRSA HIT/EHR Funding to Leverage Adoption**

The Bi-State Primary Care Association was awarded an HRSA HIT/EHR grant to provide implementation services to eight FQHCs in the state. This work is now completed. Vermont's FQHCs are well represented in terms of providers who have been awarded EHRIP incentive payments.

The State continues to engage Bi-State Primary Care Association to provide data extraction, analysis and quality improvement (QI) for FQHCs. Bi-State will be conducting quality assessment and improvement activities, population-based activities relating to improving health or reducing health care costs, case management, and care coordination. They provide support for primary care providers across initiatives and populations using integrated data, data analytics platforms, and other appropriate data sources to drive quality improvement.

#### **B7 Help to Providers to Adopt and Meaningfully Use EHR Technology**

Vermont's HIE REC Team provides technical assistance to Medicaid providers to assist them in achieving meaningful use. The REC Team is housed at VITL and is referred to as e-health specialists. These team members provide MU support to all EHRIP participants.



Vermont is seeking to leverage the expanded funding support for Behavioral Health and Long Term Care connectivity to HIE as identified in the February 29<sup>th</sup> SMD 16-003. In addition, our SIM grant is supporting a project to connect Home Health Agencies that would otherwise be ineligible for IAPD funding support. See section B-8 for more details on our technical assistance efforts.

#### **B8 Plans to Address Special Populations with EHR Incentive Program**

Pediatric providers have been well represented in the early program years of the EHRIP.

Other populations of providers that would benefit from the EHRIP but have few Eligible Professionals on their staffs include mental health, home health, and long-term services and supports providers. The State is working with them to resolve the technology gaps that prevent full participation in the benefits of health information exchange.

A VHCIP project to develop Interfaces from Home Health Agencies' (HHA) Electronic Health Records to the Vermont Health Information Exchange (VHIE) is underway. To date, five HHAs are either ready to proceed or getting ready to proceed with CCD interfaces. Two HHAs are coordinating with their vendor schedule to accommodate the connection and two HHAs have deferred activity into next year.

#### **B9 Plans to Leverage Other Grants to Implement the EHR Incentive Program**

As discussed in a few places in this SMHP, the State has been awarded a State Innovation Model (SIM) grant and identified specific HIE/HIT projects. More information about these specific projects can be found here: <http://healthcareinnovation.vermont.gov/tags/hdi-status-reports>. While not specifically related to the EHRIP, these projects, like Vermont EHRIP, support the same statewide goal of achieving meaningful use and interoperability.

#### **B10 Anticipated New Legislation to Implement EHRIP**

New legislation is not required or anticipated to continue EHRIP operations, but as mentioned in section A12 above, Vermont does have statutes that affect health information exchange.



**SECTION C: Administration and Oversight of the EHR Incentive Payment Program*****III. Administration and Oversight of EHRIP:***

In this section of the SMHP we describe Vermont's plans to administer and oversee the EHR Incentive Payment (EHRIP) Program. Topics included in this section are:

1. Verify that providers are not sanctioned, and are properly licensed
2. Verify whether Eligible Providers (EPs) are hospital based or not
3. Verify the overall content of provider attestations
4. Communicating to providers re: eligibility, payments, etc.
5. Methodology to calculate patient volume
6. Data sources to verify patient volume for EPs and acute care hospitals
7. Verify EPs at FQHC/RHCs meet the "practices predominately" requirement
8. Verify the Acquire, Implement or Update of EHR technology by providers
9. Verify Meaningful Use of certified EHR technology for the 2<sup>nd</sup> participation year
10. Identify any proposed changes to the Meaningful Use definition
11. Verify providers' use of EHR technology
12. Collect Meaningful Use data, including clinical quality measures, short- and long-term measures
13. Align data collection and analysis process with collection of other clinical quality measures data such as CHIPRA
14. Identify and describe IT, fiscal and communication systems used to implement EHRIP
15. Identify and describe IT systems changes to implement the EHRIP
16. Identify the IT timeframe for system modifications
17. Identify when Vermont will be ready to test the interface to CMS's NLR
18. Describe the plan for accepting provider registration data from the CMS NLR
19. Identify the kind of website Vermont will host for providers to accommodate enrollment, information, etc.
20. Identify the timing of an MMIS I-APD if modifications are required
21. Identify call center / help desk and other means to address EP and hospital questions regarding EHRIP
22. Describe a provider appeal process for a) incentive payments; b) eligibility determinations; and c) demonstration of efforts to Acquire, Implement or Update and Meaningfully Use EHR Technology
23. Describe a process to assure that all Federal funding (100% incentives and also 90/10 Administrative matches) are accounted for separately for HITECH and not commingled with MMIS FFP
24. Define the frequency for making EHR payments
25. Describe a process to assure that provider payments go directly to the provider with no deduction or rebate



26. Describe a process to assure that payments go to an entity promoting EHR technology only if participation is voluntary by the EP AND that no more than 5% is retained for costs unrelated to EHR technology adoption
27. Describe a process to assure that there are fiscal arrangements with providers, to disburse payments that don't exceed 105% of the capitation rate per 42 CFR Part 438.6, and a methodology to verify this
28. Describe a process to assure that hospital calculations and EP incentives, including tracking the EPs 15% of net average allowable costs of EHR technology, are consistent with statute and regulations
29. Define the role of existing contractors in implementing EHRIP – MMIS, PBM, fiscal agent, managed care contractors, etc.
30. Provide an explicit description of assumptions and dependencies based on a) role of CMS (develop NLR; provider outreach / helpdesk support); b) status/availability of certified EHR technology; c) role, approved plans and status of RECs; d) role, approved plans and status of HIE cooperative agreements; and e) State-specific readiness factors

These items are as specified in the SMHP template provided by CMS. DVHA, as the State Medicaid Agency, will continue to administer the Provider Incentive program directly, and has operational responsibility for the integrated project management of HIT, HIE, EHR adoption, implementation and upgrade, achievement of Meaningful Use criteria, Blueprint Medical Home, Community Health Teams, and payment reform program domains. DVHA has organizational units responsible for Fiscal Operations, Program Policy, Provider/Member Relations, and Quality Improvement/Program Integrity – all of which will participate in the ongoing administration and oversight of the EHRIP.

### **C1 Verify that Providers are not sanctioned, and are Properly Licensed**

Our existing Medicaid enrollment process ensures the provider is not sanctioned and is a properly licensed/qualified provider. We can safely assume that if a provider is actively enrolled in Medicaid, then there are no pending sanctions against the provider.

Vermont is participating in the MAPIR consortium and most of the provider interaction and data capture related to EHRIP will be done through the MAPIR web interface. However, providers who will access the MAPIR application will already be registered Vermont MMIS portal users (and not sanctioned and properly licensed/qualified providers), or they will be required to complete the portal registration process prior to using MAPIR. Vermont's MAPIR implementation created the backend MMIS services used by the Vermont MMIS Portal to determine whether or not the user is qualified and can subsequently access the MAPIR application. The VT MAPIR system cross-checks provider NPI and TIN information received from the NLR against the state's MMIS. If the provider does not have an active license in the state, is not currently enrolled in Medicaid, or is sanctioned, then they will not have an 'Active' status code in MMIS and will not be able to enter our MAPIR portal to attest. Also, any EHRIP application underway is aborted if sanctions / eligibility / active Medicaid status issues occur during the process of preparing, submitting, or awaiting payment.



## **C2 Verify whether Eligible Providers (EPs) are hospital based or not**

Once a provider has been authenticated through the secure Vermont state portal and confirmed to be an enrolled Medical Assistance (MA) provider, they will confirm their National Registration & Attestation System (NR&A System) information in the MAPIR application. This will be done through an eligibility questionnaire. The provider will be asked “Are you a hospital based physician?” and “Are you choosing the Medicaid Incentive Program in the state you are applying in?” If either of these two questions is answered incompatibly with eligibility, the provider will not be able to continue forward with the application process. Subsequent questions will further refine the type of provider and the setting in which the provider practices (e.g., “Do you predominately practice at an FQHC/RHC (50% or more of your practice time)?”). Through this MAPIR questionnaire process we will determine their exact provider status.

There will still be a reliance on the statement of the provider to ensure the number seen in a hospital setting is not more than 90% of the practice. DVHA will perform checks on the number of claims as an indicator of hospital-based status in post-payment audits. We will set up a report to calculate the percentage of claims an eligible provider is submitting with a hospital setting code (indicated on the claims as “place of service”). The data in this report will be used to make a hospital-based determination.

## **C3 Verify the overall content of provider attestations**

MAPIR will calculate the proper incentive payment at the proper time. Professional and hospital provider incentive payment amounts are variable during the incentive program. Professional provider incentive payments are based upon a maximum incentive payment distributed over six payment years. Hospital incentive payments can be made over three to six years and are based on hospital specific data including Medicare Cost reports, discharge days, and growth factors. Professional and hospital payments do not need to be made over consecutive years. The MAPIR technical specification document includes detailed calculations and payment schedules. Since the MAPIR Phase IV I-APD has been approved, the technical specifications are not repeated here.

## **C4 Communicating to providers re: eligibility, payments, etc.**

A certain amount of communication will occur within the portal environment, as providers are interacting with the Vermont portal and our instance of the MAPIR application. For example, the eligibility questionnaire is a specific form of communication. Also as an example, if in the process of going through the eligibility questionnaire, an eligible provider selected “yes” to the question of “Are you a hospital based Physician” and selected “No” to participation in the Medicaid incentive program MAPIR will display the message “*As a Hospital based physician, you are not eligible to participate*”.







Beyond the programmed communication that may occur through either the MAPIR application or the Vermont portal, email will be the preferred communications channel. Email contact information and phone numbers will be captured as part of the registration information.

There are several automated email transmissions that occur from MAPIR to the provider as status changes occur in the attestation process, beginning with confirmation that they are registered to attest and may enter the MAPIR portal, and ending with a notification that payment has been made. In addition, certain auto-generated MAPIR email notifications to providers / preparers are configurable to the particular way Vermont administers its EHRIP.

Vermont has also established a Helpdesk ticket system to support EHRIP participants. Hosted by our MMIS vendor (Hewlett Packard), the system allows for documentation of technical, and policy issues. General questions from program participants are submitted to the email box (ahs.dvhaehrip@vermont.gov).

## **C5 Methodology to calculate patient volume**

Vermont is accepting the methodologies described in paragraphs (c) and (d) of §495.306 of the final rule – Establishing Patient Volume. Paragraph (c) describes the patient encounter methodology. An EP would divide the total Medicaid patient encounters in any representative, continuous 90-day period in the preceding calendar year or preceding 12 months by the total patient encounters in the same 90-day period. An eligible hospital would divide the total Medicaid encounters in any representative, continuous 90-day period in the preceding fiscal year or preceding 12 months by the total encounters in the same 90-day period. A similar calculation would apply for needy individual patient volume.

Paragraph (d) of §495.306 provides for a patient panel methodology, which Vermont is not going to consider. Our Medicaid System and our operational approach is to deliver Medicaid services and associated reimbursement on an encounter basis – there is always an instance of a provider delivering a service to a beneficiary as an encounter.

Vermont did not propose alternative methodologies to those described in the final rule in its first draft SMHP submittal. More recently we realize the need to exclude CHIP encounters from patient volume counts. Vermont's implementation of CHIP does not accommodate discernment of this data from the provider perspective. Vermont received CMS approval to not exclude CHIP encounters, as a study revealed that this was a very low possibility of introducing payments in error. Certain types of CHIP encounters are now allowed, including Vermont's.

Per paragraph (h) of §495.306 – Group Practices, clinics or group practices will be permitted to calculate patient volume at the group practice/clinic level with the following limitations:

1. the clinic or group practice's patient volume is appropriate as a patient volume methodology calculation for the EP;





2. There is an auditable data source to support the clinic's or group practice's patient volume determination;
3. All EPs in the group practice or clinic must use the same methodology for the payment year;
4. The clinic or group practice uses the entire practice or clinic's patient volume and does not limit patient volume in any way;
5. If an EP works inside and outside of the clinic or practice, then the patient volume calculation includes only those encounters associated with the clinic or group practice, and not the EP's outside encounters.

Note: starting with program year 2013, EPs may choose to calculate patient volume using the 12 months preceding their attestation. When a group uses this method, not all EPs in the group may be able to use the same 90 day period. In these situations, group members will be allowed to choose different 90 day time periods, consistent with CMS guidance.

Within the MAPIR application the EP will have the opportunity to establish a start date for the 90-day attestation period, to indicate if they are predominately practicing at an FQHC/RHC, and to indicate if they are submitting volumes for an individual provider or for a group/clinic. If the EP is practicing predominately at an FQHC/RHC, they will be taken to a page where they must choose the locations where they practice. They will also be able to add a service location. Service volumes can then be listed by location. MAPIR provides for a similar capture of patient volume for other provider types as well. All of the specified numerator and denominator data types are covered in MAPIR for the full satisfaction of the Final Rule.

While MAPIR provides the data entry gateway for patient volume methodology, DVHA works collaboratively with VITL who works directly with providers and hospitals to prepare for adoption, implementation, and meaningful use of EHR technology. VITL has done outreach work to prepare the primary care provider community for year-one incentive payment requirements as well as presenting the overall incentive opportunity. As the State of Vermont's sole REC they worked directly with providers, practices, and hospitals to prepare for EHR adoption and to participate in the HIE and the EHRIP. Since the REC grant funding ended in February 2014, a combination of State and federal funding has enabled VITL to continue similar work with the provider community.

## **C6 Data sources to verify patient volume for EPs and acute care hospitals**

The data source for hospital-specific entries will be the Medicare cost report submitted by each hospital. A patient cannot be counted in the numerator for the Medicaid share if they would count for purposes of calculating the Medicare share. In other words, the inpatient bed day of a dually eligible patient cannot be counted in the Medicaid share numerator.

Providers submit their patient volume data as part of their MAPIR attestation. Before a payment is made, we validate the Medicaid patient volume numerator by checking Medicaid claims data using VT MMIS.





If the MMIS numerator/attested denominator value is below the required threshold (30% or 20% for pediatricians), then supporting documentation is requested from the provider. The attested denominator is assessed for reasonableness. If the patient volume does not meet the threshold, the provider is not eligible to receive an incentive payment. The denominator is validated post payment on providers selected for an audit, using submitted documentation and data from the All Payers Claim Database, when available.

In Vermont, the Green Mountain Care Board (GMCB) clarifies the administrative requirements and provides the data and technical guidance for hospitals regarding health care in Vermont. In particular, an Annual Hospital Budget Review Process establishes hospital budgets and monitors hospital costs. Hospital cost data is submitted to the GMCB, and the GMCB performs its own reviews of the submitted data. While the Hospital Cost Data report is a recognized source of data to validate Hospital incentive payment claims, there may be data more readily available to us from the GMCB databases. The GMCB also manages the Uniform Hospital Discharge Data Set, which provides an estimate of the denominator data of total inpatient bed days as well as total charges for any given quarter. This data source is created from the hospital billing records and is an acceptable data source – it will have been reviewed and accepted as accurate by the hospitals.

As to methodology for making hospital incentive calculations, we are using the designed methodology of the MAPIR system, which is common to the thirteen states sponsoring the MAPIR development. The MAPIR calculation, as well as a spreadsheet model of Vermont’s calculation, has been approved for use by CMS.

#### **C7 Verify EPs at FQHC/RHCs meet the “practices predominately” requirement**

The preamble to the Final Rule specifies that “...an EP practices predominantly at an FQHC or an RHC when the clinical location for over 50 percent of his or her total patient encounters over a period of 6 months occurs at an FQHC or RHC”. A query of our VT MMIS, for paid Medicaid encounters and associated billing NPI and name, will be used to determine the percent of Medicaid encounters that occurred at the FQHC/RHC. If VT Medicaid data does not support the practicing predominantly requirement, then we will request and review reports from providers regarding their patient encounters at the FQHC/RHC and their total patient encounters, including visits outside of the FQHC/RHC. This validation will occur as part of post payment audit procedures. If the documentation does not meet the practice predominantly 50% threshold, the EP is not eligible for the incentive payment

#### **C8 Verify the Adopt, Implement or Update of EHR technology by providers**

In the MAPIR application, providers will identify EHR technology by entering the 15-digit CMS EHR Certification ID of their system, obtained from the ONC Certified Health IT Product List. MAPIR performs an online real-time validation of the CEHRT-ID with the ONC data, and the application will only be able to proceed if the validation is successful. In a later step of the attestation process in MAPIR, providers designate whether the Adopt, Implement or Update status applies to them. We require an electronic signature as part of the online attestation. The signature page will caution that the provider must be authorized to receive payment





that all information provided is accurate, that the provider is subject to legal penalty for providing false information, and that any funds expended under false pretenses will be recouped.

Vermont will audit the incentive payment requests as described in Section D. We also require the submission of scanned “proof of purchase” documentation – receipts, invoices, license agreements, etc. – to demonstrate an EHR acquisition, implementation or update. This documentation is reviewed before payment is made.

### **C9 Verify Meaningful Use of certified EHR technology for the 2<sup>nd</sup> participation year**

The MAPIR project was initially focused on initial certification and first-year incentive claim validation. Subsequent development of that effort has addressed verification of Meaningful Use for the 2<sup>nd</sup> participation year. The Meaningful Use verification has been developed within the core MAPIR software which has been implemented in Vermont’s MMIS environment. In addition, our post payment audit program includes verification of meaningful use, including reviewing reports from the EHR system, a meaningful use desk audit questionnaire, and full desk audit procedures. Please see our attached audit plan.

The approved Vermont HIT Plan expands on this topic and covers State efforts to support e-Prescribing, an infrastructure for lab reporting, and the integration of public health reporting systems through the HIE. These efforts help to assist providers achieve Meaningful Use but also provide additional record sources that can be reviewed, if necessary, to confirm provider activity.

### **C10 Identify any proposed changes to the Meaningful Use definition**

Vermont is not proposing changes to the Meaningful Use definition, nor do we anticipate proposing any changes in the future.

### **C11 Verify providers’ use of EHR technology**

Please see item 3.8 above. Through the MAPIR application, providers will be attesting to use of certified EHR system by entering the CEHRT-ID obtained by selecting their product and version at the ONC Certified Health IT Product List (CHPL) website. The state requires additional proof of EHR ownership through copies of receipts, Purchase Orders, or software license documentation. This proof is submitted in the form of attached uploaded documents within the MAPIR application. The State distinguishes between Adopt and the other two AIU categories of Implement or Upgrade. The State is also concerned about the proposed use of free cloud-based EHR systems. In particular, when a provider attests to a stage of Adopt and the EHR being



used is free, the State identifies the attestation as being high risk, and an audit will be performed to confirm that the provider has made subsequent efforts to implement the technology.

#### **C12 Collect Meaningful Use data, including clinical quality measures, short- and long-term measures**

The Vermont EHRIP collects MU and CQM data via MAPIR and the measures are self-reported/typed in by providers. We have highlighted the overlap of CQM's with other state programs to identify opportunities to reduce burden by using a common measure set, but programs seem to want control over their measures and have tweaked them to meet program needs. This results in a close match, but often not close enough to use.

#### **C13 Align data collection and analysis process with collection of other clinical quality measures data such as CHIPRA**

The Vermont EHRIP has highlighted the overlap of CQM's with other state programs to identify opportunities to reduce burden by using a common measure set, but programs want control over their measures and have tweaked them to meet program needs. This results in a close match, but often not close enough to align.

#### **C14 Identify and describe IT, fiscal and communication systems used to implement EHRIP**

Vermont is participating in the MAPIR collaborative, so uses MAPIR as an attestation tool in conjunction with MMIS. Other IT systems include state network shared drives and an Access database used together with MAPIR for case management.

Our financial systems include MMIS and the state's financial software provided by Oracle Peoplesoft Enterprise.

Communication with providers is accomplished via our website (<http://healthdata.vermont.gov/ehrip>) phone, and a common email box ([ahs.dvhaehrip@vermont.gov](mailto:ahs.dvhaehrip@vermont.gov)) Weekly email communiques regarding program rules, tips, and specifics go out to program participants weekly as well as the same text available on our website.

#### **C15 Identify and describe IT systems changes to implement the EHRIP**

MAPIR is the primary system for the operation of EHRIP. As a result, updates needed to address MU stage changes are provided as software updates from the MAPIR collaborative. Vermont also has a standing contract with our MMIS vendor (HPE) to support Vermont specific customizations to MAPIR that facilitate integration into our MMIS environment, or unique process needs.



### **C16 Identify the IT timeframe for system modifications**

As one of thirteen states making up the MAPIR Collaborative, Vermont participates in the planning for system modification to accommodate changes and updates to the incentive payment program. Pennsylvania, as the lead state in the consortium, manages the development effort for core system functionality and develops and submits plan and funding request documents to CMS. These are all done with the consensus of the multi-state MAPIR steering committee.

Core software releases are planned and scheduled to accommodate the implementation of new proposed rules. Vermont will follow each release with the necessary local customization to support the core software with our existing MMIS.

As of this writing, (September, 2016) MAPIR Release 5.7.3 is in production and we are looking at later this year for integration of 5.8

### **C17 Identify when Vermont will be ready to test the interface to CMS's NLR**

Vermont successfully tested its interface to CMS's NLR prior to obtaining CMS approval to move its incentive payment program into production in October of 2011. As subsequent releases of MAPIR occur, the MAPIR project team and CMS have exchanges to resolve questions related to the testing. Vermont targets the month following each of these releases for any state-specific testing.

### **C18 Describe the plan for accepting provider registration data from the CMS NLR**

Vermont implemented its plan for accepting provider registration data from the CMS NLR as was described in its initial SMHP submittal. That plan language is provided below:

As previously indicated, much of the functionality required to accept provider registration is being addressed through the core MAPIR development. However, there are customization steps required to fully implement this functionality for Vermont:

- MAPIR will need to be integrated into the existing MMIS change management/promotion environments required to support the existing production application;
- The existing Vermont MMIS provider portal and user management process will be used to support secure access and provider authentication of the MAPIR application;
- MAPIR users must first register with the NLR;
- Only Vermont Medicaid enrolled providers will access the MAPIR application via the Vermont MMIS portal;
- Providers who will access the MAPIR application will already be registered Vermont MMIS Provider Portal users or will be required to complete the portal registration process prior to using MAPIR;



- Backend MMIS services used by the Vermont MMIS portal will need to be created to determine whether or not the user can access the MAPIR application. Some enhancements to incorporate additional MAPIR specific data needs will be added to the existing user authentication/logon process;
- The provider and financial interfaces to MAPIR will be MMIS batch interfaces;
- There will be an NPI cross reference capability developed in order to maintain unique identifiers across downstream MMIS systems.

**C19 Identify the kind of website Vermont will host for providers to accommodate enrollment, information, etc.**

As stated above, Vermont's response for accommodating providers for enrollment, information, etc. is a combination of the MAPIR core functionality and the Vermont portal customization as described. Additionally, VT EHRIP maintains a general program information and outreach website at <http://healthdata.vermont.gov/ehrip>.

**C20 Identify the timing of an MMIS I-APD if modifications are required**

Since Vermont's initial SMHP was submitted and approved, Vermont coordinated a single Jumbo IAPD submission to cover several HIT-related project areas. In 2014, the State split the Jumbo IAPD into each unique program IAPD and the State submits updates to them as needed, and at least annually.

**C21 Identify call center / help desk and other means to address EP and hospital questions regarding EHRIP**

VITL has a support center to address both HIT and REC issues. The HIT and REC project teams made up of project managers and implementation specialists/facilitators have ongoing relationships with the practices and hospitals throughout the state and offer support on the road to meaningful use. Questions related to EHRIP incentive applications, or the application process, are routed to EHRIP operations staff at DVHA.

In addition, as described in the communications plan, we do extensive outreach to the provider community to prepare them for the EHRIP and the mechanisms that will be used to implement the incentive program. That outreach consists of both web-based and other electronic communications as well as opportunities to meet in group situations to present the program.





**C22 Describe a provider appeal process for a) incentive payments; b) eligibility determinations; and c) demonstration of efforts to Acquire, Implement or Update and Meaningfully Use EHR Technology**

The Department of Vermont Health Access (DVHA), Electronic Health Record Incentive Program (EHRIP) offers a Reconsideration and Appeal process that aligns with that of the Vermont Medicaid program, and is detailed in Section 18 of the Green Mountain Care Provider Manual, available here <https://vtmedicaid.com/Downloads/manuals/New%20Consolidated%20Manual/VTMedicaidProviderManual.pdf> . The appeals process is described in detail in our EHRIP Audit Strategy. Briefly, there are 3 levels, Reconsideration by DVHA, DVHA commissioner or Chief Medical Officer Review, and the Vermont Superior Court. Eligible Professionals and Eligible Hospitals may request Reconsideration of an EHRIP decision regarding eligibility for: payment amount, overpayment amount, or recoupment. The request must be made within thirty (30) calendar days of the receipt of the overpayment notice OR of the denial notice OR within thirty (30) calendar days of the date of the EHRIP payment in dispute.

**C23 Describe a process to assure that all Federal funding (100% incentives and also 90/10 Administrative matches) are accounted for separately for HITECH and not commingled with MMIS FFP**

Vermont DVHA has an existing accounting system and procedures which accommodate the accounting of both the 100 percent incentive payments, as well as the 90 percent HIT Administrative match. As an example, program codes have been established to track the 90 percent HIT administrative match associated with Vermont's IAPD authorized activities. Staff are instructed in the appropriate use of time coding and purchases, and management at the Director level and above reviews all time and purchases being charged to this funding source. Quarterly projections are made through the CMS-37 process, and quarterly expenditures are reported through the CMS-64 process.

**C24 Define the frequency for making EHR payments**

The customization work required of the existing MMIS to accommodate MAPIR functionality included enhancements to process financial transactions through the MMIS for EHRIP. Vermont has been making EHR payments as part of the weekly Medicaid reimbursement process.

**C25 Describe a process to assure that provider payments go directly to the provider with no deduction or rebate**

DVHA can assure that amounts received with respect to incentive claims by a Medicaid provider for the adoption of EHR technology are paid directly to the provider, or to an employer or facility to which the provider has assigned payments, without any deduction or rebate. A process to support this assurance is in place. Validation of incentive claim amounts will be occurring in MAPIR. The Medicaid Remittance



Authorization that accompanies each Medicaid reimbursement to a provider or provider organization lists incentive payments as separate line items.

**C26 Describe a process to assure that payments go to an entity promoting EHR technology only if participation is voluntary by the EP AND that no more than 5% is retained for costs unrelated to EHR technology adoption**

VITL is the state's REC and, in joint participation with the Vermont EHRIP, promotes the adoption of EHR technology. VITL is funded for this activity in part through the state's HIT fund, as established by the Vermont legislature. There are no anticipated payments to VITL by an EP for the specific adoption of EHR technology by that EP.

**C27 Describe a process to assure that there are fiscal arrangements with providers, to disburse payments that don't exceed 105% of the capitation rate per 42 CFR Part 438.6, and a methodology to verify this**

Specific to this topic, 42 CFR Part 438.6 addresses contract requirements for risk contracts associated with MCO, PIHP, and PAHP contracts, which utilize capitation rates. Vermont has no contracts of this nature and this is not a concern we need to address. Elsewhere we have discussed our use of the phrase "managed care" in this SMHP document as not meant to imply that we would accept patient panel patient volume calculations.

**C28 Describe a process to assure that hospital calculations and EP incentives, (including tracking the EPs 15% of net average allowable costs of EHR technology), are consistent with statute and regulations**

In addition to a payment calculator tool developed by the VT EHRIP and used in the for prepayment attestations, Vermont also has hospitals complete a calculation adjustment tool spreadsheet during pre-payment since program year 2013 to help ensure that non-allowable values, such as non-acute, dually-eligible, and unpaid bed days are deducted. This tool is included in the VT Audit Plan. If a change in the payment calculation needs to be made, this can be done thru our MAPIR attestation system, which calculates and makes an adjusted payment accordingly. While some hospitals were paid before the advent of this adjustment tool, none were in their 3<sup>rd</sup> and final year of payment. All hospitals are asked to complete this adjustment tool before their 3<sup>rd</sup> and final payment is made. The payment calculation is also reviewed as part of post-payment hospital audits. If audit identifies an error in the calculation that resulted in an overpayment, and the hospital has not received their 3<sup>rd</sup> and final payment, then the adjustment occurs with the hospital's subsequent payment year attestation. This may result in a reduced payment or a recoupment of funds if money is owed to satisfy the adjustment. The audit is not closed until the corrected payment adjustment has been made. If audit identifies a calculation error that resulted in an overpayment, and the hospital has already received their 3<sup>rd</sup>





and final payment, then the hospital will be notified via letter that they must return the overpayment or it will be recouped.

Regarding EP incentive payments, a percentage of EP attestations undergo audit every program year, per our VT EHRIP Audit Plan. Negative audit findings are reviewed and impact the next audit plan, including risk factor design and weight, as well as pre-payment verification procedures.

**C29 Define the role of existing contractors in implementing EHRIP – MMIS, PBM, fiscal agent, managed care contractors, etc.**

Vermont's current MMIS is operated and supported by HP (Hewlett-Packard). HP continues to work with Vermont to develop the IAPD budget information for the MAPIR related customization that is required of both the Vermont portal and the MMIS to support the incentive program. VITL also has a role in implementing EHRIP – as the state's REC they promote EHR adoption, assist providers in selection and implementation of their EHR technology, and are authorized to certify the meaningful use of that technology. While some of the changes to the MMIS may support semi-automation of an EHRIP, DVHA intends to maintain administrative oversight of the EHRIP with DVHA personnel. This is appropriate, as DVHA is the hub for relationships with VITL, with the Blueprint for Health, and with HP.

**C30 Provide an explicit description of assumptions and dependencies based on a) role of CMS (develop NLR; provider outreach / helpdesk support); b) status/availability of certified EHR technology; c) role, approved plans and status of RECs; d) role, approved plans and status of HIE cooperative agreements; and e) State-specific readiness factors**

Vermont has successfully operated the incentive payment program since 2011. There are no remaining critical assumptions or dependencies.



## SECTION D: Vermont's Audit Strategy

### IV. *State's Audit Strategy:*

Due to the sensitive nature of this section as it relates to the EHRIP audit process, it is marked for CMS viewing only and is not released to the public. There may be EHRIP participants that are being audited, or may seek information related to the audit process that would compromise the integrity of the process. This section and the corresponding audit plan are submitted to CMS separately.

## SECTION E: Vermont's HIT Roadmap

### V. *State's HIT Roadmap and Annual Measurable Targets Tied to Goals:*

In this section of the SMHP we describe Vermont's HIT Roadmap, from a five-year perspective. Topics included in this section are:

1. Graphical and narrative pathway to show the As-Is, To-Be (5 Year), and plans to get there
2. Expectations for provider EHR technology adoption over time: annual benchmarks by provider type
3. Annual benchmarks for each of DVHA's goals that will serve as clearly measurable indicators of progress along this scenario
4. Annual benchmarks for audit and oversight activities

#### E1 **Graphical and narrative pathway to show the As-Is, To-Be (5 year), and plans to get there**

While the SMHP is an enabling document to support planning and funding for HIT and HIE, especially as related to HIE expansion, EHR adoption, Meaningful Use, and the EHR Incentive Program (EHRIP), these efforts occur in the larger and integrated landscape of Health Care Reform and transformation in Vermont. That landscape is evolving over time from the As-Is description in Section A to the To-Be description in Section B of this SMHP. It is appropriate to pay brief attention to the pathways and timelines of the other Health Care Reform initiatives in the To-Be landscape before focusing on the specific HIT-HIE related projects for which funding will be sought in the IAPD that covers the SMHP and all other initiatives in the Health & Human Services Enterprise (HSE). It is appropriate because the overlaps make it hard to cleanly separate HIT-HIE initiatives from other health care reform initiatives planned or underway.



Overlaps occur with, for example, the Master Data Management (MDM) initiatives of enterprise Master Person Index (eMPI) and Provider Directory (PD). The Clinical Data Registry (CDR) supports the health care delivery reform of the Vermont Blueprint for Health (VBH) program and the Vermont Chronic Care Initiative (VCCI). The All Payer Claims Database (APCD), which supports Multi-Payer Payment Reform for attribution of patient counts, also supports the EHRIP as a source of patient denominator data in general, and to match up procedure codes with reported measures. The VHIE supports Meaningful Use requirements of information exchange but also directly supports the Blueprint for Health. As measure sets become normalized, providers can report on one common measure set that supports clinical decision support, population health analysis, and the goal of combined real time clinical information combined with claim based retrospective. At that point, the Blueprint for Health program itself supports Meaningful Use and the associated EHRIP. Certainly, many of the staff functions of the Blueprint for Health – practice facilitators and workflow analysts – can be considered as supporting both Meaningful Use and HIE expansion.

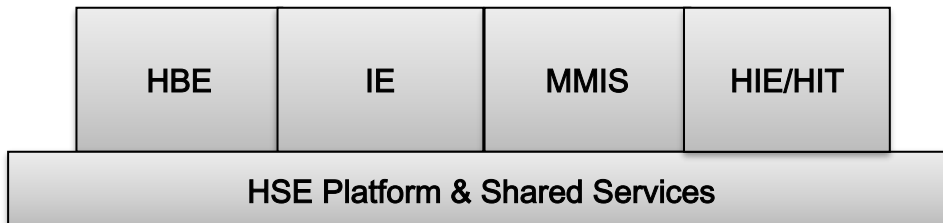
Overlaps with other major initiatives – the Vermont Health Connect (VHC) (which provides access to the Health Insurance Exchange, MAGI Medicaid and Dr. Dynosaur), Integrated Eligibility & Enrollment (IE), Medicaid Management Information System (MMIS), and HSE Platform – are primarily in the areas of eMPI and PD, but also with the APCD which includes Medicaid claims history. Elsewhere in the To-Be landscape, and currently underway, is the deployment of Accountable Care Organizations, which can benefit from the HIE, from access to information in the APCD and the CDR, and which will include providers who are meeting Meaningful Use and participating in the EHRIP.

There is a major overlap of the EHRIP and the MMIS system. The MAPIR system which supports both provider attestations and staff administration of the EHRIP is an MMIS integration project requiring design, development, and implementation through several stages of enhancements. MMIS claims and encounter data must be accessed through the integrated solution to validate information submitted through the attestation portal. The specific functionality and funding requirements of MAPIR core development is presented in Pennsylvania's IAPD which is attached to this SMHP.

This is too much to attempt to incorporate into a single timeline, so what follows are timeline tables and graphs associated with the major initiatives that are **not** primarily funded through the SMHP. A separate timeline will include the SMHP-related HIT-HIE initiatives.



As depicted in **Figure 5.1**, the HSE Platform (HSEP) as a foundation that provides the infrastructure services and functional components that each solution shares.



**Figure 5.1:** HSE Platform & Shared Services

An important view of the current state reflects respective deployment and relative maturity of HSE programs. This innovation began in Vermont back in 2011, and continues with the investment in remaining components.

### **E1.1 Initiatives specific to the SMHP – to be included in an updated Implementation Advance Planning Document (IAPD) funding request**

#### **The August 2016 submission of the Vermont IAPD- U:**

As of this writing, the most recent submission of the HITECH IAPD-U contains the following specific goals and objectives in section III. There are three work streams that support Vermont’s HIE program for which we are asking for IAPD-U funding:

1. The Electronic Health Record Incentive Program;
2. The Health Data Exchange Network; and
3. The Vermont Health Services Enterprise Platform.

Each of these three parts supports Vermont’s goals for improved use of technology to support better care, lower costs, and better health.

1. The Electronic Health Record Incentive Program (EHRIP) is designed to support providers during the period of transition in health information technology. The vision is that electronic health record use will improve the quality, efficacy, and efficiency of patient health care.

Goal: Maximize incentive payments and reduce provider burden associated with MU attestation.

Objective 1: Enroll as many providers as possible.

Objective 2: Continue to provide incentive payments to support providers use of EHR’s

Objective 3: Continue to Audit program payments to verify accuracy of attestations





Objective 4: Continue supporting the Medical Assistance Provider Incentive Repository (MAPIR) collaborative efforts to make attestation to MU easier.

Objective 5: Investigate use of eCQM's

- 2. The Health Data Exchange Network takes responsibility for the management, exchange and access to clinical and human services data throughout the clinical provider community, the Vermont Agency of Human Services and their affiliated entities. The program vision is to ensure the wellbeing of all Vermonters by ensuring that health and human services data is available at the right time, in the right place, and in the right way to support continuous improvements in individual health, health care outcomes, and health care cost.

Goal: Maximize connectivity to the network.

Objective 6: Continue to leverage federal funding support for eligible provider connections to the Vermont Health Information Exchange.

Goal: Improve Data Quality.

Objective 7: Provide health care organizations with data quality dashboards to improve the ability to use those data for analytics

Objective 8: Expand the capability to query and report on the data

Objective 9: Provide support for the development of data marts that will enable data extracts for various uses.

Goal: Improve accessibility to the data.

Objective 10: Continue to support increased use of the provider portal (VITLAccess)

Objective 11: Modify the current HIE consent policy to enable the patient to specify who can access which of their data and for how long.

- 3. The Vermont Health & Human Services Enterprise Platform (HSEP) unifies four Vermont health care reform programs with the vision of providing infrastructure, services, and functional components that each program can share.

Goal: Support shared services across programs.

Objective 12: Establish a statewide Identity Management Solution

Objective 13: Support a common consent solution

Objective 14: Develop and implement the infrastructure, tools, and processes needed for broad and timely access to analytics capabilities and reports that are needed to evaluate the effectiveness and value of health and human services.

Activity	Start Date	End Date	Status
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Conduct Provider enrollment campaign (Section 3 Objective 1)	December, 2015	March, 2017	In progress
Complete prepayment operations for PY 2015 (Section 3 Objective 2)	September, 2015	September, 2016	In Progress
Complete Audits for PY 2014 (Section 3 Objective 3)	August, 2016	May, 2017	Starting
Submit Audit plan to CMS for PY 2015 (Section 3 Objective 3)	March, 2017	May, 2017	Planning
Implement MAPIR 5.8	October, 2016	November, 2016	Planning
Evaluate alignment of measures across programs and methods for collection (Section 3 Objective 5)	July, 2016	October, 2016	Planning
Contract with Vermont Information Technology Leaders (VITL) to increase the number of Interfaces between Health care organizations (HCO's) and the Vermont HIE (VHIE) (Section 3 Objective 6)	October, 2016	September, 2017	Negotiating
Contract with VITL to provide data quality analysis to HCO's (Section 3 Objective 7)	October, 2016	September, 2017	Negotiating
Contract with VITL to expand their capability to query and report on data in the clinical data warehouse (Section 3 Objective 8)	October, 2016	September, 2017	Negotiating
Contract with VITL to develop extracts and data marts for normalized clinical data (Section 3 Objective 9)	October, 2016	September, 2017	Negotiating
Contract with VITL to increase the use of the provider portal (VITLAccess) (Section 3 Objective 10)	October, 2016	September, 2017	Negotiating
Investigate the feasibility of changing the Vermont HIE consent policy and align the needs with other program consent requirements (Section 3 Objective 11)	October, 2016	September, 2017	Planning
Investigate an Identity management capability for shared use across Vermont Health & Human Services Enterprise Platform (HSEP) users (Section 3 Objective 12)	October, 2016	September, 2017	Planning
Investigate the ability to develop and implement the infrastructure, tools, and processes needed for broad and timely access to analytics capabilities and reports that are needed to evaluate the effectiveness and value of health and human services. (Section 3 Objective 14)	October, 2016	September, 2017	Planning

Section VI of the IAPD shows these specific milestones and activities that support the near term goals and objectives above. This list is the actual work in the coming two years related to the three work streams of the program. (EHRIP, HIE/HIT, HSEP) Additionally, the following tables represent the projects over the next two years specific to the Vermont HIE vendor (VITL) from the August 2016 IAPD-U Appendix D:



Associated Projects	Project Detail	Cost Allocate?	Amount Budgeted	HITECH HIE	Vermont HIT Fund
<b>2017 HIE Expansion - HITECH HIE Funded</b>					
Interfaces – New Types (SMHP Initiatives Page 16 Ref # 7)	Continue the expansion of interfaces for Meaningful Use qualified organizations (not eligible under the terms of Vermont's State Innovation Grant) in order to expand the quality and quantity of clinical data available in the VHIE. This effort includes: 1. Developing new interfaces with qualified organizations who have at least one existing interface with the VHIE, and 2. Identifying and partnering with qualified organizations to establish an initial interface with the VHIE. VITL will collaborate with the provider organization and their vendor to determine which interfaces - ADT, lab results, radiology reports, transcribed reports, CCDs or immunizations - are technically, financially, and operationally feasible.	No 100% Medicaid HIE 90/10	\$ 526,250	\$ 526,250	
VITL Access On-Boarding (SMHP Initiatives Page 15 Ref # 6)	Ensure continued expansion of VITLAccess and to provide implementation support of other new products along with ongoing expansion and implementation of the State's patient consent policy for the State's EPs and EHS. Roll-out of the provider portal and new products is critical to continued improvement of decision making at the point of care. The client services team of eHealth Specialists work through a time-limited onboarding process consisting of three stages: Profile, Enroll, and Launch.	No 100% Medicaid HIE 90/10	\$ 526,250	\$ 526,250	
<b>HITECH HIE - 100% Medicaid 2017 Subtotal</b>			<b>\$ 1,052,500</b>	<b>\$ 1,052,500</b>	
Data Quality and Analytics (SMHP Initiatives Page 15 Ref # 6)	The scope of this project will support the analytics to improve clinical data quality within the Contractor's infrastructure. The Contractor shall measure data quality and report back these findings in the form of "data quality dashboards" for the use by contributing organizations. In addition to the Data Quality capabilities, the Contractor shall provide query capabilities, reporting capabilities, and data extracts to participating organizations.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 800,000	\$ 556,000	\$ 244,000
Single Sign-on system (SSO) for hospitals (SMHP Initiatives Page 15 Ref # 6)	Expand the implementation of the software-based single sign-on solution to access the VITL provider portal (VITLAccess) directly from the hospital EHRs. This project will be to expand the solution developed in FFY 2016 and stand up more instances of single sign-on. There will be 11 MU qualified medical centers that this solution can be applied to.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 125,000	\$ 86,875	\$ 38,125
Single Sign-on system (SSO) for practices (SMHP Initiatives Page 15 Ref # 6)	Expand the implementation of software-based single sign-on solution to access the VITL provider portal (VITLAccess) directly from the a practice-based EHR such as Allscripts, GE, eClinicalWorks, Medent or Greenway. This project will be to extend the solution developed in FFY 2016 and stand up more instances.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 312,500	\$ 217,188	\$ 95,313
VITL Infrastructure Upgrades (SMHP Initiatives Page 15 Ref # 6)	This project will extend hardware, network, and software capabilities required to support VITL internal network, email, and other services. This year we will implement redundancy to increase fault tolerance and improve business continuity.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 200,000	\$ 139,000	\$ 61,000
42 CFR Part 2 (SMHP Initiatives Page 16 Ref # 7)	Extending and building on work funded in 2016 to design a system that supports 42 CFR Part 2 (substance abuse treatment) data storage and access that will enable, with appropriate consents, integrated care across multiple provider organizations participating in the Vermont HIE. The data involved with this initiative would be stored in a segregated data repository in the VT HIE and along with expanded development of the consent algorithm, would potentially be viewed by all providers participating in the HIE, including many EHS and EPs. A diagram titled "High-Level HIE Process and Architecture Part 2 Compliant" is included at that end of this table to support the description of this project.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 625,000	\$ 434,375	\$ 190,625
Physiologic Data (SMHP Initiatives Page 16 Ref # 7)	Develop an interface from VNA home physiological monitoring systems to VHIE. These systems typically capture daily blood pressure, weight, temperature, and other clinical data results that are very useful to providers in managing patients with chronic conditions such as congestive heart failure and Chronic Obstructive Pulmonary Disease.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 56,250	\$ 39,094	\$ 17,156
Immunization Automatic Acknowledge	Currently, Health are organizations submitting immunizations messages to the Immunization Registry via the VHIE do not receive an automated acknowledgement that their messages have passed or failed validation. This project will implement a solution that performs immunization validations and sends the appropriate HL7 ACK messages back to the originating HCO from the VHIE. Additional functionality will be developed to support this solution. This includes a new data transport method via SOAP web services, new validations, incorporating the CDC's receiving system processing rules, and providing an archive of errors for reporting to and auditing of health care organizations.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 250,000	\$ 173,750	\$ 76,250
VPMS Implementation	Design a solution which allows VITLAccess to connect to VPMS via single sign on or other capability of the new VPMS vendor. Implementation of solution is dependent on the VPMS vendor, the Contractor's and the State's timeline.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 62,500	\$ 43,438	\$ 19,063
Consent Policy Review	The scope of this project shall be to review the current consent policy, including the technical architecture, and design a system that seamlessly supports federally-compliant data storage and access. The review will result in an implementation plan, including budget and timeline, for modifications to the consent policy and architecture.	Yes: Fair Share (69.5% Federal) HIE 90/10	\$ 125,000	\$ 86,875	\$ 38,125
<b>HITECH HIE - Subject to Fair Share 2017 Subtotal</b>			<b>\$ 2,556,250</b>	<b>\$ 1,776,594</b>	<b>\$ 779,656</b>
			<b>Amount Budgeted</b>	<b>HITECH HIE</b>	<b>Vermont HIT Fund</b>
<b>2017 HITECH HIE - Total (100% HIE &amp; Fair Share)</b>			<b>\$ 3,608,750</b>	<b>\$ 2,829,094</b>	<b>\$ 779,656</b>
			Federal Share (FFP 90%)	\$ 2,546,184	\$ 2,546,184
			Vermont Share (State Match 10%)	\$ 1,062,566	\$ 282,909
				\$ 779,656	





Associated Projects	Project Detail	Cost Allocate?	Amount Budgeted	HITECH HIE	Vermont HIT Fund
<b>2018 HIE Expansion - HITECH HIE Funded</b>					
Interfaces – New Types (SMHP Initiatives Page 16 Ref # 7)	Continue the expansion of interfaces for Meaningful Use qualified organizations (not eligible under the terms of Vermont’s State Innovation Grant) in order to expand the quality and quantity of clinical data available in the VHIE. This effort includes: 1. Developing new interfaces with qualified organizations who have at least one existing interface with the VHIE, and 2. Identifying and partnering with qualified organizations to establish an initial interface with the VHIE. The Contractor will collaborate with the provider organization and their vendor to determine which interfaces - ADT, lab results, radiology reports, transcribed reports, CCDs or immunizations - are technically, financially, and operationally feasible.	No 100% Medicaid HIE 90/10	\$ 526,250	\$ 526,250	
VITL Access On-Boarding (SMHP Initiatives Page 15 Ref # 6)	Ensure continued expansion of VITLAccess and to provide implementation support of other new products along with ongoing expansion and implementation of the State’s patient consent policy for the State’s EPs and EHS. Roll-out of the provider porta and new products is critical to continued improvement of decision making at the point of care. The client services team of eHealth Specialists work through a time-limited onboarding process consisting of three stages: Profile, Enroll, and Launch.	No 100% Medicaid HIE 90/10	\$ 526,250	\$ 526,250	
<b>HITECH HIE - 100% Medicaid 2018 Subtotal</b>			<b>\$ 1,052,500</b>	<b>\$ 1,052,500</b>	
Data Quality and Analytics (SMHP Initiatives Page 15 Ref # 6)	The scope of this project will support the analytics to improve clinical data quality within the Vermont Health Information Exchange. The Contractor shall measure data quality and report back these findings in the form of “data quality dashboards” for the use by contributing organizations.	Yes : Fair Share (69.50% Federal) HIE 90/10	\$ 800,000	\$ 556,000	\$ 244,000
Single Sign-on system (SSO) for hospitals (SMHP Initiatives Page 15 Ref # 6)	Expand the Implementation of the software-based single sign-on solution to access the VITL provider portal (VITLAccess) directly from the hospital EHRs. This project will be to expand the solutions developed in FFY 2017 and stand up more instances of single sign-on. There will be 11 MU qualified medical centers that this solution can be applied to.	Yes : Fair Share (69.5% Federal) HIE 90/10	\$ 330,000	\$ 229,350	\$ 100,650
42 CFR Part 2 (SMHP Initiatives Page 16 Ref # 7)	Extending and building on work funded in 2016 to design a system that supports 42 CFR Part 2 (substance abuse treatment) data storage and access that will enable, with appropriate consents, integrated care across multiple provider organizations participating in the Vermont HIE. The data involved with this initiative would be stored in a segregated data repository in the VT HIE and along with expanded development of the consent algorithm, would potentially be viewed by all providers participating in the HIE, including many EHS and EPs. A diagram titled “High-Level HIE Process and Architecture Part 2 Compliant” is included at that end of this table to support the description of this project.	Yes : Fair Share (69.5% Federal) HIE 90/10	\$ 200,000	\$ 139,000	\$ 61,000
Physiologic Data (SMHP Initiatives Page 16 Ref # 7)	Develop an interface from VNA home physiological monitoring systems to VHIE. These systems typically capture daily blood pressure, weight, temperature, and other clinical data results that are very useful to providers in managing patients with chronic conditions such as congestive heart failure and Chronic Obstructive Pulmonary Disease.	Yes : Fair Share (69.5% Federal) HIE 90/10	\$ 56,250	\$ 39,094	\$ 17,156
<b>HITECH HIE - Subject to Fair Share 2018 Subtotal</b>			<b>\$ 1,386,250</b>	<b>\$ 963,444</b>	<b>\$ 422,806</b>
<b>2018 HITECH HIE - Total (100% HIE &amp; Fair Share)</b>			<b>\$ 2,438,750</b>	<b>\$ 2,015,944</b>	<b>\$ 422,806</b>
Federal Share (FFP 90%)			\$ 1,814,349	\$ 1,814,349	\$ -
Vermont Share (State Match 10%)			\$ 624,401	\$ 201,594	\$ 422,806

## E2 Expectations for provider EHR technology adoption over time: annual benchmarks by provider type

The Vermont EHRIP team recently conducted an awareness survey of eligible Medicaid providers to identify opportunities to enroll them in the program. Targeted outreach has been conducted to educate providers about the program and incentive payment possibilities. The results of the survey did not identify a significant interest from the community, so we interpret this to mean that the majority of these providers are already using EHR technology, don’t meet the patient volume threshold, or are otherwise uninterested in participating.

Recently, Vermont has been focusing on the opiate addiction problem. In partnership with our Department of Health, providers who can prescribe Buprenorphine have been cross referenced with EHRIP participants to identify non-EHRIP participants in the Buprenorphine prescribing group. Targeted outreach is going out to this group to encourage EHRIP enrollment. In addition, we have linked this prescriber group with our HIE connectivity list to identify opportunities to use SMD letter 16-003 (expanded scope for 90/10 funds) for new provider types allowed with this funding for connection to the VHIE.





**E3 Annual benchmarks for each of DVHA's goals that will serve as clearly measurable indicators of progress along this scenario**

The Department of Vermont Health Access and its Health Care Reform Team will continue to provide detailed reporting of progress of the programs and initiatives. We have received specific guidance from CMS on our Enterprise goals and continue to have regularly scheduled calls to discuss progress.

**E4 Annual benchmarks for audit and oversight activities**

The EHRIP audit team is currently completing audits for program year 2013 and has an approved audit plan for program year 2014. The team has completed risk assessments and begun actual audit work on those selected for program year 2014. The team reports on audit progress in the quarterly CMS report and on the HITECH user support interface.



## Appendix A: Table of Acronyms

Acronyms appearing in this edition of the SMHP

ACA	Affordable Care Act
ACCESS	Not an acronym, stands for Vermont’s legacy eligibility system
ACO	Accountable Care Organization
Acronym	Explanation
ADAP	(Division of) Alcohol and Drug Abuse Programs
ADHD	Attention Deficit / Hyperactive Disorder
ADT	Admit Discharge Transfer
AHS	Agency of Human Services
AIU	Adopt, Implement, or Upgrade
APCD	All Payer Claims Database
ARRA	American Recovery and Reinvestment Act of 2009
BCBS	Blue Cross Blue Shield
BH	Behavioral Health
BHPr	(HRSA) Bureau of Health Professionals
BISHCA	(Vermont Department of) Banking, Insurance, Securities and Health Care Administration (now DFR)
BPHC	(HRSA) Bureau of Primary Health Care
CAH	Critical Access Hospital
CBOC	Community Based Outpatient Clinic
CCD	Continuity of Care Document
CDC	Centers for Disease Control
CDR	Consolidated Data Record
CHCB	Community Health Centers of Burlington, a Vermont FQHC
CHCRR	Community Health Centers of the Rutland Region, a Vermont FQHC
CHIPRA	Children’s Health Insurance Program Reauthorization Act
CHSLV	Community Health Services of Lamoille Valley, a Vermont FQHC
CHT	Community Health Team
CIS	Children’s Integrated Services
CMHC	Community Mental Health Center
CMMI	Center for Medicare & Medicaid Innovation
CMS	Centers for Medicare & Medicaid Services
CPOE	Computerized Provider Order Entry
CRS	Center for Rural Studies
CSME	Central Source for Measurement and Evaluation
DAIL	Department of Disabilities, Aging and Independent Living



DAs	Designated Agencies
DCF	Department for Children and Families
DDI	Design, Development and Implementation
DFR	Department of Financial Regulation
DHMC	Dartmouth Hitchcock Medical Center
DHR	Department of Human Resources
DIRECT	A protocol for Direct point-to-point secure email transmission of health information
DMH	Department of Mental Health
DocSite	Covisint DocSite Clinical Data Registry
DPS	Department of Public Safety
DUALS	Refers to individuals dually eligible for Medicare and Medicaid benefits
DVHA	Department of Vermont Health Access
eCQM	electronic Clinical Quality Measures
EH	Eligible Hospital
EHR	Electronic Health Record
EHRIP	Electronic Health Record Incentive Program
ELR	Electronic Lab Reporting
eMPI	electronic Master Person Index
EMR	Electronic Medical Record
EP	Eligible Professional
EPSDT	Early and Periodic Screening, Diagnosis, and Treatment
ESB	Electronic Service Bus
FAHC	Fletcher Allen Health Care
FFY	Federal Fiscal Year
FQHC	Federally Qualified Health Center
GMCB	Green Mountain Care Board
GUI	Graphical User Interface
HBE	Health Benefit Exchange
HCCN	Health Center Controlled Network
HCR	Health Care Reform
HH	Home Health
HI	Health Information
HIE	Health Information Exchange
HIT	Health Information Technology
HIT/E	Health Information Technology / Exchange
HITECH	Health Information Technology for Economic and Clinical Health
HIX	Health Insurance Exchange
HIXNY	Healthcare Information Xchange of New York



HL7	Health Level 7 International – standard for interoperability
HRSA	Health Resources and Services Administration
HSE	Health & Human Services Enterprise
HSEP	Health & Human Services Enterprise Platform
IAPD	Implementation Advance Planning Document
IE	Integrated Eligibility
IZ	Immunization Registry
LRHC	Little Rivers Health Care, a Vermont FQHC
LTC	Long Term Care
LTPAC	Long Term and Post-Acute Care
LTSS	Long Term Support Services
MA	Medical Assistance
MAPIR	Medical Assistance Provider Incentive Repository
MDM	Master Data Management
MDS	(Long Term Care) Minimum Data Set
MH	Mental Health
MHISSION-VT	Mental Health/Substance Abuse Intergovernmental Service System Interactive On-Line Network for Vermont
MITA	Medicaid Information Technology Architecture
MITA-SS-A	Medicaid Information Technology Architecture – State Self-Assessment
MMIS	Medicaid Management Information System
NCQA	National Committee for Quality Assurance
NEHIN	New England Health Information Network
NESCSO	New England States Consortium Systems Organization
NLR	National Level Repository
NoTCH	Northern Tier Center for Health, a Vermont FQHC
NR&A	National Registration & Attestation System
ONC	Office of the National Coordinator
ONC-HIE-PIN	Office of the National Coordinator – Health Information Exchange – Program Information Notice
ORHP	(HRSA) Office of Rural Health Policy
PA OMAP	Pennsylvania Office of Medical Assistance Programs
P-APD	Planning Advance Planning Document
PBM	Pharmacy Benefits Manager
PHI	Personal Health Information
PHIN MS	Public Health Information Network Messaging System
PMO	Project Management Office
QI	Quality Improvement
RCF	Residential Care Facility



REC	Regional Extension Center
RFP	Request for Proposals
RHC	Regional Health Center
ROSITA	Reusable OMOP (Observational Medical Outcomes Partnership) - SAFTINet (Scalable Architecture for Federated Translational Inquiries Network) Interface Transformation Adaptor
SA	Substance Abuse
SaaS	Software as a Service
SAMHSA	Substance Abuse and Mental Health Services Administration
SASH	Support and Services at Home
SBIRT	Screening, Brief Intervention, and Referral to Treatment
SIM	State Innovation Model
SMA	State Medicaid Agency
SMCS	Springfield Medical Care Systems, a Vermont FQHC
SMDL	State Medicaid Director Letter
SMHP	State Medicaid HIT Plan
SNF	Skilled Nursing Facility
SOA	Service Oriented Architecture
SOP	Strategic and Operational Plans
SOV	State of Vermont
Surescripts	The Surescripts e-Prescription network
THC	The Health Center, a Vermont FQHC
T-MSIS	Transformed Medicaid Statistical Information System
UDS	Uniform Data System
UHIN	Utah Health Information Network
USDA	United States Department of Agriculture
UVM	University of Vermont
V. S. A.	Vermont Statutes Annotated
VA	Veterans Administration
VAHHA	Vermont Assembly of Home Health Agencies
VBH	The Vermont Blueprint for Health
VCDMHS	Vermont Council of Developmental and Mental Health Services
VCDR	Vermont Coalition for Disability Rights
VCGI	Vermont Center for Geographic Information
VCIL	Vermont Center for Independent Living
VDH	Vermont Department of Health
VHC	Vermont Health Connect
VHCURES	Vermont Healthcare Claims Uniform Reporting and Evaluation System
VHIE	Vermont Health Information Exchange



VHCIP	Vermont Health Care Innovation Project
VHITP	Vermont Health Information Technology Plan
VITL	Vermont Information Technology Leaders, Inc.
VRHA	Vermont Rural Health Alliance
VSH	Vermont State Hospital
VSOP	Vermont Strategic and Operational Plans
VTA	Vermont Telecommunications Authority
VTel	Vermont Telephone Company, Inc.
WIC EBT	Women, Infants, and Children Electronic Benefit Transfer

**Appendix B: Vermont Health Information Technology Plan**

Can be found here:

<http://healthdata.vermont.gov/Feedback>

**Appendix C: Policy on Patient Consent for HIE**

Policy on Patient Consent for Provider Access to Protected Health Information on VHIE or through the Blueprint

Approved by Secretary of Agency of Administration and  
 By Green Mountain Care Board as of March 13, 2014.  
 Replaces Policy Approved as of October 25, 2012

Section 1 - Introduction

Upon approval by the Vermont Secretary of Administration and the Green Mountain Care Board, this Policy shall be incorporated into and become part of the Vermont statewide Health Information Technology Plan (the “Plan”). Vermont law requires that the Plan include standards and protocols for 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.<sup>6</sup>

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<sup>6</sup> 18 VSA § 9351(a)



As required by statute, VITL has been designated in the Plan to operate the exclusive statewide health information exchange network for the State of Vermont and its standards and protocols shall be consistent with those adopted by the Plan.<sup>7</sup> In consultation with health care providers and health care facilities, VITL shall establish criteria for creating and maintaining connectivity to the Vermont Health Information Exchange (“VHIE”).<sup>8</sup>

## Section 2 - Definitions

(a) “Consent” or “Written Consent” shall mean an individual’s act of giving written permission to a Participating Health Care Provider in the Vermont Health Information Exchange (“VHIE”) and in the Blueprint Registry maintained under the State of Vermont Blueprint for Health (“Blueprint” and, collectively with VHIE, the “Exchanges”) to permit access to the individual’s protected health information (“PHI”) on the Exchanges to all Participating Health Care Providers involved in the treatment of the individual. Consent shall be evidenced by a signature provided in writing or other legally recognized tangible medium that is retrievable in a perceivable form. Consent may be provided by an individual’s legal representative as authorized by law.

(b) “De-identified” shall mean that all identifying information related to an individual as set forth in the HIPAA Privacy and Security Rule<sup>9</sup> are removed from the protected health information.

(c) “Exchanges” shall mean the Vermont Health Information Exchange (“VHIE”) and the Blueprint Registry maintained under the State of Vermont Blueprint for Health (“Blueprint”).

(d) “Health Care Operations” shall mean activities of Participating Health Care Providers providing treatment to an individual relating to quality assessment and improvement, evaluations relating to the competence of treating providers or necessary administrative and management activities<sup>10</sup>.

(e) A “Legal Representative” under Vermont law may be a legal guardian, a parent of an unemancipated minor or an agent once an advance directive becomes effective.

(f) A “Medical Emergency” is a condition which poses an immediate threat to the health of any individual and which requires immediate medical intervention<sup>11</sup>. The term “Medical Emergency” specifically is intended to include an “Emergency Medical Condition” which is defined as a medical

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<sup>7</sup> 18 VSA § 9352(c)

<sup>8</sup> 18 VSA § 9352(i)

<sup>9</sup> 45 CFR § 164.514(b).

<sup>10</sup> 45 CFR §164.501.

<sup>11</sup> 42 CFR 2.15.



condition manifesting itself by acute symptoms of sufficient severity such that the absence of medical attention could reasonably be expected to result in (1) placing the health of the individual in serious jeopardy or (2) serious impairment to bodily functions or (3) serious dysfunction of any bodily organ or part<sup>12</sup>.

(g) A “Participating Health Care Provider” shall mean a health care provider, including a physician practice and any health care organization,<sup>13</sup> that has contracted with either the Vermont Information Technology Leaders, Inc. (“VITL”) or the State of Vermont Blueprint for Health initiative to make PHI of its patients available electronically on either or both of the Exchanges. The term “Participating Health Care Provider” shall include all the individual providers and authorized staff employed or otherwise legally associated with the entity or organization.

(h) “Protected Health Information” (“PHI”) shall mean “individually identifiable health information” in any form or medium about the past, present or future physical or mental health or condition of an individual as such terms are defined in the HIPAA Privacy and Security Rule<sup>14</sup>.

(i) “Revoke” or “Revocation” of Consent shall mean an individual’s statement of intent to terminate the permission given to a Participating Health Care Provider to access the individual’s Protected Health Information on the Exchanges. Revocation of Consent shall be evidenced by a signature provided in writing or other legally recognized tangible medium that is retrievable in a perceivable form. Revocation of Consent may be provided by an individual’s legal representative as authorized by law.

(j) “Treatment” shall mean the provision, coordination, or management of health care and related services by one or more health care providers.

### Section 3 - Policy

#### (a) Consent for Provider Access

Participating Health Care Providers shall only access Protected Health Information on the Exchanges for individuals who have a current Written Consent for such access on record. The policy does not apply where the PHI is being accessed from the Participating Health Care Provider’s own electronic health record or the PHI is directed to a Participating Health Care Provider from another Participating Health Care Provider in a manner consistent with the federal HIPAA privacy regulations and Vermont law.

#### (b) Patient Education Materials

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<sup>12</sup> 42 U.S.C. § 1395dd(e)(1); 42 C.F.R. § 489.24(b).

<sup>13</sup> As defined in 18 VSA § 9402(6).

<sup>14</sup> 45 CFR §160.103.





Participating Health Care Providers shall direct individuals to educational information developed and made available to them by VITL and the State of Vermont regarding the Exchanges and their use by Participating Health Care Providers, and shall refer individuals to VITL and the State of Vermont for additional information. This information shall advise individuals of the ability of Participating Health Care Providers to access their PHI for treatment and of their individual rights under this Policy. It shall advise them of the content of the information on the Exchanges accessible to Participating Health Care Providers. It also shall advise them that their information can be available to Participating Health Care Providers providing treatment in an emergency and that de-identified information may be used for research, quality improvement and public health purposes. Upon request, the individual shall also be provided a Notice of Privacy Practices by the Participating Health Care Providers.

(c) Consent Procedure for Provider Access

Participating Health Care Providers shall enter into a Business Associate Agreement (“BAA”), including, if applicable, a Qualified Service Organization Agreement (“QSOA”), with the Exchange(s) to make the PHI of its patients available to the Exchange(s). Written Consent from patients for access to their PHI on the Exchanges shall have been obtained by a Participating Health Care Provider using a Consent form which includes statements required by this Policy. The Exchanges shall establish a mechanism for Participating Health Care Providers to confirm that an individual has consented to Participating Health Care Providers’ access to the individual’s PHI on that Exchange. It is the obligation of the Participating Health Care Provider that collects a Written Consent from a patient to provide confirmation to the Exchange that the individual has consented to Participating Health Care Providers’ access to the individual’s PHI on that Exchange and to maintain a record of the individual’s Written Consent.

(d) Form of Consent

(1) An individual’s Consent for Participating Health Care Providers’ access to his or her PHI on either or both of the Exchanges (1) shall be dated with the name, address, and birth date of the individual, (2) shall be effective until the Exchange(s) ceases operation or Consent is revoked and (3) shall include statements substantially similar to the following:

- (A) I give my consent to Participating Health Care Providers to access and use or disclose my protected health information, including mental health, and substance abuse treatment information, on the Vermont Health Information Exchange, or through the Vermont Blueprint for Health’s Registry (the “Exchanges”) for my treatment, for payment for my treatment and for health care operations consistent with the federal HIPAA privacy regulations and Vermont law.
- (B) I have been referred to VITL and the State of Vermont Blueprint for Health for information regarding the Exchanges and am aware that I can request information regarding the privacy practices of any Participating Health Care Provider as described in its Notice of Privacy Practices.



- (C) I understand I do not have to give my consent in order to receive treatment from any Participating Health Care Provider.
- (D) This consent is subject to my revocation (termination) at any time except to the extent that my protected health information obtained from the Exchanges has already been accessed by Participating Health Care Providers and included in their medical records.
- (E) If not previously revoked, or otherwise stated, my consent will terminate automatically when the Exchange stops operating. My consent will remain in effect indefinitely unless I provide written notice of revocation.

(2) Consent may be given by an Individual's Legal Representative as authorized by law.

(e) Individual Access to PHI on the Exchanges

An individual shall be provided the right of access to his or her PHI available on the Exchanges through a Participating Health Care Provider or through VITL or the State of Vermont Blueprint for Health.

(f) Access by Treating Participating Health Care Providers Only

All Participating Health Care Providers shall have policies and procedures (1) to ensure that PHI from another Participating Health Care Provider is accessed on the Exchanges only when an individual has provided Consent or the PHI is directed to the Participating Health Care Provider from another Participating Health Care Provider and (2) to ensure that only those involved in the diagnosis or treatment of an individual, payment for that treatment or necessary health care operations may access the individual's PHI on the Exchanges. Participating Health Care Providers, VITL and the State of Vermont Blueprint for Health shall comply with all applicable federal and state laws.

(g) Emergency Access to PHI on Exchanges

A Participating Health Care Provider may access the PHI of an individual on the Exchanges without the individual's Consent for use in the treatment of the individual for a Medical Emergency when the Participating Health Care Provider is unable to obtain the individual's Consent due to the individual's Emergency Medical Condition. Participating Health Care Providers accessing PHI for a Medical Emergency must notify the individual or the individual's Legal Representative of such access as soon after such access as is reasonably possible and must obtain Written Consent for further access to PHI of that individual on the Exchange after the Medical Emergency has ended.

(h) Audit of Consents

VITL and the State of Vermont shall periodically audit the Consent records of Participating Health Care Providers in the VHIE or in the Blueprint, respectively. Failure to obtain patient consent, as required by this Policy, shall result in sanctions. VITL and the State of Vermont shall review all instances of emergency access to PHI on the VHIE or the Blueprint, respectively.



(i) Request for Audit Report

An individual may request and receive an Audit Report of access to his or her PHI on the VHIE by contacting VITL's Privacy Officer. VITL shall provide the requested Audit Report as soon as reasonably possible and within 30 calendar days. An individual may request and receive an Audit Report of access to his or her PHI on the Blueprint by contacting the State of Vermont Agency of Human Services' Privacy Officer. The State of Vermont shall provide the requested Audit Report as soon as reasonably possible and within 30 calendar days.

(j) Revocation

An individual who has granted Consent to permit his or her PHI to be accessed on the Exchanges for treatment, for payment for treatment, and Health Care Operations by Participating Health Care Providers shall be entitled to revoke such consent. After receiving an individual's Revocation of Consent, Participating Health Care Providers shall not access the Exchanges to seek the individual's PHI. VITL and the State of Vermont shall each establish a mechanism for Participating Health Care Providers to confirm that an individual has revoked consent for access to the individual's PHI on their respective Exchange. It is the obligation of VITL and the State of Vermont to maintain a record of the individual's Revocation for their respective Exchange.

#### Section 4 – Substance Abuse Treatment Programs

The regulations set forth in 42 C.F.R. Part 2, governing substance abuse treatment records, require additional protections before PHI from such records may be available to be shared between providers on the Exchanges. Therefore, VITL and the State of Vermont intend to supplement this Policy to accommodate PHI from substance abuse treatment programs upon the completion of necessary due diligence and a final plan for the implementation of a 42 CFR Part 2-compliant HIE and consent architecture that will enable the legal and appropriate exchange of PHI from substance abuse treatment program.



## Appendix D: PENNSYLVANIA IAPD APPROVAL LETTER FOR MAPIR

DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Medicare & Medicaid Services  
Chicago Regional Office  
233 North Michigan Avenue, Suite 600  
Chicago, Illinois 60601



Consortium for Medicaid and Children's Health Operations

July 6, 2016

Leesa M. Allen  
Executive Medicaid Director  
Pennsylvania Department of Public Welfare  
Office of the Secretary  
331 Health & Welfare Building  
Harrisburg, PA 17120

Dear Ms. Allen:

This letter is in response to the Pennsylvania Department of Public Welfare's request that the Centers for Medicare & Medicaid Services (CMS) review and approve Pennsylvania's Health Information Technology (HIT) Implementation Advance Planning Document Update (IAPD-U) for the Medical Assistance Provider Incentive Repository (MAPIR) system. This submission was received by the HITECH mailbox on June 22, 2016.

The IAPD-U details the implementation of Phase V of the Medical Assistance Provider Incentive Repository (MAPIR) system, which is a stand-alone, web-based application for use in interfacing with Medicaid Management Information Systems (MMIS). As described in the IAPD-U, HP Enterprise Services (HPES) will provide development, operations and maintenance of MAPIR enhancements for a multistate collaborative through the HPES MMIS. The 13 states participating in this collaborative are Arkansas, Connecticut, Delaware, Florida, Georgia, Indiana, Kansas, Massachusetts, Oregon, Pennsylvania, Rhode Island, Wisconsin, and Vermont.

The multistate collaborative seeks approval of \$6,668,700 (Federal Share \$6,001,830) for activities described in the MAPIR HIT IAPD-U for an implementation cycle from October 1, 2016 through September 30, 2018. Each state in the collaborative is responsible for outlining the MAPIR core cost of \$666,870 (\$600,183 Federal Share) in their state specific HIT IAPD submitted to CMS. The Commonwealth of Pennsylvania, the lead State of the collaborative, also seeks \$218,757 (Federal Share \$196,881) for work on the MAPIR core.

CMS approves the MAPIR HIT IAPD-U, effective October 1, 2016, in accordance with 42 CFR § 495, Subpart D. Federal funding associated with changes to the MMIS is approved in accordance with Section 1903(a)(3) of the Social Security Act and regulations found at 42 CFR § 433, Subpart C, 45 CFR § 95, Subpart F, and Part 11 of the State Medicaid Manual. CMS is approving total expenditures for this IAPD-U in an amount not to exceed \$6,887,457 (\$6,198,711 Federal Share) at 90 percent Federal Financial Participation (FFP). The approved MMIS funding will expire on September 30, 2018. These authorized funds cannot be increased or reallocated between Federal Fiscal Years, even within the period of this letter's approval, without submission and approval of an amendment to the IAPD-U.



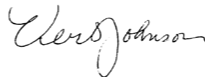
The State must provide adequate support for all costs claimed and provide detailed records and proper audit trails. Additionally, only actual costs incurred are reimbursable. Onsite reviews will be conducted at the discretion of CMS to determine if the objectives for which FFP was approved are being accomplished and to verify that the program is being administered efficiently and effectively as described in 42 CFR § 495, Subpart D.

The State is reminded that any change in an approved IAPD regarding scope, cost, or schedule, requires CMS' prior approval of an IAPD-U, in accordance with 42 CFR § 495, Subpart D. Additionally, any Requests for Proposals (RFP) and/or contracts related to the IAPD must be approved by CMS prior to release of the RFP and prior to the execution of the contract.

Please refer to Appendix B for additional information about the State's responsibilities concerning activities described in the HIT IAPD. In accordance with 42 CFR § 495.342, please submit an IAPD-U no later than 12 months from the date of the approved IAPD. If the State is requesting additional funding, please provide ample time for CMS to conduct a review and issue approval.

CMS appreciates the State's efforts in implementing its Medicaid HIT project and looks forward to its continued success. If you have any questions, please contact your Regional HITECH Lead, Robert McCarthy, at (206) 615-2505 or by email at [Robert.McCarthy@cms.hhs.gov](mailto:Robert.McCarthy@cms.hhs.gov), or CDR Samuel J. Schaffzin, USPHS at (212) 616-2474 or by email at [Samuel.Schaffzin@cms.hhs.gov](mailto:Samuel.Schaffzin@cms.hhs.gov).

Sincerely,



Verlon Johnson  
Acting Consortium Administrator



**Appendix E: VERMONT 2016 AUDIT STRATEGY APPROVAL LETTER**

DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Medicare & Medicaid Services  
Chicago Regional Office  
233 North Michigan Avenue, Suite 600  
Chicago, Illinois 60601

**Consortium for Medicaid and Children's Health Operations**

June 14, 2016

Steven Costantino  
Commissioner  
State of Vermont, Department of Vermont Health Access  
312 Hurricane Lane, Suite 201  
Williston, VT 05495

Dear Commissioner Constantino:

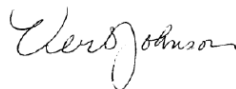
Thank you for your correspondence dated April 28, 2016 requesting that the Centers for Medicare & Medicaid Services (CMS) approve Vermont's comprehensive audit strategy for the Medicaid Electronic Health Record Incentive Program. The audit strategy identifies the method that the state will employ both pre-payment and post-payment to avoid disbursing improper incentive payments.

CMS completed its review of the audit strategy and approves it effective on the date of this letter, in accordance with Federal regulations at 42 CFR § 495, subpart D. Vermont may proceed with implementing the audit strategy for Medicaid eligible professionals and Medicaid eligible hospitals participating in the State's Medicaid EHR Incentive Program.

CMS appreciates Vermont's continued commitment and dedication to administering this important program that will lead to improved healthcare for populations served by the Medicaid Program.

We look forward to working with you as you proceed through the implementation process of your Medicaid HIT project. If you have any questions or concerns regarding this information, please feel free to contact Sam Schaffzin, Acting Technical Director, at [Samuel.schaffzin@cms.hhs.gov](mailto:Samuel.schaffzin@cms.hhs.gov), or 212-616-2474.

Sincerely,



Verlon Johnson  
Acting Consortium Administrator



**Appendix F: 2014 CEHRT Flex Addendum**

October 17, 2014

Katherine Dyer  
CMS Region 1 Lead

Katy,

Please consider page 2 of this document to be Vermont's SMHP addendum that addresses implementation of the 2014 CEHRT flexibility rule. The addendum is included in our 2014 SMHP submission for your approval.

Thank you,

Richard Terricciano  
Associate HIT Coordinator  
Department of Vermont Health Access  
Mobile 802-585-0862  
[richard.terricciano@state.vt.us](mailto:richard.terricciano@state.vt.us)**2014 CEHRT Flexibility Rule Addendum**

MAPIR is the Vermont state level repository (SLR) and participates in the 13 state MAPIR collaborative. The MAPIR Collaborative submitted business requirements to the technical vendor and the states are collaborating to establish a timeline for development, testing, and implementation of MAPIR version 5.5 which will provide the functionality necessary to address CMS 2014 CEHRT flexibility.

For Program Year 2014, the MAPIR workflow will be redesigned so that the provider's CEHRT ID will be a required entry early in the attestation process. MAPIR will determine the CEHRT Edition and present the corresponding allowable options for attestation in compliance with the 2014 CEHRT Final Rule. Providers using a CEHRT Flexibility option will be required to attest to a statement indicating that they were unable to fully implement 2014 CEHRT.

The MAPIR system changes to accommodate the 2014 CEHRT Flexibility Rule are anticipated to be implemented in Vermont in Spring of 2015.

Targeted outreach to providers at risk of receiving 2015 Payment Adjustments has been accomplished, and general education and outreach via regular communications and website updates is ongoing.

In order to accommodate the 2014 CEHRT Flexibility Rule, Vermont is requesting that the attestation Grace Period for Eligible Hospitals and Eligible Professionals be extended to 60 days beyond the deployment of MAPIR 5.5 to the production environment.





**Appendix G: 2015-2017 MODIFICATION RULE ADDENDUM**

Vermont State Medicaid Health IT Plan Addendum for 2015-2017 Modification Rule	
<p>The Vermont Agency of Human Services through the Department of Vermont Health Access complies with federal regulations and guidance from the Centers for Medicare &amp; Medicaid Services (CMS) to administer and oversee Vermont Medicaid’s Electronic Health Record Incentive Program. This State Medicaid Health Information Technology Plan (SMHP) Addendum provides CMS with an overview of the Department’s plan to address the new requirements for Program Year 2015.</p> <p>On October 16, 2015, CMS published a Final Rule, <i>Medicare and Medicaid Programs; Electronic Health Record Incentive Program-Stage 3 and Modifications to Meaningful Use in 2015-2017</i> to the Federal Register, or the 2015-2017 Modification Rule.</p> <p>The EHR Incentive Program Team completed a comprehensive analysis of the final rule to identify information, policy, process and technology impacts to the Vermont Medicaid EHR Incentive Program. The following table contains a summary of the areas impacted as well as the plan to address the impacts for Program Year 2015.</p>	
SMA Policy Changes	
Policy Considerations	<ul style="list-style-type: none"> <li>Developed policies and guidance on supporting documentation that relates to the 2015-2017 Modification Rule.</li> <li>Conducted internal review and requirements for pre-payment validation documentation required for the 2015-2017 Modification Rule objectives and measures.</li> <li>Developed internal processing and procedures documentation for use by staff in applying changes necessary for the 2015-2017 Modification Rule.</li> </ul>
Provider Registration and Attestation	
Systems / infrastructure	<ul style="list-style-type: none"> <li>Vermont is a member of the <i>Medical Assistance Provider Incentive Repository</i> (MAPIR) Collaborative. Per Core MAPIR specifications, MAPIR completes a real-time web callout to the ONC Certified Health IT Product List to verify a valid CEHRT per attestation per Program Year.</li> <li>Core MAPIR system 2015-2017 Modification Rule screen changes were submitted and a MAPIR Collaborative walkthrough was conducted with CMS on Dec 16, 2015. The Multi-state MAPIR Collaborative received CMS feedback on Dec 21, 2015 and presented clarifications to CMS on Dec 23, 2015. Approval for Core MAPIR system and screen changes was received on Dec 28, 2015.</li> <li>EHRIP Team members are working with our external vendor, HPE, to update custom MAPIR related state level Registration and Attestation requirements to allow for attestations using the 2015-2017 Modification Rule.</li> <li>Per the MAPIR thirteen state Collaborative Statement of Work, planning adequate time to beta test the Core system changes to MAPIR and finalize all changes related to the 2015-2017 Modification Rule in preparation of implementation in Vermont’s production environment.</li> <li>Updating the VT EHRIP Case Management Database with 2015-2017 Modification Rule changes in order to streamline attestation review and to continue to automatic the tracking and analysis of Vermont EHRIP data.</li> </ul>



	<ul style="list-style-type: none"> <li>• Determined that the attestation tail period needs to be extended due to the MAPIR system implementation date for 2015-2017 Modification Rule.             <ul style="list-style-type: none"> <li>○ Due to the volume of Core MAPIR systems changes needed to support the 2015-2017 Modification Rule, the planned delivery Release Date of MAPIR 5.7 to the MAPIR Collaborative States is March 25<sup>th</sup>, 2016.                 <ul style="list-style-type: none"> <li>▪ Once released, Vermont's HPE custom staff must implement the core code into our MMIS. HPE and Program staff work together for all the items that are state-configurable.</li> <li>▪ Vermont's HPE staff makes those configuration changes before beginning their testing, which includes stepping through the entire process of completing applications for both EPs and EHs for every payment year. Testing needs to be coordinated with other subsystems such as financial.</li> <li>▪ State EHRIP Team User Acceptance Testing (UAT) is the final stage of MAPIR version implementation testing before deployment.</li> </ul> </li> <li>○ Testing and communication between state EHRIP Team Staff, Vermont HPE staff and Core MAPIR staff is an iterative process requiring 8 weeks from the time of delivery from Core of the MAPIR upgrade to deployment for Vermont's Medicaid EHRIP participants. Estimated date of promoting MAPIR 5.7 to production is May 20, 2016.                 <ul style="list-style-type: none"> <li>▪ For EPs attesting for Program Year 2015, Vermont is requesting approval for a 60-day attestation tail period from the date of 5.7 deployment, making the estimated attestation deadline for EPs July 18, 2016. When the deployment date is confirmed, the Vermont EHRIP Team will notify CMS via email of the EP attestation deadline, based on the 60-days-from-deployment time period.</li> <li>▪ For Dually Eligible Hospitals for Program Year 2015, Vermont is requesting approval for an attestation tail extension through Mar 31, 2016, or 30 days after the CMS tail period closes should that change from February 29, 2016. There are no Core MAPIR systems changes needed to process dually Eligible Hospital applications.</li> <li>▪ Vermont has no Medicaid-Only or Children's Hospitals, and does not require a Program Year attestation tail period extension associated with the updates in MAPIR 5.8, expected to be available in August 2016, which would accommodate changes needed for those hospital types to attest.</li> </ul> </li> <li>○ Vermont is not requesting extended attestation tail periods for Program Year 2016 attestations.</li> </ul> </li> </ul>
<b>Outreach, Collaboration, Support</b>	
<b>Provider Outreach</b>	<ul style="list-style-type: none"> <li>• Vermont's EHR Incentive Program has reviewed requirements with providers through frequent and ongoing targeted email communications, reconfiguration and frequent updates to the Vermont EHRIP website, and contributions to the bimonthly publication of the <i>Medicaid Advisory</i>.</li> <li>• A schedule of bi-weekly webinars to be conducted through the attestation tail period will address program requirements as well as how the MAPIR system and attestation screen navigation has changed to accommodate the 2015-2017 Modification Rule requirements.</li> <li>• Coordinating outreach with Regional Extension Centers and stakeholder groups such as BiState Primary Care, the Vermont Medical Society, and others.</li> <li>• All Provider Outreach efforts include information on how non-participating providers can determine their eligibility in order to meet the 2016 Program Year deadline to begin receiving EHRIP payments.</li> </ul>



Stakeholder Engagement and Collaboration	<ul style="list-style-type: none"> <li>Continue to share information with the key stakeholders so they can include it in their newsletters, reports and on their websites.</li> <li>Continue to participate in regional and statewide functions on the status of the EHR Incentive program and 2015-2017 Modification Rule updates.</li> <li>Analyzing the EHRIP Case Management database in order to determine those who have participated in the EHR Incentive Program for AIU but not MU. Continue to contact these providers to encourage further participation and offer assistance.</li> </ul>
Provider Support	<ul style="list-style-type: none"> <li>Continue to maintain a VT EHRIP Helpdesk, where providers and preparers can submit policy and procedural questions as well as requests for assistance on the application process and any technical issues encountered during process of registering or attesting. The Helpdesk system maintains the entire communication thread and allows for timely response and action for program participants seeking information or assistance.</li> <li>Continue to maintain the VT EHRIP website, a comprehensive collection of CMS and Vermont-specific resources and guidance. Includes tools and detailed illustrations for assembling and submitting patient volume documentation, Vermont EHRIP audit guidance and tipsheets, appeals processes, and an archive of EHRIP announcements and program updates.</li> <li>Issuing the latest version of the Vermont-specific MAPIR 5.7 User Guides for EPs and EHS, including 2015-2017 Modification Rule content, timing, and process issues.</li> </ul>
<b>Medicaid EHR Incentive Program Payment Administration</b>	
Fiscal Services	<ul style="list-style-type: none"> <li>Payment procedures will remain unchanged due to the 2015-2017 Modification Rule. If payments need to be recouped then they will follow current process. Reason for recoupment will be included in correspondence with the provider and if related to 2015-2017 Modification Rule then the appropriate section of rule will be referenced.</li> </ul>
Appeals	<ul style="list-style-type: none"> <li>Providers will follow the existing appeal process.</li> </ul>
<b>Audit &amp; Program Integrity</b>	
Audits	<ul style="list-style-type: none"> <li>A revised VT EHRIP Audit Plan was recently approved by CMS on September 15, 2015 and covers AIU and Stage 1 MU audits for program year 2013. Changes to our Audit Plan that accommodate the 2014 CEHRT Flexibility Rule and the 2015-2017 Modification Rule will occur in a future update to our audit strategy. Audit risk factors and procedures will be updated to reflect the new MU requirements.</li> <li>VT EHRIP is implementing a new application questionnaire that will go into effect beginning with providers attesting with the 2015-2017 Modification rules in MAPIR 5.7. While the questionnaire is not mandatory, it includes questions regarding provider acknowledgement of required documentation. In addition, providers will be required to attach their security risk assessment in support of the Protect Patient Health Information objective, beginning with 2015-2017 MU Modification rule participants. Verification that the security risk assessment is attached to attestations will occur pre-payment.</li> </ul>
<b>State-Based Performance Measures</b>	
Reporting	<ul style="list-style-type: none"> <li>Vermont's EHR Incentive Program will utilize MAPIR data and the EHRIP Case Management database to track attestations from Eligible Professionals who have submitted Program Year 2015 applications utilizing the 2015-2017 Modification Rule objectives and measures.</li> </ul>



**Appendix H: 2016 MAPIR COLLABORATIVE DOCUMENT OF INTENT**



**State of Vermont**  
**Department of Vermont Health Access**  
 280 State Street, NOB 1 South  
 Waterbury, VT 05671-1010  
<http://dvha.vermont.gov>

[Phone] 802-879-5900

*Agency of Human Services*

**Document of Intent**  
**MEDICAL ASSISTANCE PROVIDER INCENTIVE REPOSITORY (MAPIR)**  
**Multi-State Collaborative**

This document summarizes the intent of the State of Vermont and Hewlett Packard Enterprise Services LLC (hereafter, HPE) concerning the development of the Medical Assistance Provider Incentive Repository application (MAPIR) by HPE. Vermont currently has a competitively procured agreement with HPE to pay for systems and services related to its Medicaid Management Information System (MMIS).

As noted in the attached Phase V Core MAPIR Statement of Work (SOW), which is hereby incorporated by this reference, HPE is scheduled to design, develop, implement, and support the core MAPIR application which enables administration of the Medicaid Electronic Health Record Incentive Program. This application is interfaced with Vermont's MMIS. Custom integration specific to each state's MMIS is separate from costs associated with the development of the core MAPIR application and will be submitted under a separate state specific Implementation Advance Planning Document Update (IAPD-U).

The following states have agreed to cost-share the core development of MAPIR:

Arkansas, Connecticut, Delaware, Florida, Georgia, Indiana, Kansas, Massachusetts, Oregon, Pennsylvania, Rhode Island, Vermont, and Wisconsin.

Vermont believes this approach will result in savings for the individual States and CMS because the core development will be done only once and will be shared by all States that have agreed to participate.

In the event that any state needs to terminate its commitment to the multi-state collaborative due to MMIS contract expiration, the state must provide written notice to HPE and the Collaborative Steering Committee at least 60 days prior to the last day of the quarter in which they will participate in the collaborative. The last quarterly payment is due to HPE on the last day of the state's participation in the collaborative. Subsequently, the cost to individual states will change. Listed in the chart below are the quarterly costs should the participating collaborative states be reduced. If less than 9 states, or more than 14 states, participate with the multi-state collaborative, HPE and the multi-state collaborative will mutually agree to amend the SOW and renegotiate the quarterly fee.

<b>Number of States</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>10</b>	<b>9</b>
Cost per quarter per state 10/1/2016-09/30/18	\$59,541.96	\$64,122.12	\$69,465.63	\$75,780.68	\$83,358.75	\$92,620.83
Total Cost per state 10/1/2016-9/30/2018	\$476,335.68	\$512,976.96	\$555,725.04	\$606,245.44	\$666,870.00	\$740,966.64







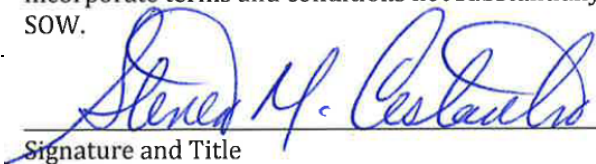
Currently, Oregon’s MMIS contract with HPE expires in February 2017, Arkansas’ MMIS contract with HPE expires in June 2017, Pennsylvania’s MMIS contract with HPE expires in October 2017, and Florida’s MMIS contract with HPE expires in June 2018. Due to the status of these State’s MMIS contracts, these states could not commit to participation in the collaborative for the entire Phase V SOW at the time of signing this document. Thus, a minimum and maximum cost has been determined.


The minimum cost represents 13 states participating in the multi-state collaborative for the entire length of the SOW. The maximum total cost represents 13 states participating in the multi-state collaborative from 10/1/2016 to 3/31/2017, 12 states participating in the multi-state collaborative from 4/1/2017 to 6/30/2017, 11 states participating in the multi-state collaborative 7/1/2017 to 12/31/2017, 10 states participating in the multi-state collaborative 1/1/2018 to 6/30/2018, and 9 states participating in the multi-state collaborative 7/1/2018 to 9/30/2018. The chart below shows the total cost for each state, during each timeframe.

Timeframe	Minimum Total Cost (13 states participating entire SOW)	Possible Maximum Total Cost	Number of Participating States
Quarters 1 & 2 10/1/2016 – 3/31/2017	\$128,244.24	\$128,244.24	13
Quarter 3 4/1/2017 – 6/30/2017	\$64,122.12	\$69,465.63	12
Quarters 4 & 5 7/1/2017-12/31/2017	\$128,244.24	\$151,561.36	11
Quarters 6 & 7 1/1/2018 – 6/30/2018	\$128,244.24	\$166,717.50	10
Quarter 8 7/1/2018 – 9/30/2018	\$64,122.12	\$92,620.83	9
<b>Total Cost Per State 10/1/2016-09/30/2018</b>	<b>\$512,976.96</b>	<b>\$608,609.56</b>	

Subject to Federal approval of the IAPD, the cost to design, develop, implement and support the core MAPIR application between 10/1/2016 and 09/30/2018 for Vermont is anticipated to be a minimum cost of \$512,976.96 to a maximum cost of \$608,609.56.

The signatory states intend to cooperate in the development of the core MAPIR application, including the definition of the work product and requirements, described in the attached SOW. Vermont also intends to agree with other participating states (listed above) on a single set of standards for the inspection and acceptance of the core MAPIR application, using the contract provisions for the inspection and acceptance of deliverables within the Commonwealth of Pennsylvania’s MMIS contract with HPE as the basis for these standards. The Pennsylvania MMIS Project Manager will be responsible for overseeing the inspection and acceptance of the core application; however, the inspection and acceptance will be done in consultation with representatives from signatory states. This letter neither overrides Vermont’s existing agreement with HPE nor does it address the development of custom interfaces of the core MAPIR application for signatory states. By signing below, Vermont agrees to amend its agreement with HPE to incorporate terms and conditions not substantially different from those contained in the attached SOW.

 \_\_\_\_\_  
Signature and Title

 \_\_\_\_\_  
Date



**Appendix I: SIM ANNUAL REPORT FOR PERFORMANCE PERIOD  
2**

Can be found on the Vermont Health Care Innovation Project website here:

<http://healthcareinnovation.vermont.gov/sites/vhcup/files/documents/September%202016%20-%20VHCIP%20Performance%20Period%202%20Annual%20Report%20to%20CMMI.pdf>



## Appendix J: References

### I. The State's "As-Is" HIT Landscape:

#### A1 EHR Adoption Rates 6

*CMS Guidelines:*

*What is the current extent of EHR adoption by practitioners and by hospitals? How recent is this data? Does it provide specificity about the types of EHRs in use by the State's providers?*

*Is it specific to just Medicaid or an assessment of overall statewide use of EHRs? Does the SMA have data or estimates on eligible providers broken out by types of provider?*

*Does the SMA have data on EHR adoption by types of provider (e.g. children's hospitals, acute care hospitals, pediatricians, nurse practitioners, etc.)?*

- *Discuss how many providers have participated in the EHR incentive program and how many have become MU users within the state.*
- *Highlight what information is now available through the incentive program participation.*
- *A new environmental scan should be conducted with data less than 1 year old. This should include both eligible and non-eligible providers.*

Resources: Provider Survey, Casey O'Hara, Heather Kendall's CQM's:

[http://healthdata.vermont.gov/sites/healthdata/files/HitHie/PDF/Aligned\\_ACO\\_CQM\\_Measures\\_EHRIP2015.pdf](http://healthdata.vermont.gov/sites/healthdata/files/HitHie/PDF/Aligned_ACO_CQM_Measures_EHRIP2015.pdf)

#### A2 The role of Broadband in Vermont's HIT/E efforts 17

- *Describe the current broadband coverage and plans to address remaining broadband challenges.*
- *Discuss broadband grants received.*
- *Include your broadband availability map.*

References (<http://publicservice.vermont.gov/content/broadband-availability>)

Contact information: Name: Clay Purvis

Dept: State of Vermont, Dept. of Public Services

Role: Connectivity Development Manager

Contact no: 802-371-9655

#### A3 Federally-Qualified Health Center (FQHC) networks 19



*Does the State have Federally-Qualified Health Center networks that have received or are receiving HIT/EHR funding from the Health Resources Services Administration (HRSA)? Please describe.*

References (<http://www.bistatepca.org/vt-primary-care-sourcebook>)

#### **A4 Status of Veterans Administration (VA) clinical facilities 21**

- *Does the State have Veterans Administration or Indian Health Service clinical facilities that are operating EHRs? Please describe.*
- *Describe what is happening with the EHR implementation to HIE connectivity for Veterans Administration and Indian Health Services (IHS) clinical facilities.*
- *Describe other entities such as state run psychiatric health facilities that are important to providers who support Medicaid consumers and that would like to share and gather information from these state run entities.*

References: (<http://veterans.vermont.gov/healthcare>) [1]  
<https://en.wikipedia.org/wiki/VistA> <https://www.ihs.gov/findhealthcare/>

#### **A5 Identification of stakeholders engaged in existing HIT/E activities 22**

*CMS Guidelines: What stakeholders are engaged in any existing HIT/E activities and how would the extent of their involvement be characterized?*

- *Discuss stakeholders and their involvement in existing HIT/E activities.*
- *Discuss how the current plans incorporate stakeholders to meet the MU stages and beyond for broad health information capture and exchange.*

**References:** IT Strategic Plan Transition Meeting #1 presentation, VHITP document, and VHITP workgroups <http://healthcareinnovation.vermont.gov/stakeholders/work-groups>

#### **A6 HIT/E Relationships with other Entities 25**

*Does the SMA have HIT/E relationships with other entities? If so, what is the nature (governance, fiscal, geographic scope, etc) of these activities?*

*Describe the relationships the SMA has with other HIT/E entities (governance, fiscal, geographic scope, etc).*

- *Discuss how these relationships help meet the state health goals using the MU capabilities and HITECH systems.*
- *Describe plans to maximize/improve the relationships.*

**References:** [http://vermontcarepartners.org/single\\_intiative.php?id=15](http://vermontcarepartners.org/single_intiative.php?id=15)





**A7 Governance Structure of Vermont's Existing HIE 25**

*Specifically, if there are health information exchange organizations in the State, what is their governance structure and is the SMA involved? \*\* How extensive is their geographic reach and scope of participation?*

- Describe how the current plans incorporate HIEs to use the MU capabilities and HITECH systems to achieve state health goals.

REFERENCES <http://legislature.vermont.gov/statutes/section/18/219/09352>  
<https://www.vitl.net/explore/network-statistics>

**A8 Role of MMIS in Our Current HIT/E Environment 27**

- Please describe the role of the MMIS in the SMA's current HIT/E environment. Has the State coordinated their HIT Plan with their MITA transition plans and if so, briefly describe how.
- Identify MMIS functionality that is integrated into HIT/E environment (using data from EHRs and interfacing with HIE).
- Describe plans to align with MITA Maturity Levels and the 7 Conditions and Standards.

References ([Information gathered from MMIS team member](#))

**A9 Current Activities Underway to Plan and Facilitate HIE and EHR Adoption 28**

*CMS Criteria:*

*What State activities are currently underway or in the planning phase to facilitate HIE and EHR adoption? What role does the SMA play? Who else is currently involved? For example, how are the regional extension centers (RECs) assisting Medicaid eligible providers to implement EHR systems and achieve meaningful use?*

- Describe State activities that are currently underway or in the planning phases HIE and EHR adoption - e.g. MCO incentive programs, HIE on-boarding programs, adoption trends of other non-eligible provider types LTC, BH.
- Describe SMA role in these activities.
- Describe how RECs or other similar entities are continuing to operate and what is their on-going role.
- Discuss the projected Medicaid Provider targets.



- Describe the support of providers to use their EHRs for other purposes (PCMH recognition, HIE connectivity, ACO participation, etc).

References: Castleton Polling Institute Survey, VHITP, HIE/T survey, VITL stats from Audit.

#### **A10 Relationship of the State of Vermont's Medicaid Agency to the State HIT Coordinator 36**

*Explain the SMA's relationship to the State HIT Coordinator and how the activities planned under the ONC-funded HIE cooperative agreement and the Regional Extension Centers (and Local Extension Centers, if applicable) would help support the administration of the EHR Incentive Program.*

*Discuss if the state has maintained a State HIT coordinator or comparable position and if so explain the relationship to the SMA.*

- Identify how HIEs and RECs (or like entities) are being used to support the administration of the EHR incentive program.

#### **A11 SMA Activities Underway that will Influence the Direction of the EHR Incentive Program over the next Five Years. 37**

*CMS Guidelines: What other activities does the SMA currently have underway that will likely influence the direction of the EHR Incentive Program over the next five years?*

- Describe other activities the SMA has underway that will influence the EHR Incentive program and involve the Medicaid program's use of HIT/E and data to support the SMA's ability to manage the medicaid program or state health population management.
- Describe interaction with other state projects such as payment reform, etc

#### **A12 Potential Impact of State Laws or Regulations on the Implementation of the EHRIP 37**

*CMS Guidelines: Have there been any recent changes (of a significant degree) to State laws or regulations that might affect the implementation of the EHR Incentive Program? Please describe.*

- Recent State law or regulation changes that affect the EHR Incentive Program or planned changes to state law/regulation.
- Expand focus to include broader HIT/E activities - e.g. super protected data regs legislation, public health reporting, HIE participation mandates, patient safety and HIT, anything related to interoperability at the state level.

**References:** <http://legislature.vermont.gov/statutes/section/18/021/01129>



This is the statute requiring reporting of immunizations through HIE

[http://www.healthinfolaw.org/state-topics/46,63/f\\_topics](http://www.healthinfolaw.org/state-topics/46,63/f_topics)

**A13 HIT activities that cross state borders 38**

- Describe HIT/E activities that cross State borders.
- Discuss significant crossing of state lines for accessing health care services by Medicaid beneficiaries.

References: VITL Progress Reports and Casey O’Hara (EHRIP Program)

**A14 Current Interoperability Status of the State Immunization (IZ) Registry and Public Health Surveillance Reporting Database 38**

- Current Interoperability status of the State Immunization registry.
- Current interoperability status of the Public Health Surveillance reporting database(s).
- Current interoperability status of the Cancer Registry.
- List any specialized registries.

References: [http://www.healthvermont.gov/hc/meaningful\\_use.aspx](http://www.healthvermont.gov/hc/meaningful_use.aspx)

**A15 Other HIT-related grants 39**

- Describe what grants, (e.g. SIM, TEFT, etc) have been awarded since last SMHP submission. Include grants that are in-progress, open, pending or not completed.

References: <http://healthcareinnovation.vermont.gov/content/april-2016-1st-quarter-2016-progress-report-cmmi>

SFY17 VITL grant agreement Attachment A Section 1

SFY17 Bi-State grant agreement Attachment A Section 1

**SECTION B: THE STATE’S “TO-BE” HIT LANDSCAPE 40**

**II. The State’s “To-Be” HIT Landscape: 40**

**B1 Specific HIT/E Goals and Objectives Next Five Years 40**

*Looking forward to the next five years, what specific HIT/E goals and objectives does the SMA expect to achieve? Be as specific as possible; e.g., the percentage of eligible providers adopting and meaningfully using certified EHR technology, the extent of access to HIE, etc.*



*Discuss SMAs HIT/HIE goals in order to align with CMS HIE IAPD goals for provider connectivity and that will also support SMA planning efforts.*

*Project the number of EPs attesting for A/I/U through 2016.*

Reference: Vermont HIT plan, Georgia Maheras

### **B2 IT Architecture, Including MMIS, for the Next Five Years 43**

*What will the SMA's IT system architecture (potentially including the MMIS) look like in five years to support achieving the SMA's long term goals and objectives? Internet portals? Enterprise Service Bus? Master Patient Index? Record Locator Service?*

- *Describe how the SMAs IT system architecture will support the long term goals and objectives, internet portals, enterprise service bus, master patient index and record locator service.*
- *Discuss plans to leverage the SLR for purposes beyond the incentive program.*
- *List the Medicaid providers that are interfacing with the SMA IT system.*
- *List local and state programs that are interfacing with SMA IT system (SNAP, TANF, Behavioral Health, etc).*

### **B3 Providers Interface with State Medicaid IT Systems Related to the EHR Incentive Program 48**

- *Describe how Medicaid providers interface with the SMA IT system for the EHR incentive program.*
- *Discuss plans to leverage the SLR for purposes beyond the incentive program.*
- *List the Medicaid providers that are interfacing with the SMA IT system.*
- *List local and state programs that are interfacing with SMA IT system (SNAP, TANF, Behavioral Health, etc).*

### **B4 Governance Structure for the Next Five Years for HIT/E Goals and Objectives 49**

*Given what is known about HIE governance structures currently in place, what should be in place by 5 years from now in order to achieve the SMA's HIT/E goals and objectives? While we do not expect the SMA to know the specific organizations will be involved, etc., we would appreciate a discussion of this in the context of what is missing today that would need to be in place five years from now to ensure EHR adoption and meaningful use of EHR technologies.*

- *Discuss the current HIE governance structure and any changes that are planned.*
- *Describe how MU of EHRs, participation in HIE and other HIT initiatives, support the SMA program management, state population health management and what funding might be needed to achieve this.*



**B5 Steps During the Next Twelve Months to Encourage the Adoption of EHRs 52**

*What specific steps is the SMA planning to take in the next 12 months to encourage provider adoption of certified EHR technology?*

- *Discuss plans for SMA to continue to encourage provider adoption of certified EHR technology.*
- *Describe how you would use your successful outreach strategies to encourage movement to MU, HIE participation as well as adoption of EHR by non-eligible provider types.*
- *Discuss the plans to maximize MU and A/I/U through 2016.*
- *Describe the changes that have been implemented for the Medicaid expansion.*

**B6 Plans to Leverage FQHCs with HRSA HIT/EHR Funding to Leverage Adoption 53**

- *Address if the State has FQHCs with HRSA HIT/EHR funding and how those resources and experiences will be leveraged by the SMA to encourage EHR adoption.*

**B7 Help to Providers to Adopt and Meaningfully Use EHR Technology 54**

*How will the SMA assess and/or provide technical assistance to Medicaid providers around adoption and meaningful use of certified EHR technology?*

- *Discuss how SMA will assess and/or provide technical assistance to Medicaid providers for meaningful use technology.*
- *Discuss expanding to Behavioral Health, LTC for adoption of CEHRT, movement by Eps/Ehs through MU stages and participation in HIE by all.*

**B8 Plans to Address Special Populations with EHR Incentive Program 54**

- *How will the SMA assure that populations with unique needs, such as children, are appropriately addressed by the EHR Incentive Program?*
- *Address how successful activities to date have been and plans to maintain or increase serving populations with unique needs.*

**B9 Plans to Leverage Other Grants to Implement the EHR Incentive Program 55**

*If the State included in a description of a HIT-related grant award (or awards) in Section A, to the extent known, how will that grant, or grants, be leveraged for implementing the EHR Incentive Program, e.g. actual grant products, knowledge/lessons learned,*



stakeholder relationships, governance structures, legal/consent policies and agreements, etc.?

- Discuss how HIT-related grants or awards from Section A will be leveraged for the EHR Incentive Program.

**B10 Anticipated New Legislation to Implement EHRIP 55**

*Does the SMA anticipate the need for new or State legislation or changes to existing State laws in order to implement the EHR Incentive Program and/or facilitate a successful EHR Incentive Program (e.g. State laws that may restrict the exchange of certain kinds of health information)? Please describe.*

**SECTION E: VERMONT'S HIT ROADMAP 69**

**E1 Graphical and narrative pathway to show the As-Is, To-Be (5 year), and plans to get there 70**

*\*Provide CMS with a graphical as well as narrative pathway that clearly shows where the SMA is starting from (As-Is) today, where it expects to be five years from now (To-Be), and how it plans to get there.*

- Provide an updated narrative pathway showing SMA As-Is, To-Be, and any new steps to fulfill agency's mission.

**E2 Expectations for provider EHR technology adoption over time: annual benchmarks by provider type 86**

*What are the SMA's expectations re provider EHR technology adoption over time? Annual benchmarks by provider type?*

- Discuss the expectations re provider EHR adoption.
- List annual benchmarks by provider type based on data gathered through the EHR incentive program.
- Align the benchmarks with HIE IAPD Appendix C as appropriate.
- Process to determine how many expected vs participated and how many dropped off.

**E3 Annual benchmarks for each of DVHA's goals that will serve as clearly measurable indicators of progress along this scenario 87**

*Describe the annual benchmarks for each of the SMA's goals that will serve as clearly measurable indicators of progress along this scenario.*

- Describe annual benchmarks for each of the SMAs goals.
- Provide parameters to align with CMS goals and focus SMA planning.

**E4 Annual benchmarks for audit and oversight activities 88**





*Discuss annual benchmarks for audit and oversight activities.*

[15] “VITL Vermont Health Care Provider Survey Summary Report” Prepared by Castleton Polling Institute at Castleton University June 2016

[https://inside.vermont.gov/agency/AHS/projects/HIE/HIE%20Program%20Documents/Vendor%20Management/VITL/VITL%20Contract/VITL%20Contract%20Management/2016/6%20-%20June/VITL\\_VT%20Provider%20Survey\\_June%202016\\_Final%20Report.pdf](https://inside.vermont.gov/agency/AHS/projects/HIE/HIE%20Program%20Documents/Vendor%20Management/VITL/VITL%20Contract/VITL%20Contract%20Management/2016/6%20-%20June/VITL_VT%20Provider%20Survey_June%202016_Final%20Report.pdf)

[16] VITL’s Final Connectivity Report for FY 2016

[https://inside.vermont.gov/agency/AHS/projects/HIE/HIE%20Program%20Documents/Vendor%20Management/VITL/VITL%20Contract/VITL%20Contract%20Management/2016/6%20-%20June/VITL\\_VT%20Provider%20Survey\\_June%202016\\_Final%20Report.pdf](https://inside.vermont.gov/agency/AHS/projects/HIE/HIE%20Program%20Documents/Vendor%20Management/VITL/VITL%20Contract/VITL%20Contract%20Management/2016/6%20-%20June/VITL_VT%20Provider%20Survey_June%202016_Final%20Report.pdf)

