Evaluation of Vermont Health Information Technology Activities

Vermont General Assembly's
House Health Care Committee
January 11, 2018

Background and Context for the Evaluation

▶ Act 73 of 2017 required the State to conduct a comprehensive review of Vermont's:

- ▶ Health Information Technology (HIT) Fund
- ▶ Health Information Technology (HIT) Plan
- ▶ Vermont Health Information Exchange (VHIE)
- ▶ Vermont Information Technology Leaders (VITL)

▶ The Act specified the Evaluation Report should include:

- ▶ An overview of health information technology and why exchanging healthcare data is critical
- ▶ A review of other states' Health Information Exchange Models
- ▶ A review of Vermont's HIT/HIE governance and structure, HIT Plan, and HIT Fund
- ▶ An analysis of Vermont's Health Information Exchange: How it compares to other states
- ▶ Recommendations to improve Health Information Technology and Exchange in Vermont

Company Overview:
HealthTech Solutions, LLC

- ▶ Founded in 2011 with headquarters in Frankfort, KY

- ▶ Over 100 consultants across the nation averaging 20+ years experience in Health Information Technology

- ▶ Provides subject matter expertise, and HIT/HIE strategic planning, consulting, and implementation support in over 20 states and to federal Centers for Medicare & Medicaid Services (CMS)

- ▶ All HTS team members on VT project have extensive HIT/HIE work experience including managing states' exchanges, and financial/technical or legal expertise
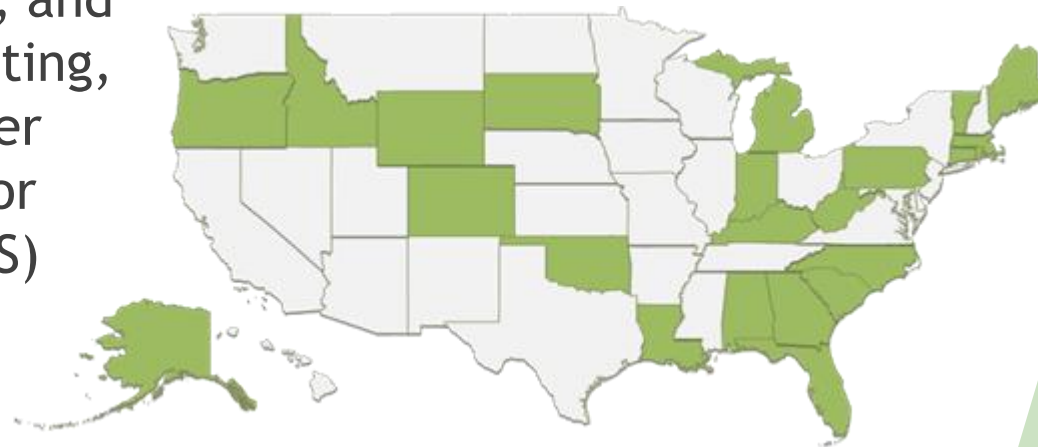
Advancing Care Information: Health Information Exchange Defined

With today's technology, expectation is a provider has each patient's health care records in provider's Electronic Health Record (EHR) system

"HIE" is technology and systems that collect healthcare data from each provider's EHR and aggregates all of a patient's health care records from all providers

HIEs aggregate health care records for all patient's providers which are accessible by health caregivers regardless of where the patient goes for health care services

All HIEs aggregate data – sophisticated HIEs provide high-quality population health reports which is essential for health care reform and improved health outcomes

Evaluation Methodology

- Conducted a review of national literature on Health Information Technology and Exchange of health care data

- Reviewed and analyzed State of Vermont and VITL documents

- Conducted interviews with nine states' HIEs and created cross-state comparisons

- Conducted individual and group interviews with 89 Vermont stakeholders:
  - 60 individual interviews
  - Eight focus/group interviews
  - One technical expert panel
  - Internal State of Vermont committee identified stakeholders from across the state
  - Stakeholders represented: legal, government, providers, payers, policy-makers, hospitals, health care associations, patients, Information Technology, and other sectors
  - Interview questions spanned the current status of HIT/HIE in Vermont, VHIE performance, governance, and funding, and the future (to-be) of HIT/HIE

Getting a Sense of Stakeholder Opinions

Question	Yes	No	Undecided
Is it critical to have the VHIE in existence in Vermont?	91%	2%	7%
Is the VHIE meeting the needs of your organization?	19%	47%	34%
Is the VHIE meeting the needs of Vermont?	19%	51%	30%
Is it critical to have VITL manage the VHIE moving forward?	21%	53%	26%
Do you think the organizational structure of VITL allows them to successfully maintain and operate the VHIE?	21%	42%	37%
What about the relationship to the State? Has State provided guidance and planning?	9%	56%	35%
Should the HIT fund continue?	58%	2%	40%*

Summary of Survey Results:
- It is essential for Vermont to continue the VHIE
- VHIE's current structure and governance is not meeting stakeholder and State needs
- Responses to additional questions indicate VHIE can be fixed with improved HIT/HIE governance and organizational structure

* *76% of 40% reserved final opinion until changes made to governance, accountability, strategic planning, and overall vision*

Health Information Exchange: A National Perspective

HIE is Essential and Meant to be Backbone of Health Data

- **Advancing Care Information: Federal Meaningful Use EHR Program:**
  - Provides incentives for providers to use EHRs
  - If providers do not exchange immunization and clinical data Medicare payments are reduced

- **Healthcare providers use the HIE to:**
  - Improve safety of patient care by reducing medication and medical errors
  - Provide clinical decision support tools for more effective care and treatment
  - Eliminate redundant or unnecessary testing
  - Improve public health reporting and monitoring
  - Allow community based providers to coordinate care with other caregivers

- **Vermont:** Reform efforts rely on HIE to provide data for Accountable Care Organizations (ACO), and policymakers to measure effectiveness and impact on costs. State needs to measure and compare health care outcomes for patients under ACO with patients not under ACO

- **Vermont:** Recognizes HIE as a "public-utility": State HIT Fund (health care claims tax imposed on insurers) used to develop programs and initiatives that promote and improve health care through health information technology

Health Information Exchange: A National Perspective

- **Sustainability challenges**
  - From 2010-2014, States received Federal grants to establish HIEs with a vision they would be sustainable by 2015. The vision was not realized and most HIEs still depend on public funding.
  - In the meantime, around the country entities like University of Vermont system, developed their own internal HIE capabilities, reducing the value of centralized HIE service

- **Technological and Quality challenges**
  - The wide variety of Electronic Health Record technologies available and the lack of nationwide data sharing standards have resulted in data quality and exchange issues.

- **Workflow challenges**
  - Many HIEs require users to log into a second system to get to the HIE
  - Many HIEs do not successfully match patient records across providers which results in multiple separate records (not a consolidated record)
  - Many HIEs only allow users to view data—the data cannot be downloaded into the EHR or shared

- **Successful HIEs**
  - Despite challenges, there are states that have successful and highly functional HIEs

Successful HIE Models: *Lessons Learned from Nine States*

States: Colorado, Delaware, Maine, Maryland, Michigan, Nebraska, Oklahoma, Oregon, & Utah
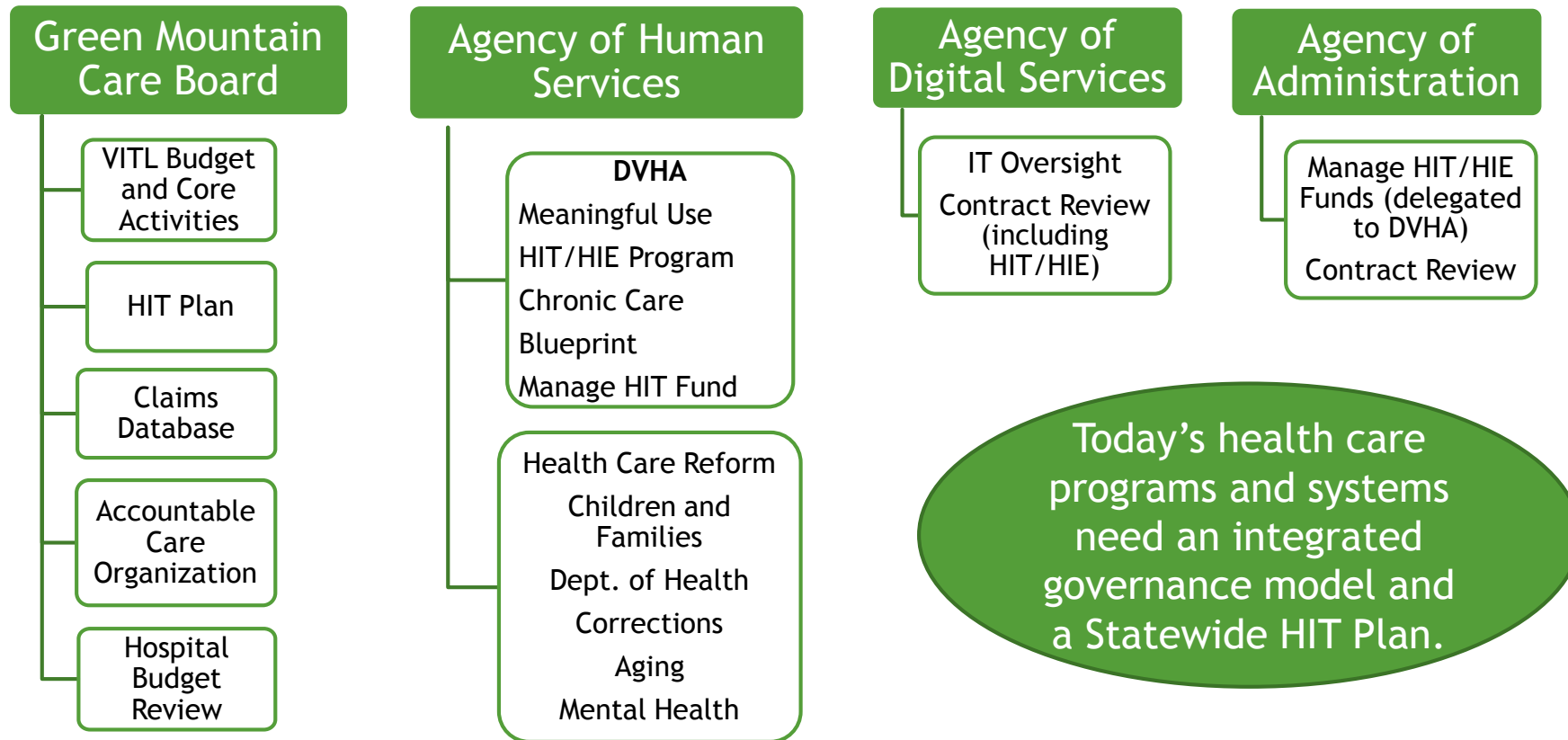
These nine states have successful HIEs and share common characteristics:

1. **HIE activities are formally structured and governed with clearly defined roles**

2. **HIEs have an effective governance model and are performance driven**
   - Highly integrated with the state's HIT/HIE structure (including Medicaid agency)
   - Strong strategic plans with clearly defined outcomes and performance measures
   - Accountable to all customers including the state

3. **Laser-focused on core HIE functions:**
   - Connect all patient data to the system in a secure manner
   - Significant percentage of patients (with their records matched) accessible in HIE
   - Produce high quality data: Have complete and accurate data that support high-quality health care and the ability to measure health systems
   - The system is secure, yet efficient, and easy to access and exchange health records

4. **Financial decisions are transparent and can be traced back to program goals**

Health Information Exchange in Vermont

Vermont Current State: Lack of Integration of State's Health Related Programs

Green Mountain Care Board
- VITL Budget and Core Activities
- HIT Plan
- Claims Database
- Accountable Care Organization
- Hospital Budget Review

Agency of Human Services
- **DVHA**
  Meaningful Use
  HIT/HIE Program
  Chronic Care
  Blueprint
  Manage HIT Fund
- Health Care Reform
  Children and Families
  Dept. of Health
  Corrections
  Aging
  Mental Health

Agency of Digital Services
- IT Oversight
  Contract Review (including HIT/HIE)

Agency of Administration
- Manage HIT/HIE Funds (delegated to DVHA)
  Contract Review

> Today's health care programs and systems need an integrated governance model and a Statewide HIT Plan.

▶ **Accountability is difficult when State-sponsored HIT efforts are segregated and spread across multiple State entities with no alignment**

▶ **Lack of HIT Plan hinders coordinated view of HIT/HIE efforts in Vermont**

  ▶ Last approved Plan was 2010 (in part, because State focused on Federal HIT reporting requirements)

Current VHIE Governance Structure Does Not Provide Sufficient Oversight

- **VHIE still relies heavily (95%+) on public funding (other HIEs 33-60%)**

- **Having four State entities share governance of VHIE gives high degree of autonomy to VITL**

- **Close oversight is needed to overcome stakeholder perceptions**

Shared State Oversight

VITL

VITL Board of Directors
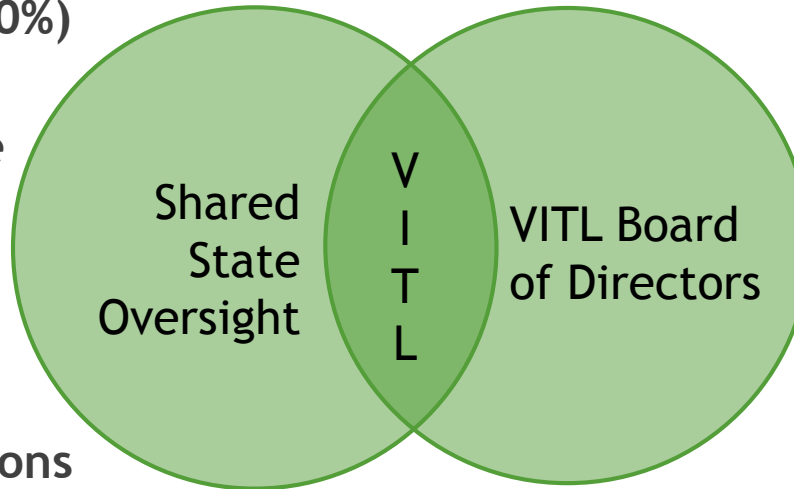
Board gives VITL management significant decision making authority

Interviewees indicated an absence of clear direction and communication from the State

Many stakeholders say they have lost confidence in VITL as the organization to operate VHIE

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Vermont Current State: Low % of Patients and Issues with Quality

▶ **There is a low percentage of patients' data accessible in VHIE**

    ▶ **Other HIEs Opt-out policy vs. Vermont's Opt-In policy**

    ▶ **V**HIE consent management process is cumbersome (users log into different system)

    ▶ VITL reports that only 19.5% of Vermonters have been asked to provide consent
        ▶ Patients must provide written consent to have data viewable
        ▶ Of those asked, 96% consented—patients want their data to be accessible in VHIE
        ▶ End result:19% (less than one in five) patients' records currently accessible in VHIE

▶ **There are gaps in matching patients with records**
    ▶ VITL does not have internal capability to provide number of patients and addresses. (Rely on a vendor that provides "universe" numbers.) Vendor reported more patients with VT addresses than number of VT citizens--that results in duplication

Consistent concern about data quality was expressed by interviewees

▶ **Records are incomplete and/or not consistently accurate**

Vermont Current State: VHIE is Challenging to Use and Usage is Low

- **VHIE's technology is not as efficient and VHIE is not as easy to use as other HIEs**
  - Most users have view-only access: cannot exchange (share) health records
  - In many cases, users must log in to a different system to get access to VHIE
  - VHIE has somewhat redundant systems

- **Usage statistics show providers generally use VHIE for limited purposes**

  > Providers do not get high value information for amount of time needed to access and find data

  - VHIE's role is essentially routing messages via third party vendors (e.g., an alert is sent to providers when patients discharged or readmitted to a hospital)
  - Providers do not use because patient numbers are low and issues with data quality

- **Most interviewees were not knowledgeable about VHIE services and functions**

Current State: Issues with Financial Traceability and Transparency

VHIE Funding	
$31,859,937	HIT Meaningful Use Program Funding (SFY 09-SFY 17)
	Of $31.8 M: $20,855,442 federal HIT funds *$11,004,495 direct/matched state funds*
$7,066,775	HIE Federal Grant (2010-2014)
$5,364,658	State Innovation Model
$44,291,370	**Total VHIE Funding**

▶ SFY14 - SFY16 audited financials revealed recurring/similar findings on internal controls

▶ VHIE received significant federal and state funding under Meaningful Use EHR Program but status of projects not included in federally mandated reports

▶ VITL has never had a corporate long-term VHIE strategic business plan

▶ National standard for non-profits: At least 70% expenditures for programs (vs. overhead). While VITL is within range, trend is downward, with 2016 dropping close to 70% threshold

▶ Some VITL board policies out-of-date and legislatively mandated reports incomplete

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Analysis of Vermont's HIT Fund

▶ Healthcare claims tax which supports
66%: Vermont Information Technology Leaders
34%: State Sponsored Programs
   ▶ Department of Vermont Health Access HIT/HIE Program
   ▶ Department of Health
   ▶ Blueprint for Health
   ▶ Department of Corrections
   ▶ Payment Reform
   ▶ Vermont Chronic Care Initiative
   ▶ Green Mountain Care Board
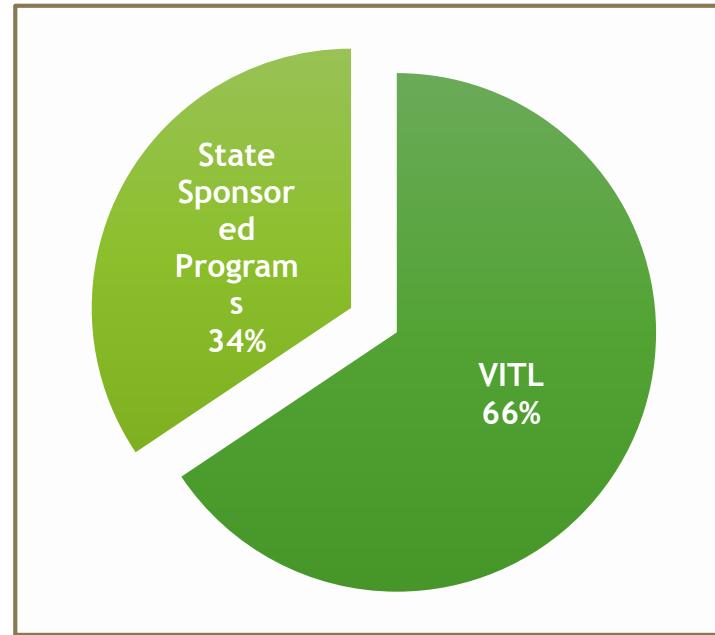
Source: DVHA Business Office

▶ SFY 18 HIT Fund $2.4M (down from $3.9 M in SFY 16)

▶ HIT Fund scheduled to sunset in SFY 18

There is strong support among interviewees for the HIT Fund to continue, yet many interviewees conditioned support on improving oversight and priority setting.

It is important to note that a portion of HIT and Blueprint funds went to VITL under grants and contracts for services.

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Recommendations

Go Back to Basics

▶ There is a national explosion of health information technology which evolves every day. Governance and structure of Vermont's HIT/HIE initiatives no longer meet ever-growing need to integrate systems and services to improve healthcare delivery and outcomes.

▶ Vermont is at a crossroads and has opportunity to once again be a national leader

▶ Vermont needs to develop effective HIT/HIE governance, create and execute an HIT planning process, link financial investment to performance, and better leverage State's relationship with VITL

    ▶ Establish Governance Committee and HIT Plan process that is owned by the State and done with full commitment of all stakeholders

    ▶ Federal and State financial investment must be linked to performance and accountability to customers, including State

    ▶ Transform VITL Board to focus on operations and core services, and improved financial oversight

Applying Lesson 1:
Recommendations for Effective Structure and Governance

▶ **Using existing State entities and private sector leaders, establish across-the-board Governance Committee to align projects and initiatives**

  ▶ Develop broad HIT/HIE policies and strategic direction

  ▶ Draft and approve HIT Plan

  ▶ Recognizing there are existing agreements between VHIE and State sponsored programs for data sharing and services, develop timelines and plans to continue that work

  ▶ Ensure various components, systems, and efforts tie back up to the HIT Plan

  ▶ Oversee the State's HIT Fund and prioritize and coordinate activities

▶ **Administratively attach Committee to State (DVHA) with additional resources**

  ▶ Contract oversight remains with State entities

| The State and stakeholders must commit to follow and meet the HIT Plan goals and objectives |

▶ **Subgroups (finance, technology, and clinical) draft policies for Committee approval**

  ▶ Statewide Data Governance Subcommittee

  ▶ Legal and Policy Subcommittee to draft data ownership and control policy

  ▶ HIT Plan Subcommittee to oversee annual HIT Plan updates

Applying Lesson 2: Recommendations for VHIE Governance

▶ **Transform** VITL Board Membership to include users or potential users of VHIE, or who have specific expertise

▶ Emphasize role of VITL Board is to focus on operations — meeting core services and use the priorities established in HIT Plan to drive technical decision-making

▶ Fill State's VITL Board slot with individual who has experience, credibility and trust of public and private leaders, and can put in effort needed

▶ Require VITL to submit its legislatively mandated annual report through Governance Committee

Many stakeholders expressed strong support for VHIE. Given providers must exchange data to meet mandates and healthcare reform, the VHIE must continue.

Question is who should operate it? Successful HIEs are usually public/private partnerships. State may consider bidding out VHIE at some point, but now is not the time.

Applying Lesson 3: Recommendations for VHIE Performance

- **Use State contract funds to improve core functions with payments tied to specific deliverables and timelines**

- **VITL should work with stakeholders to develop and implement mechanisms to:**

  - Increase number of Vermonters who consent to have their data accessible

  - Devote resources to match patients and records

  - Implement easier ways to access and use data, that do not burden providers

- **Once VITL meets core services obligations, high-value use case services should be driven by customer demand and needs.**

An effective Governance Committee model which holds VITL accountable can greatly improve VHIE performance. There is wide-spread support for VITL staff; the executive management and the Board of Directors need to refocus energies on operations and improving core services.

Applying Lesson 4:
Financial and Management Recommendations for VITL

▶ Adopt financial reporting and transparency best practices from other HIEs

▶ Require VITL to itemize income and expenses by specific source

▶ Establish Audit Committee (Use National Council of Nonprofits Toolkit for framework)

▶ Conduct operational audit of VITL's financial controls, and management practices
  ▶ Examine if contract with State complies with Federal and State uniform guidelines
  ▶ Further review if VHIE has tangible/intangible assets and how State should account for them

▶ State/VITL contract July 1, 2018-June 30, 2019
  ▶ Continue to involve State entity counsel throughout negotiations
  ▶ Add more delivery-based terms for core services with financial and legal consequences
  ▶ Correct all findings and meet Evaluation recommendations as condition for payment
  ▶ Consider incentives if VITL exceeds performance or completes activities under budget

Successful HIEs Offer High-Value Services: Getting VHIE to that Level

Once core functions and improvements completed, move to high-value services:

▶ Extract sections of patient's full record and have system search capabilities for users

▶ Allow providers and State to exchange public health reports and submit immunization and specialized registry data

▶ Implement accurate and complete Master Patient Index (MPI) and Provider Directory that can attribute patients to providers or Accountable Care Organizations (ACOs)

▶ Provide quality reports to support data-driven care decisions

▶ Submit providers' Meaningful Use Program reports directly from providers' Electronic Health Records

▶ Coordinate with Vermont's All Payer Claims Database (VHCURES) to integrate claims with clinical data and link patients' healthcare services with costs at patient and the population levels.

Core Services

High Value Uses

Integrated Whole-Person Healthcare