

Health Information Exchange (HIE)

Strategic Plan

2018-2022 Plan (2020 Update)

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Sandi Hoffman, Deputy Commissioner, Department of Vermont Health Access
November 18, 2020

Overview

- **Introductions**
- **Review of Core Concepts Underpinning HIE Planning in Vermont**
- **2020 Progress & 2021 Plans Ahead**
 - Collaborative Services Project
 - Leveraging Health Data Infrastructure to Support COVID-19 Response
 - New Federal Interoperability Rules
 - Developing Vermont's HIE Governance Structure
 - DVHA/VITL Contract
- **Evolution of the HIE Ecosystem**

Introductions

HIE Planning – Core Concepts

The HIE Plan covers three essential elements:

1. Vermont's specific vision and goals for the exchange of health data that express what the State aims to achieve.
2. The HIE ecosystem - the environment required for HIE to effectively function.
3. Clear objectives and tactical plans - a clear path for achieving progress toward the vision.

HIE Planning – Core Concepts

HIE System Goals

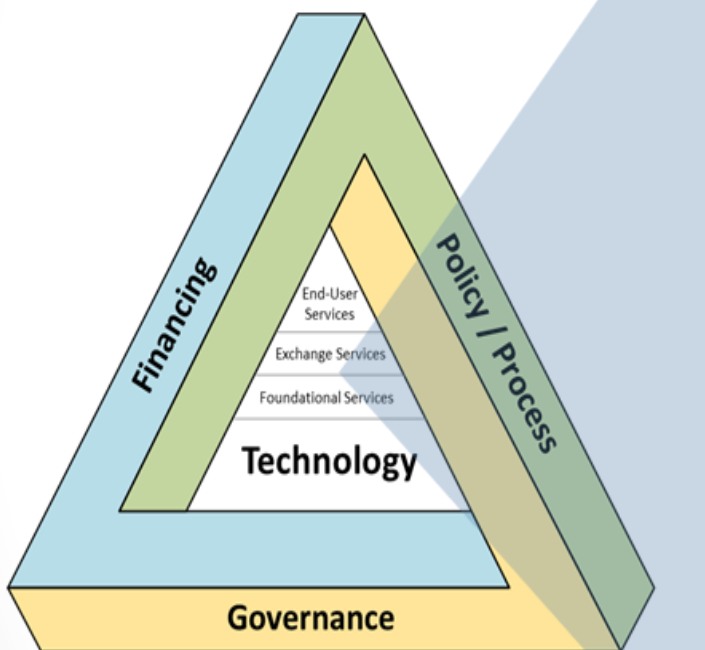
Create One Health Record for Every Person - Support optimal care delivery and coordination by ensuring access to complete and accurate health records.

Improve Health Care Operations - Enrich health care operations through data collection and analysis to support quality improvement and reporting.

Use Data to Enable Investment and Policy Decisions - Bolster the health system's ability to learn and improve by using accurate, comprehensive data to guide investment of time, labor, and capital, and inform policy making and program development.

HIE Planning – Core Concepts

The HIE Ecosystem



End-User Services		
Reporting Services	Notification Services	
Analytics Services	Consumer Tools	
Care Coordination Tools	Patient Attribution & Dashboards	
Exchange Services		
Data Extraction & Aggregation		Data Access
Interoperability	Data Quality	Data Governance
Foundational Services		
Identity Management	Consent Policy & Management	
Security	Provider Directories	

HIE Planning – Core Concepts

The HIE Steering Committee

Name	Role	Voting
Sandi Hoffman	Chair	Voting
Tyler Gauthier, OneCare VT	ACO Representative	Voting
Simone Rueschemeyer, Vermont Care Partners	Mental Health & Substance Use Representative	Voting
Georgia Maheras, BiState Primary Care Assoc.	Primary Care Representative	Voting
Kristin McClure, Agency of Digital Services	Technologist	Voting
Tracy Dolan/Jessie Hammond, Dept. of Health	Public Health Representative	Voting
Beth Anderson, VITL	Health Information Exchange Representative	Non-Voting
Jimmy Mauro, Blue Cross Blue Shield	Payer Representative	Voting
Vacant	Consumer Representative	Voting
Emma Harrigan, VT Hospital Association	Hospital Care Representative	Voting
Beth Tanzman, Blueprint for Health Program	Practice Innovation Lead – Blueprint for Health	Non-Voting
Sarah Kinsler, GMCB	Green Mountain Care Board	Non-Voting
Emily Richards, DVHA	HIE Program Representative	Non-Voting

Clear Roles and Goals are the Key to Vermont's HIE Governance Model

Where do stakeholders convene to discuss HIE matters, set priorities, and propose policy?

HIE Steering Committee

The HIE Steering Committee develops, executes and evaluates the HIE Plan and monitors HIE performance with operational and administrative support from DVHA's HIE Unit.

Where do decision makers go for support?

Ad Hoc Sub-Committees

The HIE Steering Committee actively leverages insights and expertise from existing groups and creates ad-hoc sub-committees when needed.

Who is responsible for oversight?

Green Mountain Care Board

The GMCB approves the statewide HIE Plan and VITL's budget.

Who provides HIE services?

VHIE & Other HIE Service Organizations

VITL and other HIE service vendors such as Bi-State Primary Care Association and OneCare Vermont.

How are service providers held accountable?

Performance-Based Contracts

The Steering Committee sets strategy to drive investment and works with DVHA and other contract owners to ensure contracts drive performance goals.

2020 Progress & 2021 Plans

The Collaborative Services Project

- The Collaborative Services Project kicked-off in 2019 with a commitment from various HIE partners to invest in improving the foundational services offered by Vermont's Health Information Exchange (VHIE).
- The project offers an opportunity to invest in one system for a more efficient way of obtaining valuable, usable data to improve, measure, or direct health care.
- The project is managed in phases:
 - Phase I: Master Patient Index, Terminology Services, Integration Engine
 - Phase II: New Data Repository
 - Phase III: Managing New Data
 - Phase IV: Decision Support & Analytics

2020 Progress & 2021 Plans

The Collaborative Services Project – Status Update

Phase I: Master Patient Index, Terminology Services, Integration Engine

- All updates are live and proving to enhance VHIE services
- Example: Match rates for a reference population went from ~65% to over 95% after implementation of the new Master Patient Index

Phase II: New Data Repository (Platform)

- New Data Repository procured with the assistance of the Collaborative Services Subcommittee (formerly a procurement advisory group)
- Expected to go live April 2021
- The Blueprint for Health’s Clinical Repository has been retired – data extracts will begin in 2021
- The Collaborative Services Subcommittee concludes that the new platform will meet the data needs of subcommittee members

Collaborative Services Subcommittee	
Name	Organization
Bechir Bensaid	HIE Program
Tyler Gauthier	OneCare Vermont
Ken Gingras	Vermont Care Partners
Jessie Hammond	Vermont Department of Health
Craig Hill	VITL
Sarah Lindberg	Green Mountain Care Board
Jimmy Mauro	Blue Cross Blue Shield
Lauri Scharf	Bi-State Primary Care Association
Carolyn Stone	VITL
Richard Terricciano	ADS-EA
Mahesh Thopasridharan	ADS-EPMO-HIE PM
Tim Tremblay	DVHA - Blueprint
Dawn Weening	Vermont Chronic Care Initiative

2020 Progress & 2021 Plans

The Collaborative Services Project – Status Update

- **Phase III: Managing New Data**

- The HIE Steering Committee agreed to work to expand the types of data aggregated by the VHIE to include social determinants of health, substance use disorder, mental health, behavioral health, and claims

- **Phase IV: Decision Support & Analytics**

- Demand driven services based on VHIE capabilities and consumer needs

DATATYPES ROADMAP

KEY --->

POLICY
GOVERNANCE
TECHNOLOGY -
TECHNOLOGY - Planned
FINANCING

	2020 - Q1			2020 - Q2			2020 - Q3			2020 - Q4			2021 - Q1			2021 - Q2			2021 - Q3			2021 - Q4													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC											
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SDoH										Data Sharing Agreements						Connectivity Criteria																			
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SUD / BH / MH	DA EMR Implementation																																		
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Claims																			VHIE Capable of Aggregating Claims Data									Pilot Design: Medicaid Claims Aggregated in the VHIE							

COVID-19 Response

Overview

- **Challenge:** Nationwide, electronic data gathering has not been widely adopted for public health purposes and/or public health data systems are developed in isolation from HIE systems, even where the benefits of electronic public health reporting are well understood.
 - Efficiencies in Connectivity
 - Enhanced Data Quality
 - Record Matching
 - Central Access Point to Clinical Data
- **Vermont's Solution:** In early April, the Secretary of the AHS issued a directive to VITL to provide access to patient data in the VHIE to AHS to support COVID-19 response work during the duration of the Governor's declared State of Emergency (follows HHS enforcement discretion).

COVID-19 Response

Leveraging the VHIE

- In support of Vermont's COVID response effort, VITL has:
 - Developed an interface between VT Public Health Laboratory (VPHL) and the VHIE to allow providers direct access to the VPHL testing data through the VHIE provider portal, VITLAccess, and enabled electronic lab results delivery into EHRs.
 - Generated a daily report on positive test results for the State of Vermont's epidemiological modeling.
 - A COVID-response focused team of VDH staff have been trained on and gained access to patient records in the VHIE via the provider portal to gather data on patients that have tested positive for COVID-19.
 - Generated data to support VDH's federal reporting requirements to the NNDSS and other federal entities for national disease tracking.
 - Connected locally-based Emergency Medical Technicians across the state to the VHIE provider portal so they may see patient records in real-time to support the provision of emergency care.
 - Fed Vermont hospital data directly to EMResource, an HHS tool that hospitals are required to use to report emergency care information.
 - Captured testing data from the Broad Institute, the main research lab supporting Vermont's hospitals and universities in COVID-19 testing.
 - The VHIE to OneCare Vermont "gateway" provides lab results which support reporting, analysis, and care coordination for ACO participating providers.

COVID-19 Response

Ongoing Support + Building on the Momentum

- The VHIE will continue to be used in the support efforts. Currently known ways include:
 - Connecting the VHIE to national data sources to ensure that patient's information follows them no matter where they're treated.
 - Moving high volume immunizers like pharmacies to daily automated feeds to help VDH with the CDC's daily reporting requirements for COVID-19 vaccine administration.
 - Automating sharing of statewide testing results and enhance vaccine collection through the VHIE (e.g., long term care facilities and added commercial labs)
 - Continuing data sharing to support ongoing syndromic surveillance through the VHIE, beyond COVID-19.
 - Connecting additional VDH registries to the VHIE to automate public health reporting to VDH and make essential data available to providers (e.g., birth, death, immunization).
 - Establishing direct feeds of lab results to health care organizations and offering reporting to stakeholders for specialized care needs.
 - Leveraging the VHIE's connection to EMResource to automate hospital reporting in future emergencies.

COVID-19 Response

Ongoing Support + Building on the Momentum

- To Support VDH in leveraging VHIE data and technology to support their existing work, the *Protocols for Access to Protected Health Information on the VHIE* has been expanded to allow for:
 - ❖ Accessing health data to support VDH’s work to prevent or control disease, injury, or disability and in support of federal/state mandated reporting (e.g., immunizations).
 - ❖ Accessing health data in response to a “Significant Public Health Risk” allowing the Commissioner of VDH to determine when this would be necessary as defined by state law.

Interoperability Rules

1. Office of the National Coordinator:
21st Century Cures Act Final Rule
2. Center for Medicare & Medicaid Services (CMS): **Interoperability & Patient Access Final Rule**



Shared
Goal

Putting the patient at the center of health care by driving interoperable systems that open a window to individual's health information.

Interoperability Rules

- **ONC's Cures Act Final Rule** supports seamless and secure access, exchange, and use of electronic health information. It aims to increase innovation and competition by fostering an ecosystem of new applications (apps) that provide patients with more information about their healthcare.
 - Defines and penalizes Information Blocking
 - Uses the ONC IT Certification Process to Force Use of Data Exchange Methods
 - Raises the baseline for data exchange by establishing the USCDI (core data set)
 - *Who's impacted?* HIEs, health-IT developers, health care providers
- **Interoperability & Patient Access Final Rule** creates a framework of requirements to enable individuals to access their own health care data and drive interoperability.
 - Relies on ONC's technical standards to drive action
 - *Who's impacted?* Payers providing Medicare Advantage (MA), Medicaid, CHIP, and Qualified Health Plan (QHP) issuers on the Federally-facilitated Exchanges (FfEs)

Vermont's HIE Governance Structure

2020 Steering Committee Progress

- **Collaborative Services Subcommittee** formed to (1) provide strategic insight to VITL as they progress on the Collaborative Services Project and (2) provide a project assessment and recommendation to the Steering Committee to enable their evaluation of this strategic effort to solidify the foundation of the VHIE to benefit its many users.
- **Connectivity Criteria Subcommittee** – updates to the Connectivity Criteria and expanded focus to support connectivity with the Designated Agencies
- **Interface Prioritization Subcommittee** – developed a matrix to support annual selection of connectivity priorities
- **Consent Subcommittee** – continued work evaluating consent (majority of findings expected from patient engagement survey fielded this month)
- **PartII+** – began work designing a process to develop stakeholder-informed policies and processes for managing substance use disorder data and other sensitive data types

Vermont's HIE Governance Structure

2021 Steering Committee Plans

- **Collaborative Services Subcommittee** – aid VITL in developing a longer-term technical roadmap
- **Connectivity Criteria Subcommittee** – update the Criteria in accordance with progress made to expand data aggregated in the VHIE; update existing Criteria considering newly identified needs and standards
- **Interface Prioritization Subcommittee** – develop annual connectivity priorities
- **Population Health Subcommittee**– advise VITL and other health data producers and aggregators on needed data sets to augment research and population health management efforts; 2021 focus: social determinants of health data
- **PartII+** – continue work developing stakeholder-informed policies and processes for managing substance use disorder data and other sensitive data types; work is contingent on changes introduced by the CURES Act
- **Outcomes-Based Certification Subcommittee** – support the State in developing the outcome measures used by CMS to certify the VHIE (allows access to maintenance funding for the system)
- **Claims Pilot Subcommittee** – design a pilot to test the integration of claims data into the VHIE system with a focus on Medicaid claims

Note: 2021 Committee will invite new representatives from long term care and home health organizations

DATATYPES ROADMAP

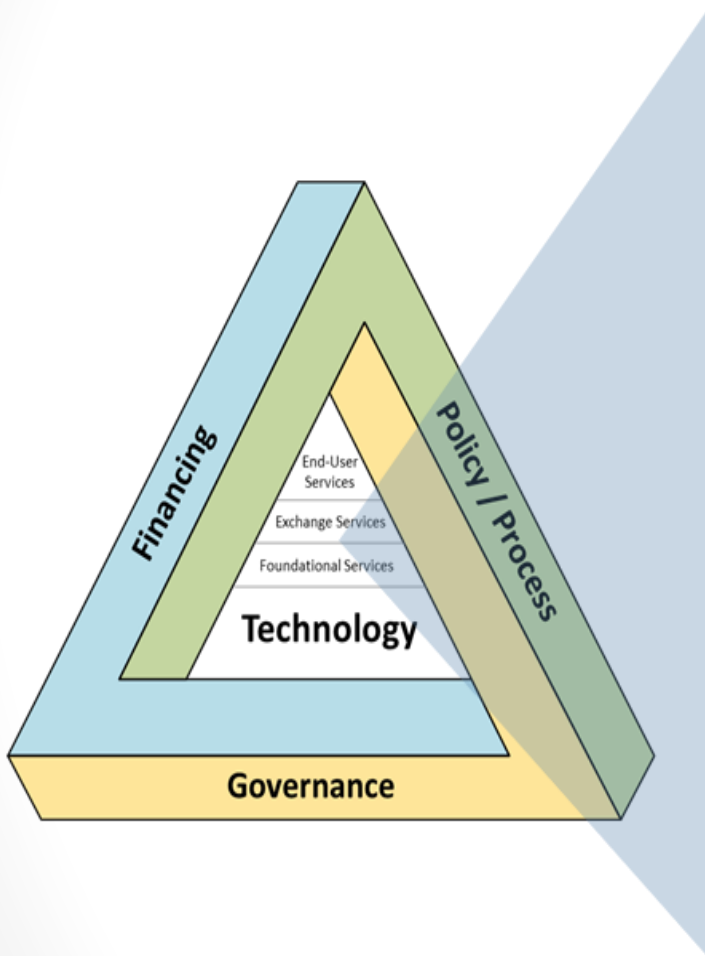
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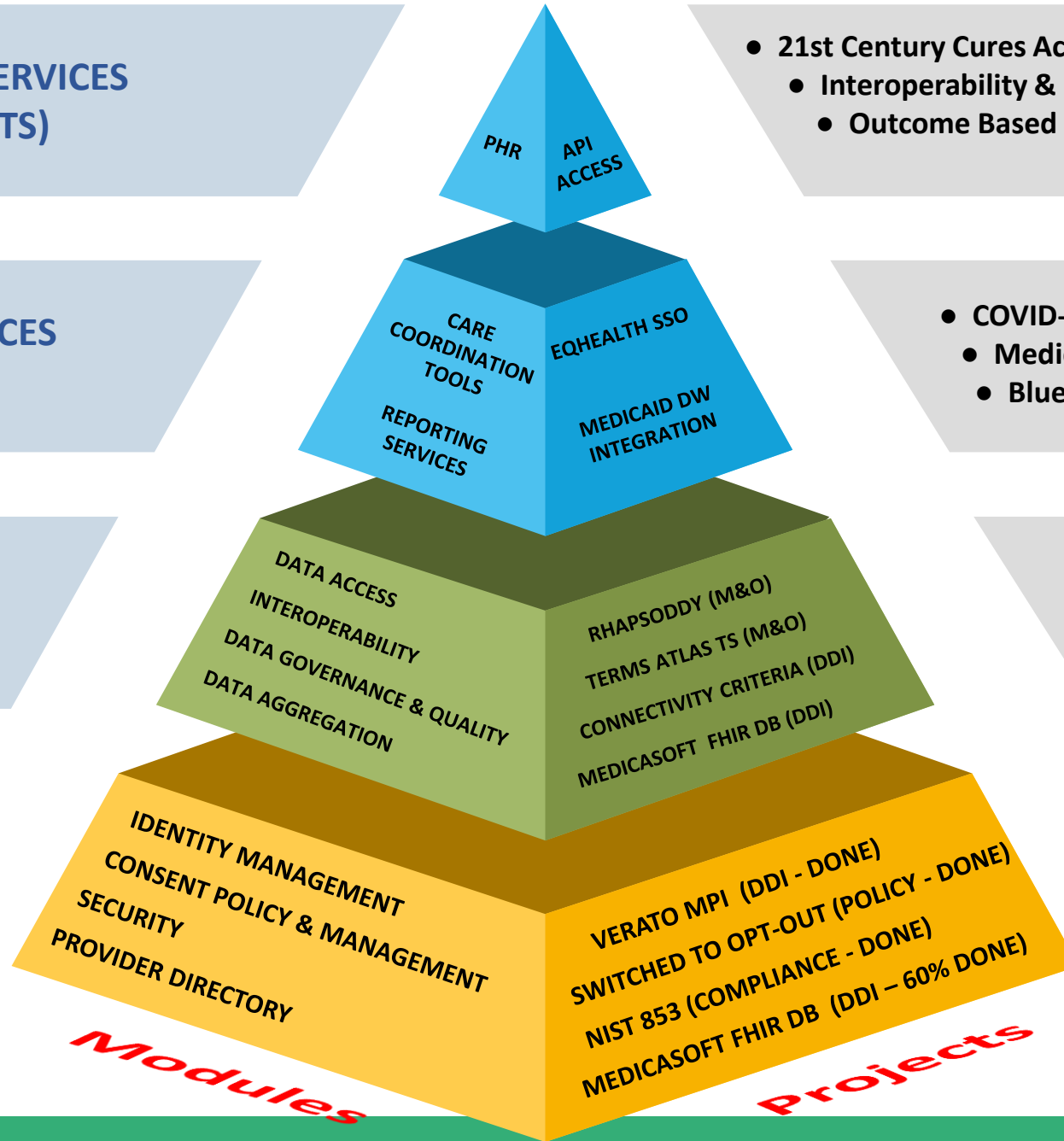
**END-USER SERVICES
(PATIENTS)**

**END-USER SERVICES
(PROVIDERS)**

**EXCHANGE
SERVICES
(50% DONE)**

**FOUNDATIONAL
SERVICES
(80% DONE)**

**ONC Technology
Stack**



- 21st Century Cures Act Final Rule (45 CFR Parts 170 & 171)
- Interoperability & Patient Access Final Rule (CMS9115-F)
- Outcome Based Certification (OBC)

- COVID-19 Reporting
- Medicaid Services Reporting
- Blueprint Extracts

- HL7 Interfaces & FHIR APIs
- Data Quality
- Sensitive Data
- Claims & SDoH Data

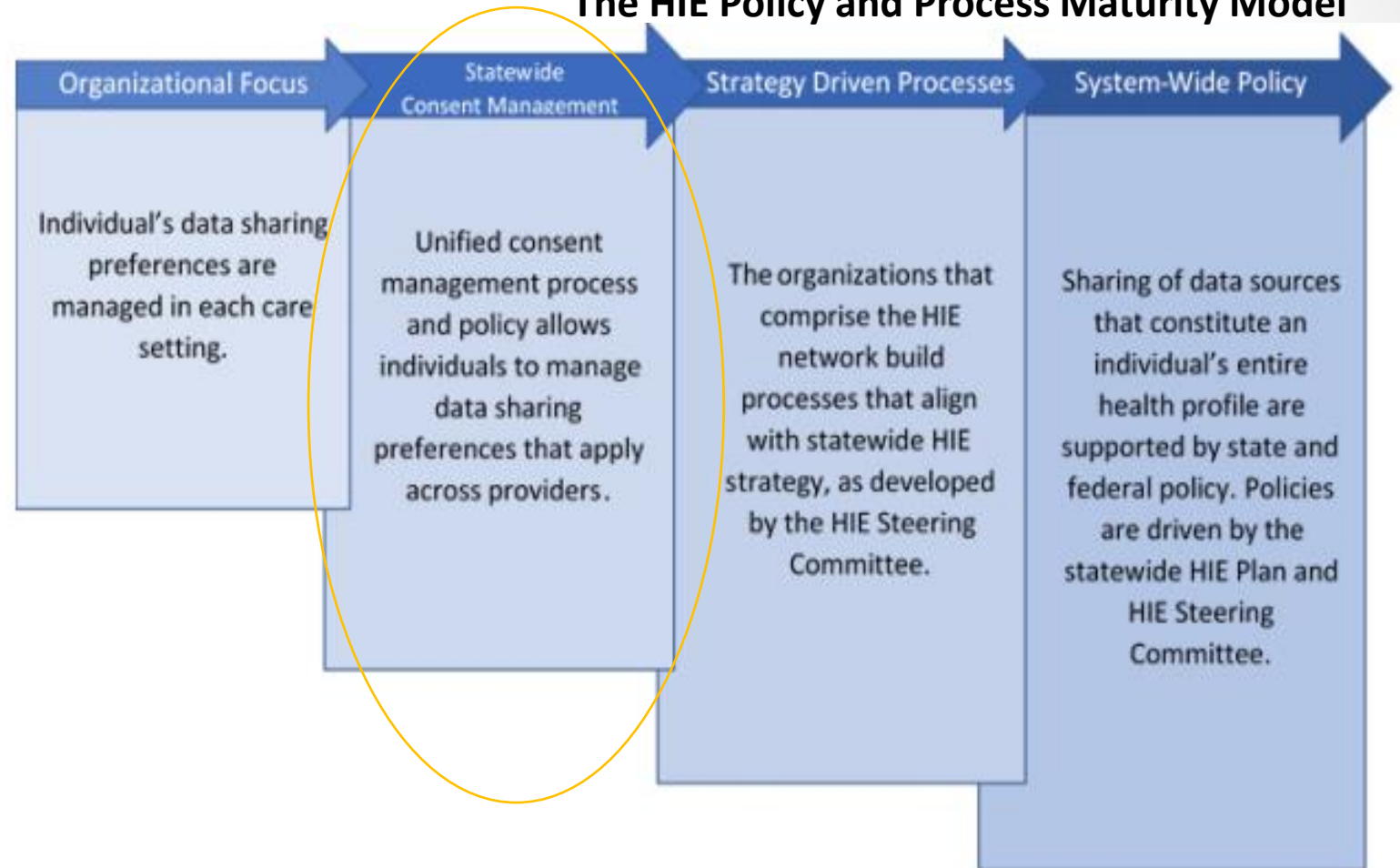
- Consent System Implementation
- Provider Directory

**CY'21 DVHA/VITL
Contract
Characteristics**

HIE Ecosystem: Policy

The HIE Policy and Process Maturity Model

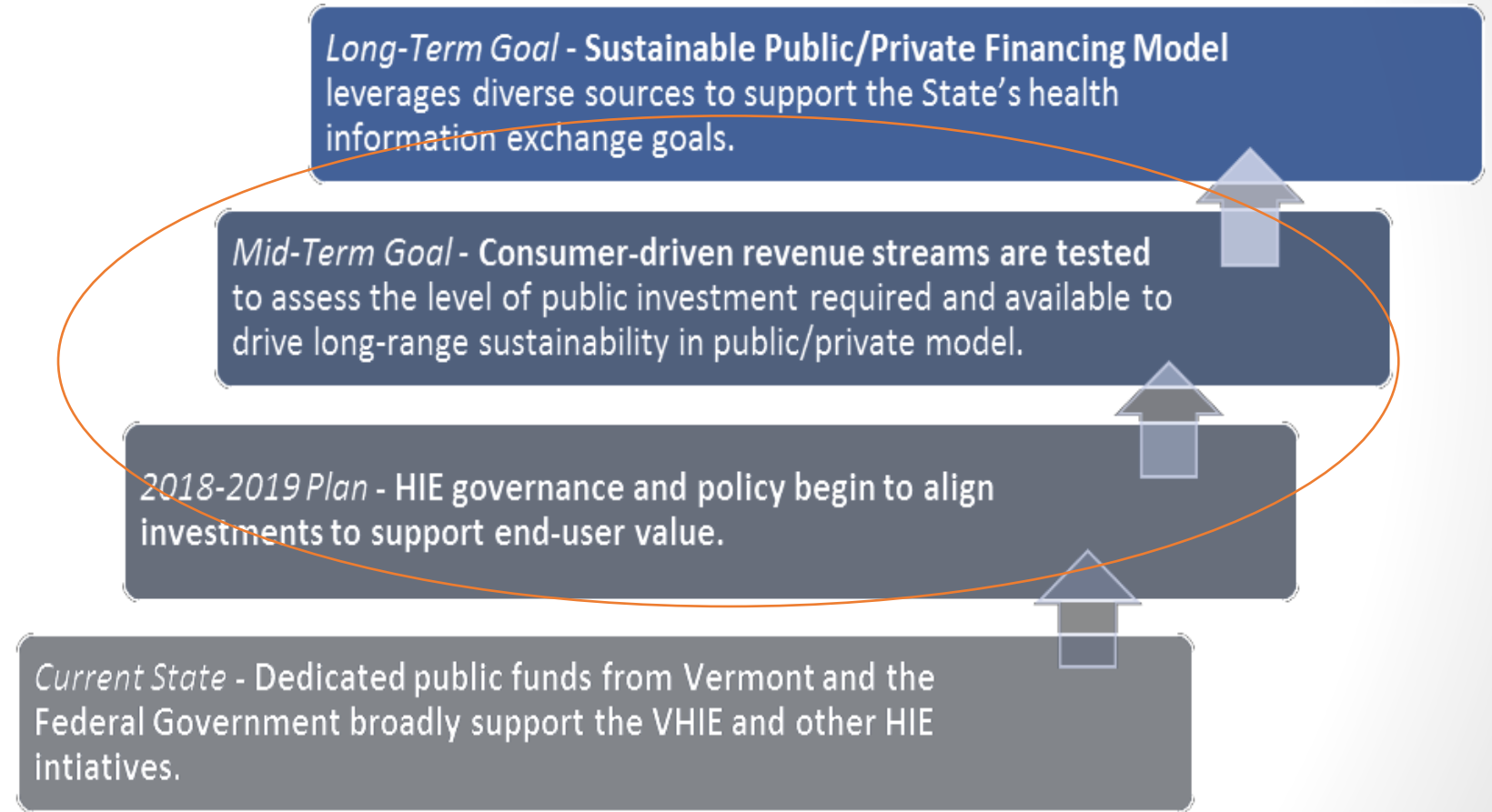
- Introduced in this update to the HIE Plan: new data access protocols articulate how the Dept. of Health's work is supported by VHIE data and capabilities
- In development: policies and processes to support aggregation of "clinically sensitive data" on the VHIE



HIE Ecosystem: Finance

- US HITECH Act funding has provided federal investment in Vermont's HIE efforts since 2011. The Act expires September 2021.
- CMS is offering states a way to continue to receive federal investments in this work, but the availability of funding will change.
- Outcomes Based Certification offers Vermont an opportunity to obtain ongoing maintenance funds for the VHIE and other systems.
- The Steering Committee supports an extension of the HIT Fund.
- The Collaborative Services Project is expected to position the VHIE to provide demand-driven services.

HIE Financing Maturity Model



HIE Ecosystem: Governance

A Note on Data Governance

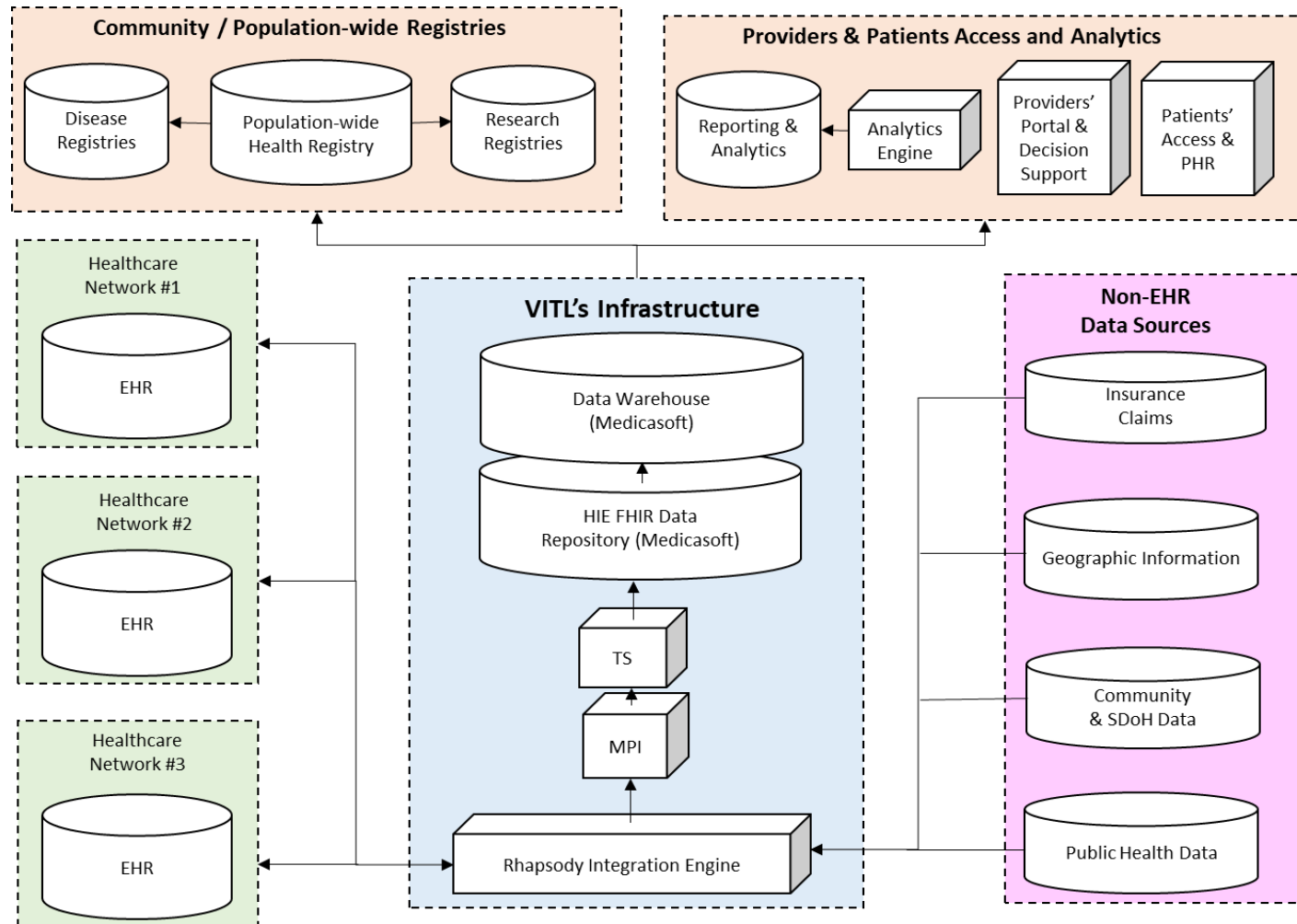
VITL does not own health data, rather it acts as a steward of health data that originates from various sources, which is why a comprehensive, and well understood, data governance effort is so important. The Steering Committee is responsible for uniting data governance concepts across the work of subcommittees.

Attribute	Description
Availability	The data must be available to the applications of all HIE users when needed
Accessibility	The agreement must ensure that the data is accessible, regardless of the application used
Interoperability	The data must be both semantically and syntactically interoperable across systems
Auditability	There must be a trail of the data from its source to its destination
Quality	The data must be accurate and complete
Security	The data must be kept secure

Figure 7: Key Attributes of Data Governance

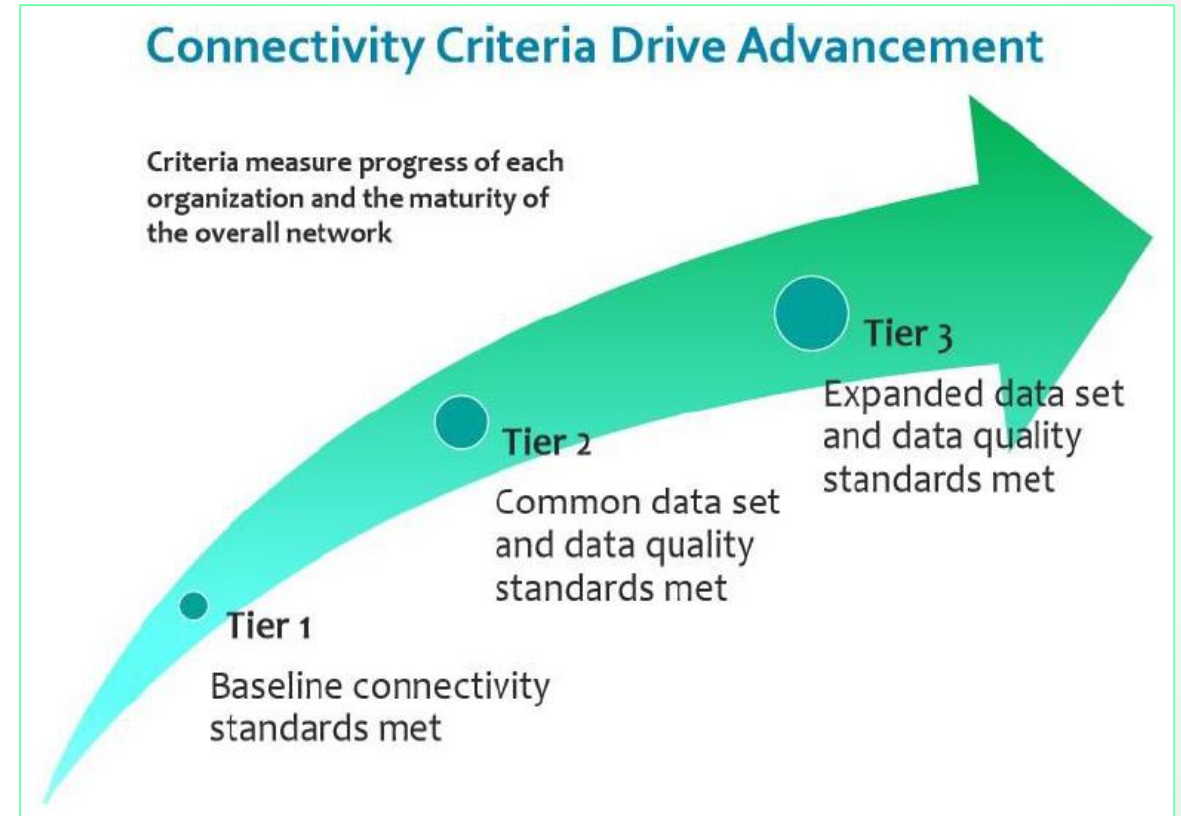
HIE Ecosystem: Technology

VHIE Architecture Diagram



2020 Connectivity Criteria Update

- The Connectivity Criteria establishes the standards for creating and maintaining connectivity to the VHIE
- The Connectivity Criteria is intended to build on currently established industry and federal standards e.g., US Core Data for Interoperability (USCDI)
- A core group of data users, the Connectivity Criteria subcommittee, aid VITL in updating the Criteria annually
- In 2020, mental health/behavioral health elements were added to the Criteria to support data exchange for Designated Agencies
- VITL works with health care organizations to ensure compliance with Criteria (workplans, certification)



Questions?