

Health Information Exchange (HIE) Strategic Plan 2023-2027 (2022 Update)



AHS

Agenda

- Goals of the Health Information Exchange
- Steering Committee Composition
- Components of the Health Information Exchange
- Ecosystem – Unified Health Data Space
- 2022 Accomplishments
- Strategic Plan

Goals of the Health Information Exchange:

1

Create 1 health record for every person



Better health outcomes



Improved healthcare operations



Use data to enable investment and policy decisions

HIE Steering Committee

VOTING MEMBERS

Kristin McClure - Chair
(Agency of Human Services)



Emma Harrington
(VAHHS)



Jessie Hammond
(Vermont Dept. of Health)



Josiah Mueller
(OneCare Vermont)



Victor Morrison
(Person Advocate)



Sandy Rouse
(Central Vermont Home Health and Hospice)

Jimmy Mauro
(BCBS of VT)



Georgia Maheras
(Bi-State Primary Care)

Simone Rueschemeyer
(Vermont Care Partners)



Laura Pelosi
(Long Term Care Advocate)



Timothy Tremblay
(Blueprint for Health)



NON-VOTING MEMBERS

Beth Anderson
(VITL)



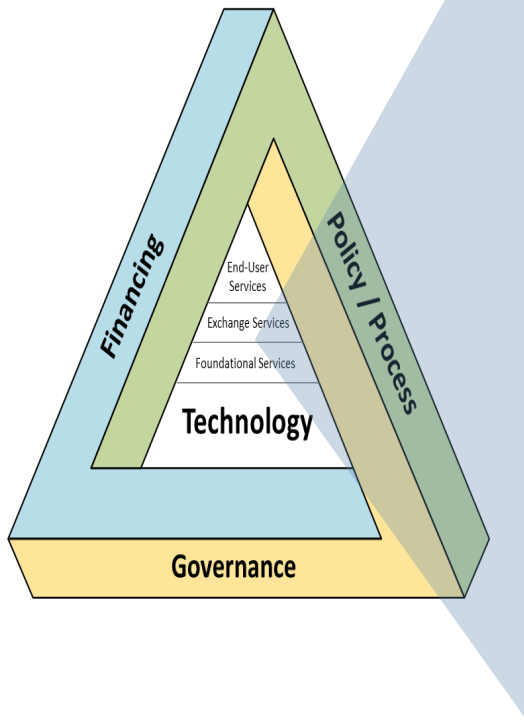
Vacant
(Agency of Digital Services)



Kathryn O'Neil
(Green Mountain Care Board)



HIE Ecosystem: Four components



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	

What Is The Unified Health Data Space (UHDS) ?

The Unified Health Data Space (UHDS) is a collaborative initiative to streamline data services required to improve healthcare in the state of Vermont. Costs and usage of technology will be shared among the participants to avoid duplicative efforts and purchases.

This Project is an integral part of reform efforts to support a broad spectrum of healthcare stakeholders and uses;

- ✓ Point of Care (Providers)
- ✓ Quality (ACO Provider Networks)
- ✓ Policy Evaluation & Regulation (GMCB, VDH, Blueprint)
- ✓ Patients (telehealth, personal health responsibility)
- ✓ Population Health (preventative, health equity)

Once this project is completed it will provide efficient access to needed information to a broad spectrum of important players in the healthcare reform arena. That information includes; **Clinical** data, **Behavioral Health & SUD** data, **Claims** data, and **Social Determinants of Health (SDoH)** data.

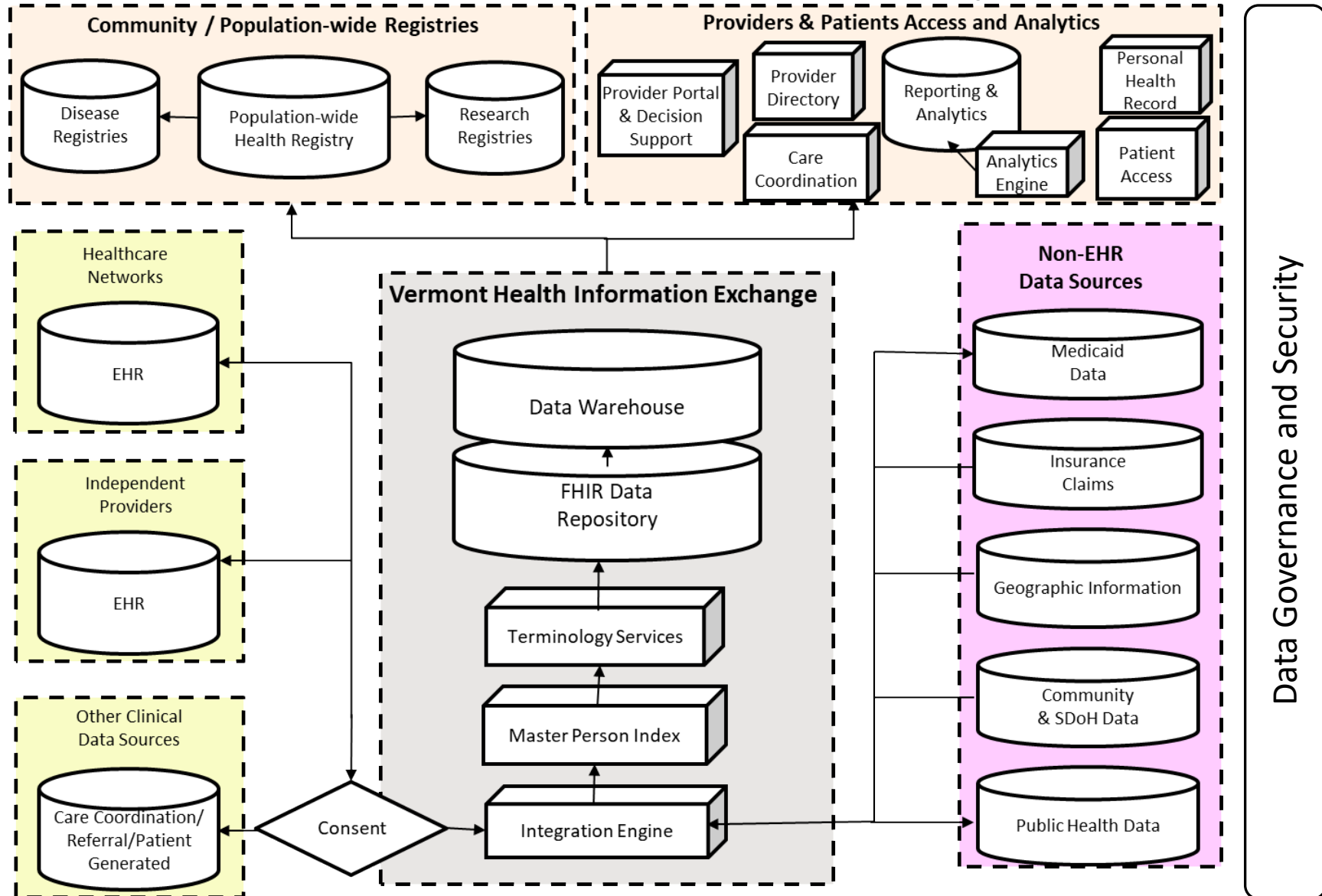
The Case For The UHDS To Enable Value Based Care in VT

As performance-based and risk-based reimbursement programs continue to drive health reform initiatives, the value of having an accurate, up-to-date, and complete health data set becomes more and more critical.

VHIE, a component of VT's UHDS, is the engine to collect, normalize, and exchange health data and enables it to be transformed into actionable and meaningful insights for patient care. The information is used for preventive care, evidence-based disease management, population health management, physician alignment, clinical integration, and participation in various reimbursement programs.

When complete, the VT Unified Health Data Space (UHDS) will include tools for comprehensive population health management including point of care decision support, care gap analysis, automated patient outreach, roll-up and drill-down outcomes reporting, predictive modeling and risk assessment, and care management and coordination.

Vermont's Unified Health Data Space



2022 Key Accomplishments

Category	2022 Goals	Actual	Status
Collaborative Services	New Provider Portal	Complete	Complete
	Okta Identity Management - ID Authentication & Authorization - Smart on FHIR	Planning	Delayed
	FHIR R3 to FHIR R4 upgrade	Executing	On Track
Medicaid Services	21st Century Cures Act Compliance - Interoperability Project - Clinical Data for API (Patient Access)	Executing	On Track
	Unified Health Data Space - MDWAS Project - Leverage VHIE's DW for Medicaid Operations	Planning	On Track
	Medicaid Data Aggregation & Access Program (MDAAP)	Planning	On Track
CMS Funding & Federal Compliance	VHIE System CMS Certification	Complete	Complete
	OBC Compliance & Federal Reporting	Complete	Complete
	Post-HITECH Cost Allocation	Complete	Complete
Population Health	Integrate Social Determinants of Health (SDoH)	Executing	On Track
	Integrate Claims Data with VHIE's Clinical Data (& SDoH Data)	Planning	On Track
	Blueprint extracts & Access	Complete	Complete
Public Health	New Interface Connections & Existing Interface Remediations	Executing	On Track
	Implement bi-directional data exchange with IZ registry incl. Mulesoft & Rhasody Interface	Executing	On Track
	Provide COVID-19 Reporting	Executing	On Track
VHIE Operations	Ensure VHIE Services are operational 24 hrs, 7 days / wk, 94% uptime. Maintain system security.	Executing	On Track

• Funding

- ✓ Received CMS Certification – Federal Funding implications
- ✓ Received CMS approval for conditional cost allocation

• Technology

- ✓ Launched new provider portal
- ✓ Established infrastructure for ingesting Social Determinants of Health
- ✓ Expanded Data Connectivity Network
- ✓ Expanded Data Warehousing & Reporting Capabilities

• Governance

- ✓ Engagement with Brilljent, consulting, on Data Strategy and Data Governance

• Policy / Process

- ✓ Supported 1129 with bi-directional exchange of immunization data with Vermont Department of Health
- ✓ Provided Vermonters with electronic patient health data education

2022 Funding Key Accomplishments

Key Items

- CMS Certification and conditional cost allocation allows for increased Federal match rate
- Federal Maintenance & Operations: 72% (vs. 25% post HITECH)
- Federal Design, Development, and Implementation for shared: ~86% (vs. 30% post HITECH)
- State match: largely from Health Informational Technology (HIT) Fund:
 - Background: Health Care Claims Tax (\$1 out of every \$100 is collected for the Health Care Claims Tax. Of that 80 cents goes to the General Fund and 20 cents goes to the Health Information Technology (HIT) Fund.
- Recommendation to maintain current funding strategy (Data Utility) through maturity of Unified Health Data Space

Example

<u>Current</u>	<u>Category</u>	<u>Federal</u>	<u>State</u>	<u>Total</u>
Maintenance and Operations (M&O)	All	72%	28%	100%
Design, Development, Implementation (DDI)	Medicaid	90%	10%	100%
Design, Development, Implementation (DDI)	Shared (Medicaid and Non Medicaid)*	86%	14%	100%
Design, Development, Implementation (DDI)	Fully Non Medicaid	0%	100%	100%

Example**

Maintenance and Operations (M&O)	All	\$ 4,680,000	\$ 1,820,000	\$ 6,500,000
Design, Development, Implementation (DDI)	Medicaid	\$ 675,000	\$ 75,000	\$ 750,000
Design, Development, Implementation (DDI)	Shared (Medicaid and Non Medicaid)	\$ 1,720,000	\$ 280,000	\$ 2,000,000
Design, Development, Implementation (DDI)	Fully Non Medicaid	\$ -	\$ 250,000	\$ 250,000
Total		\$ 7,075,000	\$ 2,425,000	\$ 9,500,000

Previous***

	<u>Category</u>	<u>Federal</u>	<u>State</u>	
Maintenance and Operations (M&O)	All	25%	75%	100%
Design, Development, Implementation (DDI)	Medicaid	90%	10%	100%
Design, Development, Implementation (DDI)	Shared (Medicaid and Non Medicaid)	30%	70%	100%
Design, Development, Implementation (DDI)	Fully Non Medicaid	0%	100%	100%

Example

Maintenance and Operations (M&O)	All	\$ 1,625,000	\$ 4,875,000	\$ 6,500,000
Design, Development, Implementation (DDI)	Medicaid	\$ 675,000	\$ 75,000	\$ 750,000
Design, Development, Implementation (DDI)	Shared (Medicaid and Non Medicaid)	\$ 600,000	\$ 1,400,000	\$ 2,000,000
Design, Development, Implementation (DDI)	Fully Non Medicaid	\$ -	\$ 250,000	\$ 250,000
Total		\$ 2,900,000	\$ 6,600,000	\$ 9,500,000

* Varies by quarter

** Example only - not representative of actual figures

** Post HITECH funding (10/1/21 - 12/31/21)

2022 Technology Key Accomplishments

✓ Launched new provider portal

- Extensively configured to meet user needs
- Successfully piloted with 49 clinicians & staff
- Supported by extensive training & educational resources
- Received very positive feedback from users (quick access to clinically relevant data, familiar EHR-like look & feel)

✓ Established infrastructure for ingesting Social Determinants of Health

- Requirements gathered, through questionnaires, from users of State services
- The objective is to leverage data to gain a complete understanding of the social and economic impact to a person's health
- A pilot to incorporate data collected by the Vermont Chronic Care Initiative's screening tools into the Vermont Health Information Exchange is underway.

✓ Expanded Data Connectivity Network

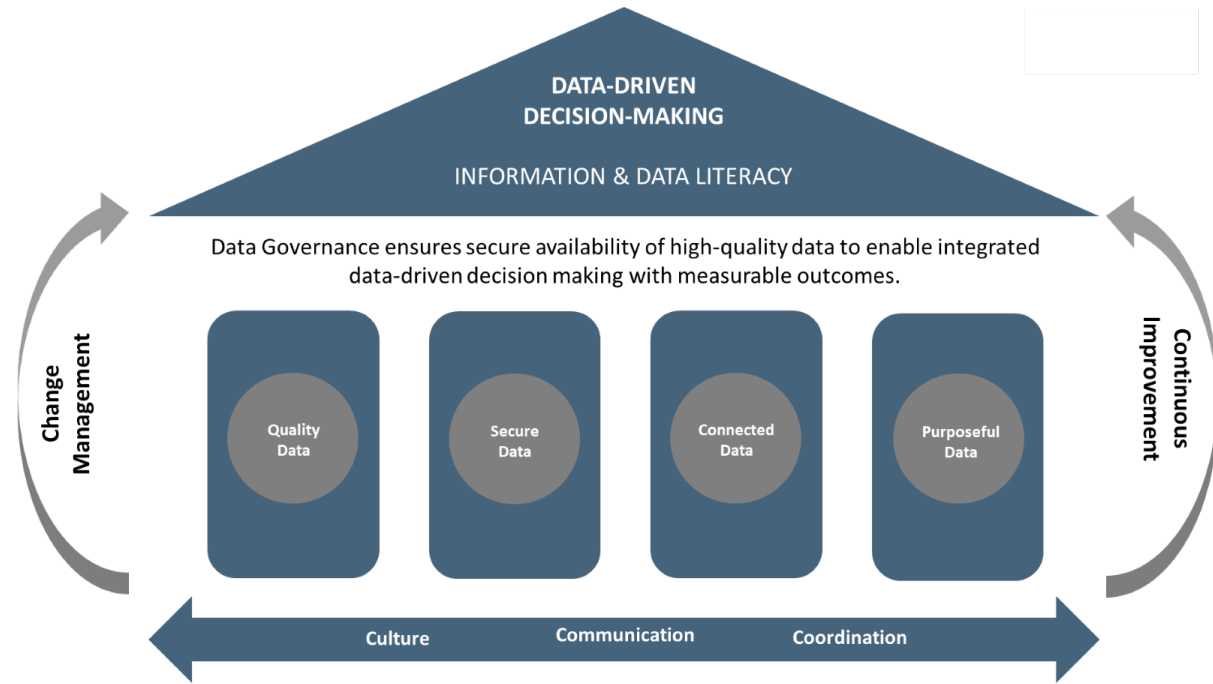
- 21 new public health priority interfaces
- 39 new provider interfaces implementing new electronic health records
- On target to complete, by year end, a pilot to establish a live, bi-directional interface between the VHIE and VDH's Immunization Registry.

✓ Expanded Data Warehousing & Reporting Capabilities

- Delivered the Blueprint for Health annual report from the new platform.
- Started the transition of daily COVID reporting to VDH

2022 Governance Key Accomplishments

- Governance Plan
 - Align Strategically
 - Establish Objectives
 - Build Framework
 - Govern by Domain
 - Operationalize
 - Communicate
 - Metrics for Success



And our Next Stop is...

• **Data Governance Council**

- “A Data Governance Council provides executive sponsorship, prioritizes the goals, and is responsible for broad decision-making for the Unified Health Data Space.
- A Unified Health Data Space Council is necessary to include responsible parties who own the data that will eventually live in the environment, which will extend beyond what is currently in the HIE.”

2022 Policy/Process Key Accomplishments

✓ **Bi-directional exchange of Immunization Data**

- Implementing bidirectionality through a two-way encrypted VDH-HL7-SOAP-API allows the healthcare provider organizations to query the Vermont Immunization Registry (IMR) and retrieve an individual's immunization history
- Providers have a choice to embed this functionality in their EHR
- The pilot, slated to go-live in January of 2023, is establishing business processes and onboarding 1 provider organization

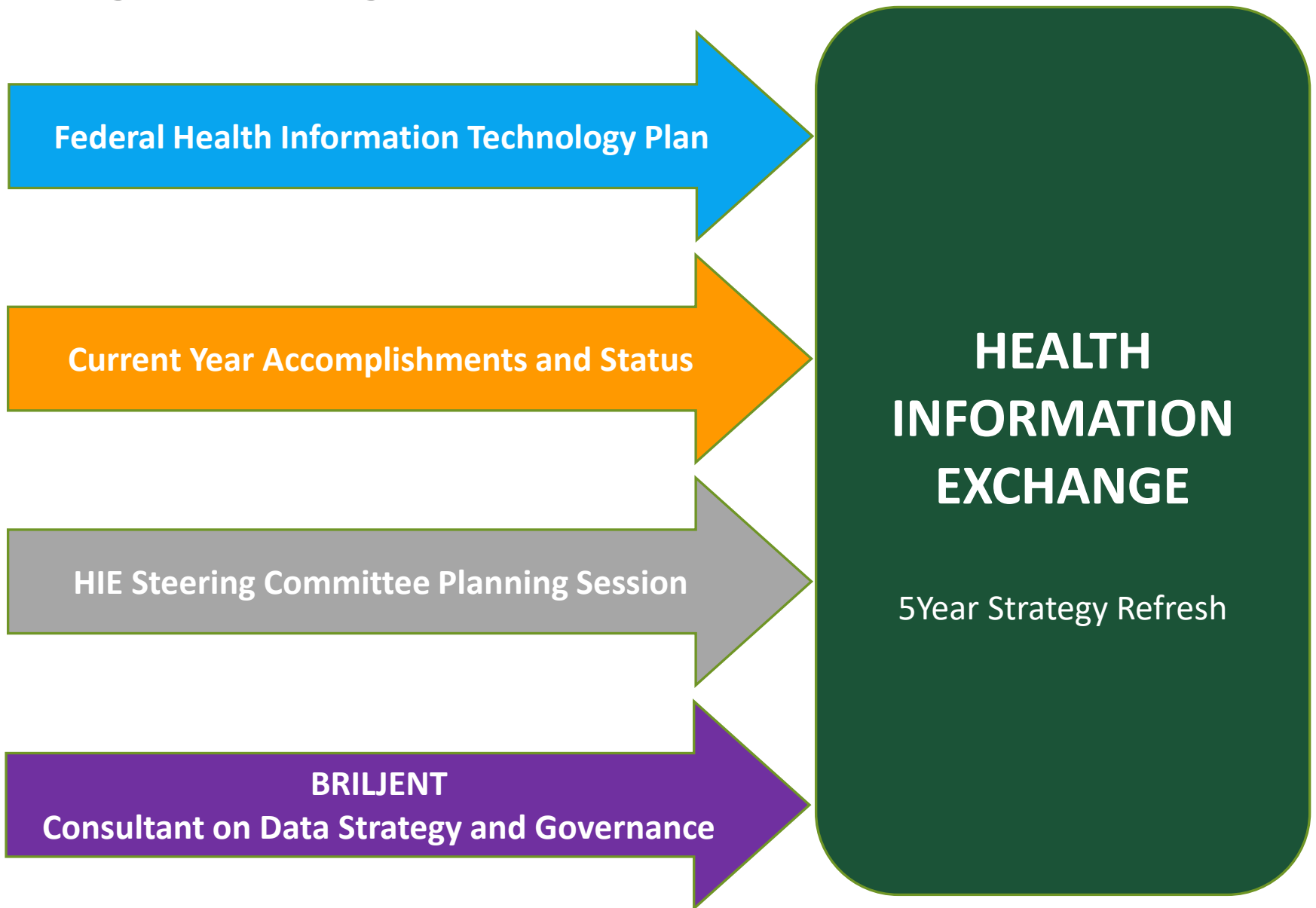
✓ **Patient Electronic Health Data Education**

- Educate the public on the benefit and use of electronic health information
- Supported the State Medicaid Agency in complying with the 21st Cures Act by supplying Medicaid beneficiaries' clinical data for integration with their claims data for access by third party applications (test data feed successfully completed & currently finalizing data interfacing details with claims processor).

✓ **Act 167**

- “The act directs the Health Information Exchange (HIE) Steering Committee to include a data integration strategy in its 2023 HIE Strategic Plan and to continue its efforts to create a single, integrated health record for each individual.”
- Collaboration in 2023 with GMCB, HIE Steering Committee, and Agency of Digital Services to provide recommended data integration strategy in next years HIE Strategic Plan – data privacy and protections, governance, technical considerations, efficiencies

Strategic Planning Process



1 Create One Health Record For Each Person:

WHAT:

- Support optimal care delivery and coordination by ensuring access to complete and accurate health records

STRATEGIC PLAN & CRITERIA:

STRATEGIC PLAN	18 V.S.A. § 9351	18 V.S.A. § 9371	OTHER LEG.	BEST PRACTICES / FEEDBACK	PRIVACY PROTECT.	CAPACITY NEEDS	FEASIBILITY
Establish new / additional interfaces to increase richness of Data - 2023	• (a)(3)(B), (b)(3), (b)(4)	• (4),(9)	• (9352)	• Fed HIT	•	•	•
Development work for HIE to serve as Medicaid Data Warehouse - 2023	• (b)(6)	• (10)	• 1902a	•	•	•	•
Integrate all-payer claims and clinical data - 2024	• (b)(6)	• (10)	• Act 167	•	•	•	•
Onboard Integrated Enrollment and Eligibility Data - 2025	• (b)(6)	• (12)		•	•	•	•

*Each 2023 item has a full action plan being developed by Dec 2022



Better Health Outcomes:

WHAT:

- Promote health and wellness for individuals and communities

STRATEGIC PLAN & CRITERIA:

STRATEGIC PLAN	18 V.S.A. § 9351	18 V.S.A. § 9371	OTHER LEG.	BEST PRACTICES / FEEDBACK	PRIVACY PROTECT.	CAPACITY NEEDS	FEASIBILITY
Enable end to end implementation of 2 social determinants of health use cases - 2023	• (b)(8)	• (12)		• Fed HIT	•	•	•
Integrate VDH and HIE: bi-directional exchange of immunization records – 2023	• (a)(3)(B), (b)(3), (b)(6)	• (9)	• (1129)	• Fed HIT	•	•	•
Potential integration of electronic case reporting and Pharmacy Drug Monitoring Program (PDMP) – 2024	• (b)(6)	•		•	•	•	•
Explore Patient Engagement Platform: receive health data, and send health data such as wearable sensors, home health devices, IoT - 2025	• (b)(2), (b)(4)	• (7), (9)		• Fed HIT	•	•	•

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Improve Health Care Operations:

WHAT:

- Enrich health care operations through data collection and analysis to support quality improvement and reporting with the goal to reduce health care costs and provide insight to improve the delivery and experience of care

STRATEGIC PLAN & CRITERIA:

STRATEGIC PLAN	18 V.S.A. § 9351	18 V.S.A. § 9371	OTHER LEG.	BEST PRACTICES / FEEDBACK	PRIVACY PROTECT.	CAPACITY NEEDS	FEASIBILITY
Improve completeness of clinical data – includes standardization of data (from providers) - 2023	• (a)(3)(B), (b)(3), (b)(4)	• (9)	• (9352)	• Fed HIT	•	•	•
Enhance accessibility for Stakeholder - 2023	• (a)(3)(B)	• (9)		• Fed HIT	•	•	•
Capability for complex care management, care coordination, and referral management - 2024	• (b)(4)	• (4)		•	•	•	•
Adopt new algorithms, analytics, machine learning to address patients' full range of health needs, promote health behaviors, facilitate better health outcomes – 2024/2025	• (b)(4)	• (7), (9)		• Fed HIT	•	•	•

*Each 2023 item has a full action plan being developed by Dec 2022



Use Data To Enable Investment And Policy Decisions:

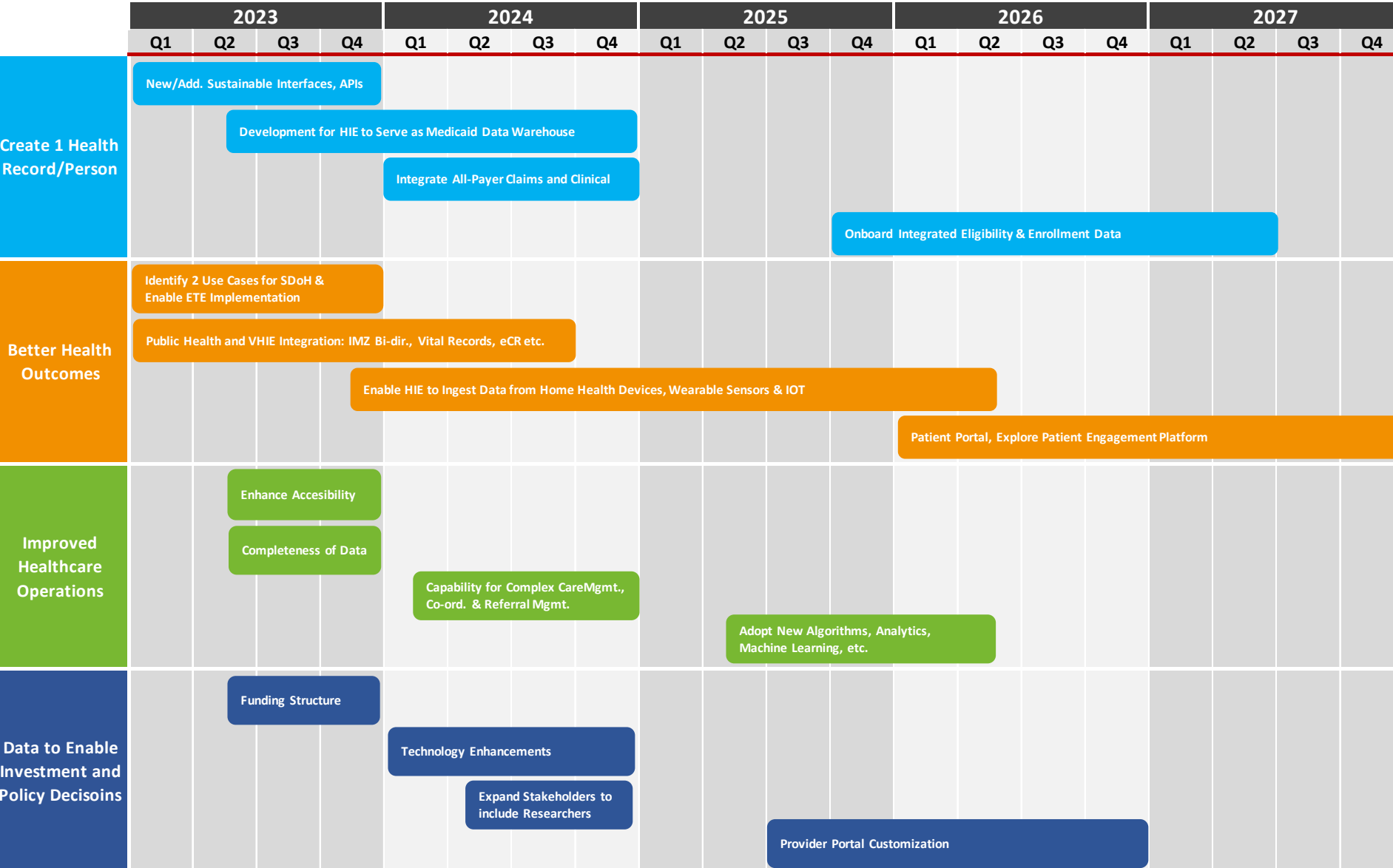
- WHAT:**
- Bolster the health system’s ability to learn and improve by using accurate, comprehensive data to guide investment of time, labor, and capital, and inform policy making and program development.

STRATEGIC PLAN & CRITERIA:

STRATEGIC PLAN	18 V.S.A. § 9351	18 V.S.A. § 9371	OTHER LEG.	BEST PRACTICES / FEEDBACK	PRIVACY PROTECT.	CAPACITY NEEDS	FEASIBILITY
Establish data governance for each data type and stakeholder use of it -2023	• (b)(8)	• (3)	• (9352)	•	•		•
Sustainable Funding Structure: establish milestones and guardrails for seeking private funding - 2023	• (b)(5)	• (11)	• (9352)	•			•
Ongoing technology enhancements – focus on ease of use: Single Sign On capability – 2024	• (b)(4),(b)(6)	• (10)		• Fed HIT	•	•	•
Expand stakeholders to include researchers to utilize limited datasets for health improvement - 2024	• (a)(3)(B)	• (4)		• Fed HIT	•	•	•
Customization of Provider Portal - 2025	• (a)(3)(B), (b)(4)	• (4)		•	•	•	•

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2023-2027 Roadmap



Backup

HIE KPIs / Metrics

1. Uptime: 24 hours / 7 days a week uptime of 94%
2. Growth of Interfaces: 2023 – 10% total increase, ~135 new connections
3. Security Compliance Reports
 - Monthly
4. Outcomes Based Certification Metrics (App E)

Direct Care/Care Coordination											
Metric	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	
1.1a Number of VITLAccess Users	3,512	2,393	2,402	2,425	2,485	2,504	2,261	2,265	2,128	1,980	
1.1b Number of HCO VITLAccess Users/Number of Potential HCO Users	234/1549	234/1549	239/1549	239/1586	242/1586	241/1587	237/1587	237/1589	236/1591	237/1593	
1.1c Number of Patient Queries through VITLAccess	17,653	21,051	23,065	28,283	18,373	11,329	10,169	10,502	9,969	6,014	
1.2 Number of Medicaid patient records transmitted from the VHIE to the Medicaid care coordination tool	686,127	728,101	664,399	661,222	660,722	590,470	667,850	624,984	608,164	574,776	
Direct Care/Care Coordination: Event Notification											
Metric	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	
3.1 Number of event notifications (ADT) messages sent to Patient Ping through VHIE connection	3,648,690	3,717,003	3,558,781	3,463,535	3,502,426	3,115,652	3,665,794	3,376,094	3,309,448	3,205,041	
3.2 Master Patient Index: Percent Medicaid Match Rate	96.75%	97.07%	97.03%	97.42%	97.59%	97.69%	97.80%	98.01%	98.10%	98.06%	
Direct Care/Care Coordination: Electronic Results Delivery											
Metric	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	
4.1 Number of LAB messages captured in the VHIE	684,213	752,616	754,074*	793,326*	838,814	612,218	652,547	606,892	603,639	562,590	
4.2 Number of RAD messages captured in the VHIE	78,992	78,652	74,396	75,777*	71,863	70,344	81,132	73,293	85,884	77,521	
4.3 Number of TRANS messages captured in the VHIE	388,666	395,257	386,618	381,894	359,419	329,804	380,259	353,173	370,774	374,258	
* Updated based on data review and quality improvement process											

5. Value Based Care Metric:

- 30 Day hospital readmission rate of the ACO attributed population