Meeting Agenda

• Department of Health/VHIE Collaboration: COVID-19 and Beyond
• 2022 VHIE Connectivity Criteria
• HIE Plan Updates
• Wrap Up
Collaboration during COVID-19 Pandemic Response: Health Department and VITL

Jessie Hammond and Veronica Fialkowski
Electronic Lab Reporting - Onboarding

• VDH Identified Gap: Lack of capacity to consume non-HL7 message electronic lab reports and low capacity to onboarding new facilities

• VITL worked with Epi and ADS HIE Team to establish electronic lab reporting process for some new labs performing COVID-19 testing
  • Built flat file route
  • Onboarded 14 labs in a year
    • Biggest lab onboarded by VITL is Broad
  • Benefit of VITL receiving Broad results includes result delivery for some facilities and to better analyze hospitalization data
Contact Tracing

• ID-Epi team had immediate need for real-time clinical data about individuals who tested positive for COVID-19, for public health investigation
  • Traditionally this data was collected by contacting providers directly for information on each patient – a time-intensive process that added burden to already stretched thin providers

• VITL provided the ID-Epi team with access to the VITLAccess provider portal, enabling them to quickly obtain data they needed for contact tracing

• Success: Portal access helped the ID-Epi team find race information crucial for health equity response.
  • At the end of March 2020, patient race was unknown in 73% of COVID-19 cases. Using VITL’s tools, that percentage was reduced to 8%

• ID-Epi is now able to use VITLAccess for all reportable conditions thanks to policy changes
Hospitalization

- VITL provides data to help VDH understand health care usage and plan surge capacity
- VITL automated delivery of over 40 data elements that hospital staff had been manually collecting and entering into EMResource on a daily basis
  - Data is automatically delivered daily, easing the burden on providers and ensuring more consistent data quality
  - This data also populated the public facing COVID dashboard
- New: VITL provides patient level current hospitalizations so VDH Data Team can merge with underlying medical conditions and vaccination status for leadership situational awareness
Vaccine

• Onboarded providers across the state which reduced the number of “batch” reporters
  • Accelerated timelines
  • Included high volume significant reporters (e.g., large pharmacy chains)

• Verified high-risk health conditions for those attesting to having a condition when registering for the vaccine

• Provided VDH Vaccination Data Team access to VITLAccess provider portal. Use to look up race and ethnicity for those with missing/unknown race or ethnicity in the Immunization Registry
  • Enabled VDH to lower the percent missing to <= 5% (through today); work is ongoing

• Change to state statute allowing VDH to share immunization data with the VHIE
Vitals (Death)

- Death registry system does not currently exchange data with NCHS and other jurisdictions via HL7-FHIR or other electronic messaging.
  - Prior to Covid-19 implemented monthly sharing of Vermont occurrent death information with VITL via flat file.
- The exchange of messages in FHIR format is expected to be facilitated via Mulesoft.
- Planning for exchange of vital records data using FHIR is anticipated to begin in 2022. The development is scheduled to occur after initial set up of Mulesoft and development of APIs for HL7 exchange of Immunization and Lab data. Implementation is not anticipated to be complete until 2023.
- Exchange of death information is the priority for vital records data. Once that is implemented, we can consider similar processes for other systems (e.g., births)
Challenges

• Complexities (multiple agencies)

• Lab Reporting
  • Data agreements from VITL can be a barrier to some labs and can slow down the process
  • Prioritization is can be difficult, especially choosing to onboarding new facilities vs onboarding new tests at existing facilities
  • Variant reporting cannot be reported to providers therefore facilities onboarded through VTIL need a separate process to report those results
  • Similar challenges that VDH faces with not onboarding quickly VITL also faced
    • Challenges with formatting, communication with facilities, competing priorities (staff capacity)
Challenges

• Vaccine
  • Similar to lab reporting – prioritization, time to work through data agreements, general onboarding issues.
  • Verification of chronic conditions
    • New process/area of engagement involving VITL and multiple state Agencies.
    • Also were a LOT of unknowns/rapidly evolving situation
Next steps

• Lab Reporting
  • Onboarding non-COVID results for labs already reporting through VITL to the Health Department
  • Consider future data sharing opportunities (i.e., which labs report to whom and how)

• Electronic Case Reporting
  • Currently HIEs do not meet the minimum reporting requirements for eCR
  • Policy framework like eHealthExchange can be helpful for providers onboarding for eCR
Next Steps

• Vaccine
  • Implement sharing of information from IMR to VHIE.
    • Requires use of batch files until bidirectional exchange is implemented (early-mid 2022)
    • Will share COVID vaccination first data to establish the process, then will expand to others
  • Included funds in Health Disparity grant related to data quality and the VHIE. Will be implementing projects to assess/improve quality of race and ethnicity information; likely to also complete a similar project with sex/gender.
  • Continue onboarding new providers

• Vital Records
  • Holding pattern until complete other projects earlier in the queue.
Next Steps

- VDH and VHIE to develop an integration strategy or strategies
  - Early conversations occurring later this year
VHIE Connectivity Criteria Approval

- Establishes the conditions for health care organizations to connect to the Vermont Health Information Exchange (VHIE) that will apply for 2022
- The Connectivity sub-committee has made recommendations for updates to the Criteria
- Approved updates will be incorporated into the State HIE Plan in October by DVHA
- The State HIE Plan will be reviewed and approved by the GMCB in November
VHIE Connectivity Criteria Update

Process

• The Connectivity sub-committee consists of members from VITL, Blueprint, DVHA, OneCare Vermont, Vermont Care Partners, Blue Cross Blue Shield, the Vermont Hospital Association, Bi-State, the Vermont Department of Health and the Vermont Chronic Care Initiative.

• The sub-committee met in 2021 to create new criteria for Claims data from Payer organizations and to review the existing physical, Mental and Behavioral health criteria.

• The group aligned the Criteria with the program needs and the Office of the National Coordinator (ONC) United States Core Data Interoperability v1 (USCDI) data set, as well as the CMS 837 Professional format for Claims.
## Connectivity Criteria Overview

**Uses expand as hospitals and practices advance through the stages**

| Tier 1: Baseline connectivity |
| Tier 2: Common data set and data quality standards met |
| Tier 3: Expanded data set and data quality standards met |

### Connectivity Criteria Overview

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Objective</th>
<th>Value</th>
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<tbody>
<tr>
<td>• Expanded data sets for use by specific stakeholder(s)</td>
<td>• Variety of quality data aggregated for specific use by stakeholders</td>
<td>• Performance measurement and population health management applications are optimized</td>
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<td>• Data is standardized</td>
<td>• Data can be analyzed across organizations</td>
<td>• Expanded data uses possible for advanced end-user services</td>
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<tr>
<td><strong>Tier 2:</strong> Common data set and data quality standards met</td>
<td>• One common data set for use by VHLIE and all stakeholder(s)</td>
<td>• Stakeholders can measure quality and manage populations (inform quality measures)</td>
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<tr>
<td>• Data is standardized</td>
<td>• Uniform, quality patient data aggregated</td>
<td>• Expanded data uses possible (example: Care Management)</td>
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<td><strong>Tier 3:</strong> Expanded data set and data quality standards met</td>
<td>• Data supports patient matching</td>
<td>• Clinicians can view basic data</td>
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<tr>
<td>• Data is structured for storage and transmission</td>
<td>• Implement planned interfaces</td>
<td>• Clinicians can receive electronic results</td>
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<td></td>
<td>• Patient matching</td>
<td>• Patients are properly matched</td>
</tr>
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<td></td>
<td>• Data use at the point of care and by stakeholders</td>
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Notably, the criteria and their objectives evolve as hospitals and practices advance through the stages. This progression highlights the increasing sophistication and utility of the data as they become more widely shared and used across healthcare systems.
Successes:

- Criteria have helped organizations clearly understand what the scope of data that is wanted, and the work needed to provide it.
- Alignment with USCDI v1 is showing benefits, as multiple vendors are doing upgrades to comply with the new requirements and providing better data in the process!

Challenges:

- Did not get a chance to test out the new Mental and Behavioral Health Criteria yet, due to delays in the new Substance Abuse and Mental Health Services (SAMHSA) legal guidance around handling this data type.
- More education needed about the Criteria and the process of applying it, this will be an ongoing effort to address.
Proposed Plan for 2022 Criteria

• Create a new Claims data contributor type and update the Connectivity Criteria materials to include a separate Tier 2 with data elements based on the required data in the CMS 837 Professional format for the first year.

• Add COVID-19 Test Results to the Physical Health Tier 2 Criteria for 2022, as testing is available across the community

• Leave Mental/Behavioral Health Tier 2 Criteria as is for 2022

• Update all documentation for 2022 submission with HIE plan
Documentation Updates

- **Stakeholder Matrix** – Updated with addition of Payers and support of Health Reform efforts as an outcome

- **Certification Process**
  - Updated to include payers and claims in addition to clinical data

- **Workplan**
  - Added new Data Contributor Type (Claims)
  - Added FHIR and Claims data as potential Interface types

- **Data Set and Data Quality Standards Worksheet**
  - Added a new Claims Tier 2 tab with data elements required from the CMS 837 Professional Form as we discussed in the meeting.
  - Need input on this new format to ensure I got everything the group was intending.

- **Baseline Criteria** – Updated to include FHIR interface criteria and a Claims interface type
Looking Forward

• Monitor vendor compliance with USCDI v1 next year.
• Evaluate the Medicaid claims data against the new claims criteria
• Experiment using national tools being developed by the Sequoia Project that will allow USCDI validation of data to support the eHealth Exchange networks data quality.
• Hold off on USCDI v2, which was just released until our annual review next year, as it is not mandated for vendors to support until Dec. 2023.
HIE Plan Update
Unified Health Data Space

Community / Population-wide Registries
- Disease Registries
- Population-wide Health Registry
- Research Registries

Providers & Patients Access and Analytics
- Provider Portal & Decision Support
- Reporting & Analytics
- Care Coordination
- Analytics Engine
- Patient Access

Vermont Health Information Exchange
- Data Warehouse
- FHIR Data Repository
- Terminology Services
- Master Person Index
- Integration Engine

Non-EHR Data Sources
- Medicaid Data
- Insurance Claims
- Geographic Information
- Community & SDoH Data
- Public Health Data

Healthcare Network #1
- EHR

Healthcare Network #2
- EHR

Healthcare Network #3
- EHR

Alerts / Results Delivery
Data Governance

- **Objective:** Establish a transparent process for developing new data sharing arrangements to ensure usability, accessibility, and security of data on the VHIE, with a focus on new-to-the-VHIE data types (claims, SDoH, clinically sensitive data)

- **Stakeholders**
  - Data producers
  - Data consumers
  - VITL
  - HIE Steering Committee
  - HIE Steering Committee Subcommittees

- **Data Governance Forums**
  - Population Health Subcommittee (to be established in 2022)
  - PartII+ Group (continuation of existing efforts)
  - VITL (operations and provider and payer agreements)
HIE Ecosystem: Financing

• Diversifying VITL’s revenue ensures that they can sustain the VHIE and continue to provide “foundational” services

• As an example of this diversification, Vermont’s Agency of Human Services is a VITL customer –
  • Care Coordination and Case Management for the Medicaid Population
  • Data Warehousing to Support Agency Operations
  • Aggregating the Agency’s Social Determinants of Health Data
  • Providing Clinical Data to Support Compliance with the federal Patient Access and Interoperability Rules
  • Matching Clinical and Claims Data to Support Evaluation of the Medicaid Next Generation Model
  • Supporting Implementation and Evaluation of the Blueprint for Health Program
  • Enhancing Public Health Operations
  • Automating Required Federal Reporting (under evaluation)

• New technical capabilities established through the Collaborative Services Project allow VITL to offer enhanced HIE services to private (i.e., not State of Vermont) customers
HIE Plan Update Outline

• **2021 Progress Update**
  • Collaborative Services Project – technical implementation reaching last stages
  • COVID-19 Response Efforts
  • Funding Changes – HITECH Act funding expiring, shift to Medicaid funding at a lower federal match rate; move through the financing model towards public and private funding

• **2022 Look Ahead**
  • *Governance to Enable New Uses of the VHIE* – introduction of new data types to the VHIE creates a need for more robust, formalized data governance
  • *Improving Public Health Capabilities through Integration with the Unified Health Data Space* – to fully participate in the vision of a Unified Health Data Space, public health data and systems must be integrated with the VHIE
  • *Refining the HIE Services Model* – continuing the conversations about how to designate services as “foundational” vs “end user” i.e., designating responsibility for sustaining individual HIE services
  • *Leveraging the Unified Health Data Space to Support Health Care Reforms* – a platform that offers a common view of people across care settings and over time is essential to ongoing health care reform efforts
  • *Continuing to Identify Services that Deliver Value to Providers* – In 2022, how can providers continue to be involved in and benefit from the Steering Committee’s work?
Wrap Up

• Finalizing this Year’s HIE Plan Update
  • You will receive the HIE Plan Update draft this week
  • Your feedback is due October 18
  • Final review of the HIE Plan Update at the next meeting, October 25
  • HIE Plan submission to the GMCB, November 1
  • HIE Plan presentation to the GMCB, November 17