VHCIP Project Status Reports
Health Data Infrastructure Focus Area
November 2016

Focus Area: Health Data Infrastructure

<table>
<tr><td colspan="1" style="background-color:orange">Focus Area: Health Data Infrastructure
Project: Expand Connectivity to HIE – Gap Analyses (Project Complete)</td></tr>
</table>

Project Summary: The Gap Analysis is an evaluation of the Electronic Health Record (EHR) system capability of health care organizations, interface ability of the EHR system, and the data transmitted within those interfaces. Conducting the ACO Gap Analysis created a baseline determination of the ability of health care organizations to produce Year 1 Medicare, Medicaid, and commercial Shared Savings ACO Program quality measure data. The Vermont Care Partners (VCP) Gap Analysis evaluated data quality among the 16 Designated and Specialized Service Agencies. Finally, the DLTSS Gap Analysis was conducted to review the technical capability of DLTSS providers statewide. This work stream is complete as of December 2015.

Project Timeline and Key Facts:
- January 2014 – VITL and ACO teams launched Gap Analysis of the ACO Program quality measures.
- July 2014 – Gap Analysis of the ACO Program quality measure data completed.
- September 2014 –DLTSS Information Technology Assessment work launched.
- January 2015 – Scope of Work for VCP Gap Analysis finalized.
- February 2015 – Work began for VCP Gap Analysis with introductory meeting with Designated Agencies.
- February 2015 – Draft DLTSS Information Technology Assessment Report completed.
- July 2015 – A total of 67 data quality meetings held with DAs & SSAs.
- November 2015 – DLTSS Information Technology Assessment Report completed.
- December 2015 – DLTSS Information Technology Assessment findings presented to HDI Work Group.

Status Update/Progress Toward Milestones and Goals:
- Gap Analysis of ACO Program data quality measures completed in January 2014.
- VITL has conducted numerous data quality interviews with the 16 Designated Mental Health and Specialized Service agencies (DAs and SSAs). VITL has also identified that a number of DA and SSA member agencies' structures are decentralized such that they operate as multiple independent agencies. VCP has confirmed the need for full assessments to be conducted at these agencies.
- DLTSS Information Technology Assessment Report completed with recommendations on next steps; report has been distributed to stakeholders and findings presented to the HDI Work Group.

Milestones:
Performance Period 1: Perform gap analyses related to quality measures for each payment program, as appropriate; perform baseline gap analyses to understand connectivity of non-Meaningful Use (MU) providers.
Performance Period 1 Carryover: Perform gap analyses related to quality measures for each payment program, as appropriate; perform baseline gap analyses to understand connectivity of non-Meaningful Use (MU) providers:
    1. Complete DLTSS technical gap analysis by 9/30/15.
    2. Conduct bimonthly SSP quality measure gap analyses for ACO providers.
Performance Period 2: N/A
Performance Period 3: N/A

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: TBD
  # Participating Providers: 400

Key Documents:
- ACO Gap Analysis (Fall 2014)
- [DLTSS Information Technology Assessment Report](#) (Fall 2015)

State of Vermont Lead(s): Georgia Maheras, Larry Sandage

Contractors Supporting: VITL; Vermont Care Partners; H.I.S. Professionals; Bailit.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy: This project is complete.

Focus Area: Health Data Infrastructure
Project: Expand Connectivity to HIE – Gap Remediation

Project Summary: The Gap Remediation project addresses gaps in connectivity and clinical data quality of health care organizations to the Health Information Exchange. Gap remediation efforts are focused in three areas: ACO member organizations, Vermont's 16 Designated Mental Health and Specialized Service Agencies (DAs and SSAs), and Home Health Agencies.

- The ACO Gap Remediation component improves the connectivity for all Vermont Shared Savings Program measures among ACO member organizations. The project includes five deliverables: Interface and Electronic Health Record Installation, Data Analysis, Data Formatting, Terminology Services, and SET Team activities.
- The Vermont Care Partners (VCP) Gap Remediation improves the data quality for Vermont's DAs and SSAs.
- The DLTSS Gap Remediation effort seeks to increase connectivity and access to client information for Home Health Agencies. This project, approved in January 2016 based on the results of the DLTSS Information Technology Assessment, originally included Area Agencies on Aging in its scope; Area Agencies on Aging are currently excluded from this work due to legal data sharing issues.

Gap Remediation efforts for ACO member organizations and VCP dovetail with the data quality improvement efforts described under the "Improve Quality of Data Flowing into HIE" work stream. The VCP Data Quality and Terminology Services projects are now reported under that focus area.

Project Timeline and Key Facts:

- March 2015 – ACO Gap Remediation work begun by VITL and ACO member organizations; Terminology Services vendor identified by VITL.
- May 2015 – SET Team work completed by VITL and Medicity.
- July 2015 – Gap Remediation work continued, with 95 ADT, VXU, and CCD interfaces in progress.
- October 2015 – Phase II ACO Gap Remediation initially proposed; VCP Gap Remediation proposed.
- January 2016 – Phase I ACO Gap Remediation work completed; VCP Gap Remediation work begun; DLTSS Gap Remediation project to increase connectivity for Home Health Agencies and Area Agencies on Aging approved and planning process begun.
- June 2016 – Home Health Agency connectivity project Phase 1 completed.
- December 2016 – VCP Gap Remediation work to be completed.
- June 2017 – Home Health Agency connectivity project to be completed.

Status Update/Progress Toward Milestones and Goals:

- In December 2015, VITL increased the percentage of OneCare Vermont beneficiaries able to be represented in Quality Measure reporting to 64%.
- VITL and VCP proposed additional gap remediation work in Quarter 4 of 2015 for Performance Period 3 and the HDI Work Group approved proposals for gap remediation for the ACO and VCP projects in the November Work Group meeting.
- The HDI Work Group evaluated next steps based on the DLTSS Information Technology Assessment in November 2015, and recommended pursuing connections for Home Health Agencies and Area Agencies on Aging. A revised proposal limited to Home Health Agencies was approved by the Core Team in January 2016. Home Health Agency interface discovery work was completed as of June 2016. VITLAccess onboarding and interface development work has begun in collaboration with the HHAs, State staff, and VITL.

Milestones:

Performance Period 1: N/A

Performance Period 1 Carryover: N/A

Performance Period 2: Remediate data gaps that support payment model quality measures, as identified in gap analyses:

    1. Remediate 50% of data gaps for SSP quality measures by 12/31/15.

    2. Develop a remediation plan for gaps identified in LTSS technical gap analysis by 12/31/15.

Performance Period 3:

    1. Remediate 65% of ACO SSP measures-related gaps as identified in Fall 2015/Spring 2016 by 6/30/17. (*Baseline as of December 2015:* 62%)

    2. Remediate data gaps for LTSS providers according to remediation plan developed in Performance Period 2 by 6/30/17.

3. Incorporate Gap Remediation activities into Sustainability Plan by 6/30/17.
Metrics:
CORE_Health Info Exchange_[VT]
Additional Goals:
Lives Impacted: TBD
Participating Providers: TBD
Key Documents:
State of Vermont Lead(s): Georgia Maheras, Larry Sandage
Contractors Supporting: VITL; Vermont Care Partners; H.I.S. Professionals; Pacific Health Policy Group.
To view executed contracts, please visit the **VHCIP Contracts** page.
Anticipated Risks and Mitigation Strategy: None at this time.

Focus Area: Health Data Infrastructure
Project: Expand Connectivity to HIE – Data Extracts from HIE (Project Complete)

Project Summary: This project provided a secure data connection from the VHIE to the ACOs analytics vendors for their attributed beneficiaries, and allowed ACOs direct access to timely data feeds for population health analytics. This work stream was completed as of July 2016.

Project Timeline and Key Facts:
- March 2014 – OneCare (OCV) Gateway build started.
- February 2015 – Community Health Accountable Care (CHAC) Gateway build started.
- December 2015 – OCV and CHAC Gateways completed.
- January 2016 – Contract with VITL to build Health*first* Gateway approved.
- July 2016 – Health*first* Gateway completed.

Status Update/Progress Toward Milestones and Goals:
- All three Gateways are completed.

Milestones:
Performance Period 1: N/A
Performance Period 1 Carryover: Completed development of ACO Gateways with OneCare Vermont (OCV) by 3/31/15 and Community Health Accountable Care (CHAC) by 12/31/15 to support transmission of data extracts from the HIE.
Performance Period 2: N/A
Performance Period 3: N/A

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: TBD
  # Participating Providers: TBD

Key Documents:

State of Vermont Lead(s): Georgia Maheras

Contractors Supporting: Vermont Information Technology Leaders.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy: This project is complete.

<table>
<tr><td align="center">**Focus Area: Health Data Infrastructure**
Project: Improve Quality of Data Flowing into HIE</td></tr>
</table>

Project Summary: The Data Quality Improvement Project initially focused on analyzing ACO members' data quality in reference to each of sixteen data elements. The ACO Data Quality efforts were later expanded to improve workflow and data entry in member Electronic Health Record systems, and to include efforts to improve data quality and usability for Designated Agencies (DAs) and Specialized Service Agencies (SSAs). To improve data quality, VITL works directly with providers to recommend data entry and data capture workflow improvements. VITL also performs comprehensive analyses to ensure data elements from each Health Care Organization (HCO) are formatted identically, and works with the HCOs to improve quality and usability through one or more of the following methods: (1) The HCO can change their method of data entry; (2) the HCO's vendor can change their format used to capture data; and (3) a third party could use a terminology service to transform the data. The Terminology Services project, originally initiated as part of the ACO Gap Remediation work, examines clinical data elements and translates those data elements into standardized code sets.

Project Timeline and Key Facts:
- March 2015 – VITL-ACO Data Quality work began by deploying VITL's eHealth Specialist teams to member organizations for review of Data Quality input and workflow.
- July 2015 – Significant progress made in data quality assessment and initial phases of gap remediation through an existing underlying contract approved in Performance Period 1; additional gap remediation progress in Performance Periods 2 & 3 pending Federal approval of contract amendment.
- January 2016 – Funds to support continued work on the Vermont Care Partners (VCP) Data Quality project approved by the VHCIP Core Team.
- February 2016 – Terminology Services work begun.
- April 2016 – Terminology Services hardware and software implementation complete.
- June 2016 – Terminology Services configuration and training completed.
- September 2016 – Terminology Services second phase approved by the VHCIP Core Team.
- December 2016 – VCP Data Quality work to be completed.

Status Update/Progress Toward Milestones and Goals:
- Data quantity and quality improvements resulted in addressing 64% of known data gaps for SSP quality measures.
- Work with VCP, DA/SSA member agencies, and VITL will continue through December 2016. VITL is working with DAs to implement the workflow improvements in each agency through the development of a toolkit that will provide the necessary documentation, workflows, and answers to specific questions as needed.
- The HDI Work Group approved additional data quality work for the ACO and VCP project in the November 2015 Work Group meeting. This request was approved by the Steering Committee and Core Team in December 2015 and January 2016, respectively.
- VITL is providing continued Data Quality services for the Designated Mental Health Agencies (VCP Data Quality project) through workflow support to enable DA staff to improve information collection and standardized data entry of required data elements. Analysis of the data will identify areas of improvement. Finally, the data sets will be formatted appropriately to meet standard data formats for development of consistent and accurate ADT and CCD interfaces.

Milestones:
Performance Period 1: Clinical Data:
    1. Medication history and provider portal to query the VHIE by end of 2013.
    2. State law requires statewide availability of Blueprint program and its IT infrastructure by October 2013.
Performance Period 1 Carryover:
    1. Data quality initiatives with the DAs/SSAs:
Conduct data quality improvement meetings with the DAs/SSAs to focus on the analysis of the current state assessments for each agency: at least 4 meetings per month with DA/SSA leadership and 6 meetings per month with individual DAs/SSAs to review work flow.
    2. Access to medication history to support care: 150 medication queries to the VHIE by Vermont providers by 12/31/15.
Performance Period 2:

1. Implement terminology services tool to normalize data elements within the VHIE by TBD.
2. Engage in workflow improvement activities at provider practices to improve the quality of the data flowing into the VHIE as identified in gap analyses. Start workflow improvement activities in 30% of ACO attributing practices by 6/30/16.

Performance Period 3: Engage in workflow improvement activities at designated mental health agencies (DAs) as identified in gap analyses. Start workflow improvement activities in all 16 DAs by 7/1/16 and complete workflow improvement by 12/31/16. Report on improvement over baseline by 6/30/17.

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
 # Lives Impacted: TBD
 # Participating Providers: 977

Key Documents:

State of Vermont Lead(s): Georgia Maheras, Larry Sandage

Contractors Supporting: Behavioral Health Network/Vermont Care Network; Bi-State Primary Care Association/Community Health Accountable Care; H.I.S. Professionals; UVM Medical Center/OneCare Vermont; Vermont Information Technology Leaders.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy: None at this time.

Focus Area: Health Data Infrastructure
Project: Telehealth – Strategic Plan (Project Complete)

Project Summary: Vermont contracted with JBS International to develop a Statewide Telehealth Strategy to guide future investments in this area. The Strategy, developed in collaboration with the State of Vermont and private sector stakeholders, includes four core elements: a coordinating body to support telehealth activities; alignment of state policies relevant to telehealth; telehealth technology investments that are secure, accessible, interoperable, cloud-based, and aligned with Vermont's HIT infrastructure; and clinician engagement. The Strategy also includes a Roadmap based on Vermont's transition from volume-based to value-based reimbursement methodologies to guide prioritization of telehealth projects and their alignment with new clinical processes adopted as payment reform evolves. This project is complete.

Project Timeline and Key Facts:
- February 2015 – Project launched.
- March-July 2015 – Vermont Telehealth Steering Committee convened in March 2015 to guide Telehealth Strategy development; the Steering Committee continued to meet through July.
- June 2015 – Contractor presented draft strategy elements to the HIE/HIT Work Group for comments.
- August 2015 – Final Strategy elements approved.
- June-September 2015 – Strategy review and editing.
- September 2015 – Final Strategy document approved by State of Vermont; final Strategy released. The project is complete.

Status Update/Progress Toward Milestones and Goals:
- JBS International convened the Vermont Telehealth Steering Committee in March 2015 to guide Telehealth Strategy development. Steering Committee members met biweekly via phone between March and July to come to consensus on a telehealth definition, identify guiding principles for the strategy, review key features on telehealth programs across the country, and develop strategy elements.
- A draft Statewide Telehealth Strategy was submitted to DVHA in June 2015; JBS worked with SOV staff to refine the Strategy between June and September 2015.
- The final strategy elements were approved by the HIE/HIT Work Group, Steering Committee, and Core Team in August 2015.
- The State of Vermont finalized the Strategy in September 2015 and released the final Strategy in mid-September.

Milestones:
Performance Period 1: N/A
Performance Period 1 Carryover: N/A
Performance Period 2: Develop Telehealth Strategic Plan by 9/15/15.
Performance Period 3: N/A

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: N/A
  # Participating Providers: N/A

Key Documents:
- A Statewide Telehealth Strategy for the State of Vermont

Lead(s): Sarah Kinsler

Contractors Supporting: JBS International.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy: This project is complete.

Focus Area: Health Data Infrastructure
Project: Telehealth – Implementation

Project Summary: Vermont is funding pilot projects that can address a variety of geographical areas, telehealth approaches and settings, and patient populations. The primary purpose is to explore ways in which a coordinated and efficient telehealth system can support value-based care reimbursement throughout the State of Vermont. Projects were selected in part based on demonstration of alignment with the health reform efforts currently being implemented as part of Vermont's SIM project. Project summaries:
- The VNA of Chittenden and Grand Isle Counties is developing its telehealth infrastructure by building connections among providers and enabling the timely sharing of clinical information.
- The Howard Center, a major mental health and substance use disorder treatment provider in the state, is developing an opiate treatment pilot that uses novel technology to facilitate and monitor home-based opiate treatment for some clients.

Project Timeline and Key Facts:
- August 2015 – Approval of draft RFP scope.
- September 2015 – RFP released.
- November 2015 – Pilot projects selected.
- April and June 2016-January 2017 – Pilot project periods.
- December 2016-February 2017 – Pilot project wrap-up, evaluation, and reporting.

Status Update/Progress Toward Milestones and Goals:
- A draft RFP scope was developed by the State and JBS International, drawing on the telehealth definition, guiding principles, and key Telehealth Strategy elements. The draft RFP scope was approved by the HIE/HIT Work Group, Steering Committee, and Core Team in August 2015.
- The RFP was released on September 18, 2015; the bid period closed on October 23, 2015. Two pilots were selected in November.
- Contracts executed for two awardees in July 2016. Pilots began in April and June 2016. As of November 2016, both pilot projects are in progress and have made telehealth technology purchases to support their work.

Milestones:
Performance Period 1: N/A
Performance Period 1 Carryover: N/A
Performance Period 2:
    1. Release telehealth program RFP by 9/30/15.
    2. Award at least one contract to implement the scope of work in the telehealth program RFP by 1/15/16.
Performance Period 3:
    1. Continue telehealth pilot implementation through contract end dates.
    2. Incorporate Telehealth Program into Sustainability Plan by 6/30/17.

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: TBD
  # Participating Providers: TBD

Key Documents:
- [A Statewide Telehealth Strategy for the State of Vermont](#)

Lead(s): Jim Westrich

Contractors Supporting: Howard Center; VNA of Chittenden and Grand Isle Counties.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy:
- Delays in bidder selection and contract negotiations have resulted in delayed program launch.
  - The State has worked to limit the impact of this delay by negotiating condensed project timelines. The timeline above reflects delays.

Focus Area: Health Data Infrastructure
Project: EMR Expansion (Project Complete)

Project Summary: EMR Expansion focused on assisting in the procurement of EMR systems for non-Meaningful Use (MU) providers, focusing on EMR acquisition for five Specialized Service Agencies (SSAs) and Department of Mental Health/State Psychiatric Hospital. This project is complete.

Project Timeline and Key Facts:
- January 2015 – EMR acquisition project began with several contractors: VITL, VCP, and ARIS for five Specialized Service Agencies (SSAs).
- January-June 2015 – VITL assisted Vermont's Department of Mental Health in procuring new EMR solution for State Psychiatric Hospital.
- July 2015 – Vendor selected for SSA EMR acquisition and contract negotiations completed.
- August 2015 – Contract executed for SSA EMR acquisition. The project is complete.
- June 2016 – SSA EMR implementations complete.

Status Update/Progress Toward Milestones and Goals:
- EMR acquisition for five Specialized Service Agencies is complete.
- VITL provided technical assistance to the Department of Mental Health to support procurement of the EMR system for the State's new hospital.

Milestones:
Performance Period 1: N/A
Performance Period 1 Carryover: N/A
Performance Period 2:
    1. Assist in procurement of EMR for non-MU providers: Vermont State Psychiatric Hospital (by 6/30/15) and ARIS (Developmental Disability Agencies) (by 6/30/16).
    2. Explore non-EMR solutions for providers without EMRs: develop plan based on LTSS technical gap analysis.
Performance Period 3: N/A

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: TBD
  # Participating Providers: TBD

Key Documents:

State of Vermont Lead(s): Georgia Maheras, Larry Sandage

Contractors Supporting: VITL, Vermont Care Partners, ARIS.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy: This project is complete.

Focus Area: Health Data Infrastructure
Project: Data Warehousing

Project Summary: The Data Warehousing work stream includes three independent projects: The Vermont Care Partners (VCP) Data Repository project, the Clinical Registry Migration project, and statewide planning to develop a cohesive data warehousing strategy.

- The VCN Data Repository allows the Designated Mental Health Agencies (DAs) and Specialized Service Agencies (SSAs) to send specific data to a centralized data repository. In addition to acting as a centralized repository for DA/SSA data, it is expected that this project will provide VCP members with advanced data analytic capabilities to improve the efficiency and effectiveness of their services, to demonstrate value, and to participate in payment and delivery system reforms.
- The Clinical Registry Migration project moved the Blueprint for Health Clinical Registry from its previous environment to be hosted within VITL's infrastructure.
- Statewide planning activities focus on developing a long-term strategy for data systems to support analytics.

Project Timeline and Key Facts:

- March 2015 – RFP released for the VCP Data Repository project.
- May 2015 – VCP Data Repository Selection Committee selected preferred vendor.
- September 2015 – VCP Data Repository Vendor contract executed.
- June 2016 – Blueprint Clinical Registry Migration to VITL infrastructure complete.
- July 2016 – VCP Data Repository Phase 1 completed.
- January 2017 – VCP Data Repository Phase 2 to be completed.
- June 2017 – VCP Data Repository Phase 3 to be completed.

Status Update/Progress Toward Milestones and Goals:

- VCP Data Repository project work has developed a behavioral health-specific data repository for DAs and SSAs, which will aggregate, analyze, and improve the quality of the data stored within the repository and allow for sharing of data extracts with appropriate entities.
- As of May 2016, the VCP Data Repository project has received 100% of member agency data for CYs 2014 and 2105. The web portal for member agencies is nearly ready for functional testing. A prototype of a dashboard including a Key Performance Indicator (KPI) summary, demographic analyses, service delivery analyses, staff service delivery analyses, and crisis services analyses is ready for review and feedback. Implementation of this project began in late 2015 and will continue through the end of 2016.
- The Blueprint Clinical Registry Migration began in January 2016 with the acquisition of the clinical registry software. The system was migrated in Spring 2016 and successfully went live in June 2016.
- The VHCIP team has convened a team of State stakeholders to discuss strategies for developing data systems to support the State's analytic needs, as well as a group of stakeholders to discuss HIT Data Governance. These groups will provide proposals to the State's health care and HIT leadership in December.

Milestones:

Performance Period 1: N/A

Performance Period 1 Carryover: Prepare to develop infrastructure to support the transmission, aggregation, and data capability of the DAs and SSAs data into a mental health and substance abuse compliant Data Warehouse:

   1. Develop data dictionary by 3/31/15.
   2. Release RFP by 4/1/15.
   3. Execute contract for Data Warehouse by 10/15/15.
   4. Design data warehousing solution so that the solution begins implementation by 12/31/15.

Performance Period 2:

   1. Implement Phase 1 of DA/SSA data warehousing solution by 12/31/15 (implementation follows implementation project plan).
   2. Procure clinical registry software by 3/31/16.
   3. Develop a cohesive strategy for developing data systems to support analytics by 3/31/16.

Performance Period 3:

   1. Implement Phase 2 of DA/SSA data warehousing solution by 12/31/16.
   2. Obtain approval of cohesive strategy for developing data systems to support analytics by 10/31/16.
   Operationalize the approved cohesive strategy for developing data systems to support analytics by 12/31/16.

Metrics: CORE_Health Info Exchange_[VT]	

Additional Goals:
  # Lives Impacted: 35,000
  # Participating Providers: 5,000	

Key Documents: • Data Repository RFP	
State of Vermont Lead(s): Georgia Maheras	
Contractors Supporting: Behavioral Health Network/Vermont Care Network; H.I.S. Professionals; Stone Environmental; Vermont Information Technology Leaders; TBD. To view executed contracts, please visit the **VHCIP Contracts** page.	

Anticipated Risks and Mitigation Strategy:
  • Work toward the cohesive data warehousing strategy component of the Performance Period 2 milestone was been delayed.
      o The State is currently working with key partners to develop a cohesive strategy; this work is expected to be completed during the first half of Performance Period 3.	

Project Summary: The Shared Care Plan (SCP) project (formerly part of the SCÜP project) originally sought to provide a Shared Care Plan solution to Vermont's provider organizations. After electing not to pursue a technical Shared Care Plan solution, the project has refocused on reviewing and recommending revisions to consent policy and architecture to enable shared care planning in the future.

Project Timeline and Key Facts:
- April 2015 – Through the Integrated Communities Care Management Learning Collaborative, the need for a technical solution for Shared Care Plans was identified. Universal Transfer Protocol (UTP) and SCP projects are aligned under a single project named SCÜP.
- June 2015 – Discovery on aligned SCÜP project began.
- July-October 2015 – Requirements gathering sessions with multiple communities were performed and initial technical and business requirements drafted. Requirements validated with target communities. Technical Assessments of existing or proposed solutions meeting SCÜP use cases were reviewed for alignment.
- November 2015 – Technical proposal submitted to HDI Work Group by SCÜP team. SCÜP split into two projects (SCP and UTP) due to a difference in proposed solutions.
- December 2015-January 2016 – Continued discovery activities.
- March 2016 – Project staff recommended continued review of consent requirements for Shared Care Plans. A technical solution was not recommended.
- March 2016-December 2016 – Continued review of consent requirements and development of recommendations.

Status Update/Progress Toward Milestones and Goals:
- Integrated Care Management Learning Collaborative Cohort 1 communities requested shared care planning tools in April 2015.
- Final findings reviewed with HDI Work Group in November 2015 and March 2016. A technical solution was not recommended.
- A project plan to define consent requirements and for discovery work for a consent management system was presented to the HDI Work Group in October 2016. The HDI Work Group requested that additional detail be developed by a subgroup for December 2016.

Milestones (all Care Coordination Tools work streams):
Performance Period 1: N/A
Performance Period 1 Carryover:
    1. Discovery project to support long- term care, mental health, home care and specialist providers through a Universal Transfer Protocol solution: Report due 4/15/15.
    2. Engage in research and discovery to support selection of a vendor for event notification system in Vermont by 10/1/15.
Performance Period 2: Engage in discovery, design and testing of shared care plan IT solutions, an event notification system, and uniform transfer protocol. Create project plans for each of these projects and implement as appropriate, following SOV procedure for IT development:
    1. Event Notification System: Procure solution by 1/15/16 and implement according to project plan for phased roll out.
    2. SCÜP (shared care plans and uniform transfer protocol): Create project plan for this project that includes business requirements gathering by 9/30/15; technical requirements by 10/31/15; and final proposal for review by 1/31/16.
Performance Period 3:
    1. Event Notification System: Continue implementation of ENS according to contract with vendor through 12/31/16.
    2. Shared Care Plan: Recommend revisions to the VHIE consent policy and architecture to better support shared care planning by 6/30/17.
    3. Universal Transfer Protocol: Support workflow improvements at provider practices through existing contracts through 12/31/16.

4. Continue implementation of care management solutions, including VITLAccess, supporting Home Health Agencies and Area Agencies on Aging.
Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: TBD
  # Participating Providers: TBD

Key Documents: • Shared Care Plan and Universal Transfer Protocol Final Report (May 2016)
State of Vermont Lead(s): Georgia Maheras
Contractors Supporting: Bailit Health Purchasing; im21; Vermont Information Technology Leaders. To view executed contracts, please visit the **VHCIP Contracts** page.
Anticipated Risks and Mitigation Strategy: None at this time.

Focus Area: Health Data Infrastructure
Project: Care Management Tools (Universal Transfer Protocol) (Project Complete)

Project Summary: The Universal Transfer Protocol (UTP) project (formerly part of the SCÜP project) sought to provide a Universal Transfer Protocol to Vermont's provider organizations to help providers across the care continuum to exchange critical data that would support a team-based, coordinated model of care, particularly during care transitions. After electing not to pursue a technical UTP solution, this work focused on transforming practice workflows to meet UTP goals in partnership with the Integrated Communities Care Management Learning Collaborative. This project is complete.

Project Timeline and Key Facts:
- September 2014 – Contractor im21 began UTP discovery.
- February 2015 – Draft UTP charter and final UTP report submitted.
- April 2015 – Through Learning Collaboratives, the need for a technical solution for Shared Care Plans was identified; UTP and SCP projects aligned under a single project named SCÜP.
- June 2015 – Discovery on aligned SCÜP project began.
- July-October 2015 – Requirements gathering sessions with multiple communities performed and initial technical and business requirements drafted. Requirements validated with target communities. Technical Assessments of existing or proposed solutions meeting SCÜP use cases reviewed for alignment.
- November 2015 – Technical proposal submitted to HDI Work Group by SCÜP team. SCÜP split into two projects (SCP and UTP) due to a difference in proposed solutions.
- March 2016 – Project staff recommended that the UTP project work with the Learning Collaboratives to provide support services to transform practice workflows to support the UTP use case. A technical solution was not recommended.
- September 2016 – Integrated Communities Care Management Learning Collaborative learning session focused on transforming practice workflows to support care transitions and the UTP use case.

Status Update/Progress Toward Milestones and Goals:
- Final findings reviewed with HDI Work Group. Project staff recommended that the UTP project work with the Integrated Communities Care Management Learning Collaboratives to provide support services to transform practice workflows to support the UTP use case. The September 2016 learning session for Learning Collaborative communities focused on this topic.

Milestones (all Care Coordination Tools work streams):
Performance Period 1: N/A
Performance Period 1 Carryover:
    1. Discovery project to support long- term care, mental health, home care and specialist providers through a Universal Transfer Protocol solution: Report due 4/15/15.
    2. Engage in research and discovery to support selection of a vendor for event notification system in Vermont by 10/1/15.
Performance Period 2: Engage in discovery, design and testing of shared care plan IT solutions, an event notification system, and uniform transfer protocol. Create project plans for each of these projects and implement as appropriate, following SOV procedure for IT development:
    1. Event Notification System: Procure solution by 1/15/16 and implement according to project plan for phased roll out.
    2. SCÜP (shared care plans and uniform transfer protocol): Create project plan for this project that includes business requirements gathering by 9/30/15; technical requirements by 10/31/15; and final proposal for review by 1/31/16.
Performance Period 3:
    1. Event Notification System: Continue implementation of ENS according to contract with vendor through 12/31/16.
    2. Shared Care Plan: Recommend revisions to the VHIE consent policy and architecture to better support shared care planning by 6/30/17.
    3. Universal Transfer Protocol: Support workflow improvements at provider practices through existing contracts through 12/31/16.

4. Continue implementation of care management solutions, including VITLAccess, supporting Home Health Agencies and Area Agencies on Aging.
Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:
   # Lives Impacted: TBD
   # Participating Providers: TBD

Key Documents: • Shared Care Plan and Universal Transfer Protocol Final Report (May 2016)
State of Vermont Lead(s): Georgia Maheras
Contractors Supporting: Bailit Health Purchasing; im21; Vermont Information Technology Leaders.   To view executed contracts, please visit the **VHCIP Contracts** page.
Anticipated Risks and Mitigation Strategy: This project is complete.

Focus Area: Health Data Infrastructure
Project: Care Management Tools (Event Notification System)

Project Summary: The Event Notification System (ENS) project has implemented a system to proactively alert participating providers regarding their patient's medical service encounters. VITL and the Vermont ACOs worked with the State to perform discovery and design of proposed ENS solutions. The selected ENS solution provides admission, discharge, and transfer data to participating providers.

Project Timeline and Key Facts:
- July 2014 – VITL began ENS project.
- August 2014-January 2015 – Proof of concept, research, and discovery to support vendor selection.
- September 2015 – Vendor selected.
- March 2016 – Contract approved.
- April 2016 – Project launch.

Status Update/Progress Toward Milestones and Goals:
- State of Vermont worked with VITL to procure an Event Notification System.
- Vendor (PatientPing) and VITL have completed implementation of all 15 VITL feeds in PatientPing environment.
- As of September 2016, the ENS service was providing alerts for 60,260 lives, and was continuing to target expansion to all FQHC patients and the VNAs. Additional expansion work is targeted for the DAs/SSAs & SNFs.

Milestones (all Care Coordination Tools work streams):
Performance Period 1: N/A
Performance Period 1 Carryover:
　　1. Discovery project to support long- term care, mental health, home care and specialist providers through a Universal Transfer Protocol solution: Report due 4/15/15.
　　2. Engage in research and discovery to support selection of a vendor for event notification system in Vermont by 10/1/15.
Performance Period 2: Engage in discovery, design and testing of shared care plan IT solutions, an event notification system, and uniform transfer protocol. Create project plans for each of these projects and implement as appropriate, following SOV procedure for IT development:
　　1. Event Notification System: Procure solution by 1/15/16 and implement according to project plan for phased roll out.
　　2. SCÜP (shared care plans and uniform transfer protocol): Create project plan for this project that includes business requirements gathering by 9/30/15; technical requirements by 10/31/15; and final proposal for review by 1/31/16.
Performance Period 3:
　　1. Event Notification System: Continue implementation of ENS according to contract with vendor through 12/31/16.
　　2. Shared Care Plan: Recommend revisions to the VHIE consent policy and architecture to better support shared care planning by 6/30/17.
　　3. Universal Transfer Protocol: Support workflow improvements at provider practices through existing contracts through 12/31/16.
　　4. Continue implementation of care management solutions, including VITLAccess, supporting Home Health Agencies and Area Agencies on Aging.

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
　# Lives Impacted: TBD
　# Participating Providers: TBD

Key Documents:

Lead(s): Georgia Maheras

Contractors Supporting: Vermont Information Technology Leaders, PatientPing.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy: None at this time.

Focus Area: Health Data Infrastructure
Project: General Health Data – Data Inventory (Project Complete)

Project Summary: Vermont engaged a contractor, Stone Environmental, to complete a statewide health data inventory that will support future health data infrastructure planning. This project built a comprehensive list of health data sources in Vermont, gathered key information about each, and catalogued them in a web-accessible format. The resulting data inventory is a web-based tool that allows users (both within the State and external stakeholders) to find and review comprehensive information relating to the inventoried datasets. This project was completed as of December 2015.

Project Timeline and Key Facts:
- November 2014 – Contract executed.
- December 2014 – Project launched.
- January 2015 – Project convened Health Data Inventory Steering Committee to guide work.
- January-May 2015 – Dataset discovery and initial information collection; including key informant interviews.
- April-May 2015 – Dataset prioritization.
- September-November 2015 – Data collection on prioritized datasets, recommendations development.
- November 2015 – Draft report and recommendations submitted and shared with project leadership and HDI Work Group co-chairs for feedback.
- December 2015 – Final recommendations presented to Health Data Infrastructure Work Group; final report submitted to project leadership; final web-accessible inventory launched.

Status Update/Progress Toward Milestones and Goals:
- Contractor, working with SOV staff and key stakeholders, identified ~20 high priority datasets for deeper data collection; additional data collection on these prioritized datasets began in May 2015 and ended in September.
- Contractor engaged in research on possible portal framework options, and selected a solution already licensed by the State of Vermont.
- Draft report submitted to contract manager and shared with project leadership and HDI Work Group co-chairs in November 2015.
- Final report submitted and web-accessible inventory launched in December 2015.

Milestones:
Performance Period 1: Conduct data inventory.
Performance Period 1 Carryover: Complete data inventory:
    1. Draft analysis of health care data sources that support payment and delivery system reforms by 4/15/15.
    2. Final data inventory due by 10/31/15.
Performance Period 2: N/A
Performance Period 3: N/A

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: N/A
  # Participating Providers: N/A

Key Documents:
- Final Health Data Inventory Report
- Searchable Health Data Inventory

State of Vermont Lead(s): Sarah Kinsler

Contractors Supporting: Stone Environmental.
To view executed contracts, please visit the **VHCIP Contracts** page.

Anticipated Risks and Mitigation Strategy: This project is complete.

Focus Area: Health Data Infrastructure
Project: General Health Data – HIE Planning

Project Summary: The HIE Planning project resulted from a perceived gap in high-level planning and research in local and nationwide best practices for providing a robust, interoperable ability to transmit accurate and current health information throughout the Vermont health care landscape. This project is conducting further research on best practices around improving clinical health data quality and connectivity resulting in recommendations to the HDI Work Group. Additionally, the HDI Work Group has participated on multiple occasions in the 2015 revision of Vermont Health Information Technology Plan, which was released in January 2016.

Project Timeline and Key Facts:
- December 2014 – Contractor selected for HIE Planning project.
- April 2015-September 2015 – HIE Planning project contracting process put on hold pending Federal approval.
- October 2015 – HIE Planning work began.
- July 2016 – Connectivity Targets plan presented to HDI Workgroup.

Status Update/Progress Toward Milestones and Goals:
- Work is ongoing with contractor support.
- Vermont HIT Plan released in January 2016; the Plan is pending approval at the Green Mountain Care Board.
- Connectivity Targets presented and approved in the October HDI Work Group meeting. Additional parameters were requested and will be included in the next version, tentatively scheduled for March of 2017.

Milestones:
Performance Period 1: Provide input to update of state HIT plan.
Performance Period 1 Carryover: N/A
Performance Period 2:
    1. VHCIP will provide comment into the HIT Strategic Plan at least 4 times in 2015.
    2. HDI Work Group will identify connectivity targets for 2016-2019 by 6/30/16.
Performance Period 3: Finalize connectivity targets for 2016-2019 by 12/31/16. Incorporate targets into Sustainability Plan by 6/30/17.

Metrics:
CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: N/A
  # Participating Providers: N/A

Key Documents:

State of Vermont Lead(s): Georgia Maheras, Larry Sandage

Contractors Supporting: Stone Environmental.
To view executed contracts, please visit the **VHCIP Contracts** page.

Additional Supporting Information: None at this time.

Focus Area: Health Data Infrastructure
Project: General Health Data – Expert Support

Project Summary: This is a companion project to all of the projects within the Health Data Infrastructure focus area. These projects require specific skills to support the State and stakeholders in decision-making and implementation, including IT Enterprise Architects, Business Analysts, and Subject-Matter Experts.
Project Timeline and Key Facts: • Accessed as necessary to support various Health Data Infrastructure projects.
Status Update/Progress Toward Milestones and Goals: • IT-specific support to be engaged as needed. • Enterprise Architect, Business Analyst and Subject Matter Experts identified.
Milestones: *Performance Period 1:* N/A *Performance Period 1 Carryover:* N/A *Performance Period 2:* Procure appropriate IT-specific support to further health data initiatives – depending on the design of projects described above, enterprise architects, business analysts, and others will be hired to support appropriate investments. *Performance Period 3*: Procure appropriate IT-specific support to further health data initiatives – depending on the design of projects described above, enterprise architects, business analysts, and others will be hired to support appropriate investments.
Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:
  # Lives Impacted: N/A
  # Participating Providers: N/A

Key Documents:
State of Vermont Lead(s): Georgia Maheras
Contractors Supporting: Stone Environmental. To view executed contracts, please visit the **VHCIP Contracts** page.
Anticipated Risks and Mitigation Strategy: None at this time.