Vermont Health Information Exchange (VHIE) Progress Evaluation Report

FINAL REPORT
Submitted October 1, 2018 to the Department of Vermont Health Access

Prepared by:
HealthTech Solutions, LLC
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1.0 Introduction and Background

This document is the Vermont Health Information Exchange (VHIE) Progress Evaluation Report mandated by Act 187 of 2018, *an Act relating to health information technology and health information exchange*.

Act 187 of 2018 arose from Act 73 of 2017 which required Vermont’s Department of Health Access (DVHA) to contract with an independent third-party entity to conduct a comprehensive review of the State’s Health Information Technology (HIT) initiatives; federal and State funding that support HIT; the Vermont Health Information Exchange (VHIE), and the Vermont Information Technology Leaders (VITL) (the operator of VHIE). One of the priorities of Act 73 was to analyze whether the significant public funds spent to implement and operate the HIE had added sufficient value to the State, providers, and the health of Vermont citizens. Act 73 also required a report of findings and recommendations to remediate deficiencies and to improve the State’s health information technology efforts.

HealthTech Solutions (HTS) was selected by DVHA to conduct the evaluation and prepare the Act 73 “Evaluation of Health Information Technology Activities Report.” HTS conducted 90 stakeholder interviews, examined other States’ HIE structures compared to Vermont’s HIE, reviewed current literature, and analyzed the State’s and VITL’s governance and operations. The evaluation compared both the current state of HIE nationally, and Vermont’s own stated goals and processes to its actual performance.

The research revealed that while HIE is expensive and difficult for all states, HIE systems are essential to healthcare reform. In terms of oversight, Vermont was generally not organized for success, and is further hampered because the State’s last approved statewide HIT Plan dated back to 2010. Further, stakeholders lacked confidence in VITL to operate the HIE stating that the data were unreliable, the number of patient records in the HIE was low (less than 20%), and accessing the HIE frequently required multiple sign-ons.

The Act 73 report found that both health reform needs and stakeholder interviews supported the view that HIE is essential to support high-quality healthcare delivery. It urged Vermont to go back to the basics, develop effective HIE governance, create and execute an HIT Plan, improve oversight of the State’s HIT fund, link financial investment to performance, and better leverage the State’s relationship with VITL.

The Act 73 report was shared with stakeholders and presented to the General Assembly, after which Act 187 of 2018 was passed by the General Assembly and signed into law. It required the State to implement the Act 73 report recommendations and to submit: 1) A Work Plan with five updates to the General Assembly and the Green Mountain Care Board (GMCB); 2) A contingency plan if DVHA and VITL are unable to implement the recommendations of the Act 73

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1 Section 15 directed the Secretaries of Administration and Human Services to conduct a comprehensive review of the Health Information Technology Fund established by 32 V.S.A. § 10301, Health Information Technology (HIT) Plan established by 18 V.S.A. § 9351, Vermont Information Technology Leaders established by 18 V.S.A. § 9352, and the Vermont Health Information Exchange. See: http://legislature.vermont.gov/assets/Documents/2018/Docs/ACTS/ACT073/ACT073%20As%20Enacted.pdf.

2 32 V.S.A. §10301(a) establishes a Vermont Health IT Fund in the State Treasury to fund Health Care Information Technology programs and initiatives. The source of funding for the Fund is the healthcare claims tax.

3 DVHA completed the Request for Proposals process and selected HealthTech Solutions LLC, a nationally known HIT/HIE entity, to conduct the Vermont Evaluation. See: https://legislature.vermont.gov/assets/Legislative-Reports/VT-Evaluation-of-HIT-Activities-FinalReport-Secretary-Signature.pdf

4 The initial 2007 HIT Plan was amended by a 2010 HIT Plan. A draft VHIT Plan was submitted to the Green Mountain Care Board in early 2016 but was not approved.

5 The Green Mountain Care Board (GMCB) is a statutorily defined independent Board which governs HIT and State initiatives. Act 48 of 2011.
report; and 3) An independent entity evaluation of DVHA’s and VITL’s progress toward implementing the recommendations. DVHA contracted with HealthTech Solutions to conduct the review and report its findings and recommendations in this Act 187 report.

2.0 Executive Summary
DVHA, with input from VITL, developed the protocol and timelines for the Work Plan. HTS reviewed the Work Plan specifically commenting on the need for an expedited timeline to meet Act 187 legislative intent. The Work Plan was submitted to the General Assembly on May 1, 2018.

From May through early September, HTS, DVHA, and VITL held conference calls to discuss the review process, clarify documentation, and present the status of the activities and progress toward meeting the Act 73 report and Work Plan recommendations.

DVHA and VITL have reported making significant progress meeting the recommendations of the Act 73 report and the Work Plan. It was understood that many of the recommendations would not be completed before the Act 187 report was due. As such, this report provides a summary of progress made toward implementing the Act 73 report and Work Plan recommendations.

A matrix was developed which cross-walked the requirements of Act 187 with the Act 73 report recommendations and VITL/DVHA contract performance measures to create a single document where the status of all activities was easily accessible. For the May, July, and September reviews, HTS analyzed DVHA and VITL reports to determine the status of the activities. If additional program/performance documentation was needed, HTS issued a data request through DVHA. The matrix included a status and a notes column for each of the three reviews indicating whether the activity was complete; or if still in progress, whether the status was satisfactory or at risk. DVHA, VITL, and the HTS team held discussions before the HTS status reports were submitted to the legislature. As of mid-September 2018, of the initiatives linked to the 23 recommendations, 12 were implemented or completed, and 11 were in progress.

This report also includes a review of the Contingency Plan which was prepared by a separate outside vendor and submitted to DVHA on August 29, 2018, and then reviewed by HTS.

2.1 Summary Findings
The table below provides a high-level summary of the status of the 21 recommendations from the Work Plan that is related to the Act 73 report and Act 187 requirements, in addition to a summary of the status of reviews of the Work Plan and Contingency Plan. A stop light status of red, yellow, green was used to depict the overall status of each task. If a task was making sufficient progress but was not yet completed or implemented at the time of this report, it is coded as blue status. Further details on the recommendations and status are in Section 3.0 below.

<table>
<thead>
<tr>
<th>Recommendations from DVHA Work Plan related to Act 73 report and Act 187</th>
<th>Responsible Party</th>
<th>Phase: (Not Started; In Progress; Implemented; Completed)</th>
<th>Overall Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Establish an effective across-the-board Governance Committee</td>
<td>✓</td>
<td>Completed</td>
<td></td>
<td>This recommendation was completed in November 2017.</td>
</tr>
<tr>
<td>2 Create effective HIT/HIE Governance Model and temporary and permanent subcommittees to support Governance Committee’s work</td>
<td>✓</td>
<td>In Progress</td>
<td></td>
<td>The HIE Steering Committee is still reviewing various HIE/HIT governance models and has rescheduled the presentation for the proposed governance model to November.</td>
</tr>
</tbody>
</table>


7 The timeframe allowed for the evaluation work was from May 1 to October 1, 2018.
<table>
<thead>
<tr>
<th>Recommendations from DVHA Work Plan related to Act 73 report and Act 187</th>
<th>Responsible Party</th>
<th>Phase: (Not Started; In Progress; Implemented; Completed)</th>
<th>Overall Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Establish an Advisory Committee to Oversee VITL’s Progress</td>
<td>✓</td>
<td>✓</td>
<td>Implemented</td>
<td>The State reported that this recommendation was completed in December 2017 when VITL and DVHA convened an HIT Advisory Committee.</td>
</tr>
<tr>
<td>4 Appropriately staff the VHIE operator</td>
<td>✓</td>
<td></td>
<td>Completed</td>
<td>This task has been completed and is satisfactory; however, it will require the HIE strategic plan to be completed for ongoing assessment.</td>
</tr>
<tr>
<td>5 Ensure that VITL is compliant with financial and operational regulations and standards as it operates the Vermont’s HIE infrastructure</td>
<td>✓</td>
<td></td>
<td>Implemented</td>
<td>DVHA and VITL have shared operational plans for contract monitoring and deliverable acceptance criteria and processes. Progress has been noted in an attempt to more closely define the Return on Investment derived from the HIE and VITL as a steward of that program.</td>
</tr>
<tr>
<td>6 Increase Transparency through Improved Public Reporting on the VHIE</td>
<td>✓</td>
<td>✓</td>
<td>Implemented</td>
<td>All activities for this task have been implemented and are satisfactory.</td>
</tr>
<tr>
<td>7 Use the State’s contracts with VITL to transparently tie program goals to HIE financial investments</td>
<td>✓</td>
<td></td>
<td>In Progress</td>
<td>This recommendation is in progress and the process is satisfactory at this point.</td>
</tr>
<tr>
<td>8 Develop a VHIE strategic plan that is reflective of customers’ needs and the strategy outlined in the HIT Plan</td>
<td>✓</td>
<td></td>
<td>In Progress</td>
<td>A strategic plan discussion memorandum was discussed with the VITL Board of Directors at the September 2018 meeting. Further discussions will be included in the VITL Board’s meeting in November.</td>
</tr>
<tr>
<td>9 Address the issues with VHIE core functions identified in the Act 73 report</td>
<td>✓</td>
<td></td>
<td>In Progress</td>
<td>Two of the activities under this task have been completed and have been satisfactorily addressed. The other activities are in progress and sufficient progress is being made towards these tasks.</td>
</tr>
<tr>
<td>10 Create an HIE Board of Directors consisting of a mix of stakeholders including subject matter experts and users to serve Vermont’s HIE needs</td>
<td>✓</td>
<td></td>
<td>Implemented</td>
<td>The Governance Committee of the VITL Board of Directors has drafted new criteria for board members in accord with Act 187 of 2018. At its September 2018 meeting, the Board approved five new directors for a total of 14.</td>
</tr>
<tr>
<td>11 Provide the General Assembly and the GMCB with reports on progress made in implementing the recommendations from the Act 73 report</td>
<td>✓</td>
<td>✓</td>
<td>Completed</td>
<td>This task is complete. Progress reports have been submitted to the General Assembly and GMCB as mandated.</td>
</tr>
<tr>
<td>12 Develop a Contingency Plan should DVHA and VITL prove unable to act on the recommendations from the evaluation report</td>
<td>✓</td>
<td>✓</td>
<td>Completed</td>
<td>The contingency plan was complete and submitted on time.</td>
</tr>
<tr>
<td>13 Execute a third-party analysis of progress</td>
<td>✓</td>
<td></td>
<td>Completed</td>
<td>The third-party evaluation was submitted DVHA as required by October 1, 2018.</td>
</tr>
<tr>
<td>14 Provide recommendations to inform future HIE and consent policy legislation and activity</td>
<td>✓</td>
<td></td>
<td>In Progress</td>
<td>DVHA has begun engaging stakeholders to assist in the development of recommendations to the General Assembly and administration on Vermont’s consent policy.</td>
</tr>
<tr>
<td>15 Work collaboratively with the State and other stakeholders to develop and implement mechanisms to increase the number of Vermonters who consent to have their data viewable in the VHIE</td>
<td>✓</td>
<td></td>
<td>Implemented</td>
<td>The Work Plan adopted a goal of increasing the number of patients in the HIE from 19% to 35%. The September 1st Progress Report indicates that the 35% patient consent rate has been achieved.</td>
</tr>
<tr>
<td>Recommendations from DVHA Work Plan related to Act 73 report and Act 187</td>
<td>Responsible Party</td>
<td>Phase: (Not Started; In Progress; Implemented; Completed)</td>
<td>Overall Status</td>
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</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>16 For the patients who have already provided consent, expend resources to match the patients with their records.</td>
<td>✔</td>
<td>In Progress</td>
<td>This task is in progress. A Master Patient Index Assessment Plan has been created and is a step in the right direction.</td>
<td></td>
</tr>
<tr>
<td>17 Implement easier ways to access and use the data in the VHIE that do not burden providers and facilitate healthcare reform measures</td>
<td>✔</td>
<td>In Progress</td>
<td>This task has been implemented satisfactorily but should be monitored for extension beyond the two initial locations.</td>
<td></td>
</tr>
<tr>
<td>18 Improve the quality of the data in the VHIE by making sure that records are accurate and complete.</td>
<td>✔</td>
<td>In Progress</td>
<td>The Terminology Services Plan was reviewed and although additional details need to be developed for it, sufficient progress has been made to date.</td>
<td></td>
</tr>
<tr>
<td>19 Require VITL to submit a corrective action plan to address the findings on VHIE’s security controls, including a description of how findings will be corrected with a detailed implementation plan and timeline. Through Plan of Action &amp; Milestone (POA&amp;M) Management, centralize findings and defects and then track the remediation effort into dates, milestones, and cost.</td>
<td>✔</td>
<td>In Progress</td>
<td>Although this recommendation is still in progress, HTS believes sufficient progress has been made as of this report date.</td>
<td></td>
</tr>
<tr>
<td>20 Inform the assessment of the VHIE technical structure by completing the State’s Architectural Assessment</td>
<td>✔</td>
<td>In Progress</td>
<td>This task is still in progress, but sufficient progress has been made to date.</td>
<td></td>
</tr>
<tr>
<td>21 Simplify the architecture of the VHIE.</td>
<td>✔</td>
<td>In Progress</td>
<td>This task is still in progress, but sufficient progress has been made to date.</td>
<td></td>
</tr>
<tr>
<td>22 Review of the Work Plan</td>
<td>✔ ✔</td>
<td>Completed</td>
<td>HTS determined the activities in the Work Plan were in line with steps necessary to address the recommendations from the Act 73 report.</td>
<td></td>
</tr>
<tr>
<td>23 Review of the Contingency Plan</td>
<td>✔ ✔</td>
<td>Completed</td>
<td>The Contingency Plan was submitted on time, and in the opinion of HTS, this plan satisfactorily addresses the five elements required of the contingency report in the legislation. However, in the opinion of HTS, if the Contingency Plan is acted upon, additional factors should be considered.</td>
<td></td>
</tr>
</tbody>
</table>

3.0 Final Review of Recommendations, Objectives and Plans

The following subsections provide a summary of the final review status of the recommendations from the Work Plan which reflect the discussions and documentation received from DVHA and VITL and the three status reports submitted to the General Assembly.

3.1 Establish an effective across-the-board Governance Committee

The State reported that this recommendation was completed in November 2017 when it “established the HIE Steering Committee, which is tasked with developing a statewide strategic plan by November of this year. The Steering Committee includes representatives from across the care continuum who are wholly focused on ensuring that the strategic plan is consensus-driven, achievable and acts as the foundation for continued planning.” (DVHA May 1, 2018 report to legislature) Section (a)(1) of Act 187 of 2018 states that DVHA “in consultation with the Department’s Health Information Exchange Steering Committee” shall be responsible for the overall coordination of Vermont’s statewide health information Technology Plan. The Steering Committee is not defined in law nor DVHA rules and regulations. DVHA may want to consider
promulgating a rule that establishes the Steering Committee, and its roles and responsibilities to ensure official jurisdiction.

3.2 Create effective HIE/HIT Governance Model and temporary and permanent subcommittees to support Governance Committee’s work
HealthTech Solutions reviewed the progress to create effective HIE/HIT Governance Model and temporary and permanent subcommittees to support Governance Committee’s work documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task is still in progress. The HIE Steering Committee is still reviewing various HIE/HIT governance models and discussion has been rescheduled for November.

DVHA has elected to use its existing stakeholder groups in lieu of establishing permanent subcommittees. While this may be effective in most cases, DVHA may want to consider a subcommittee to focus on the patient consent issue which is a critical component to achieving a successful HIE.

3.3 Establish an Advisory Committee to Oversee VITL's Progress
The State reported that this recommendation was completed in December 2017 when VITL and DVHA convened an “HIT Advisory Committee” which consists of key VITL Board members and Executives and DVHA leadership and staff to address issues with the VHIE, and a subsequently developed work plan.

3.4 Appropriately staff the VHIE operator
HealthTech Solutions reviewed the progress to appropriately staff the VHIE operator as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task has been completed and is satisfactory; however, it will require the HIE strategic plan to be completed for ongoing assessment.

3.5 Ensure that VITL is compliant with financial and operational regulations and standards as it operates the Vermont’s HIE infrastructure
HealthTech Solutions reviewed the progress to ensure that VITL is compliant with financial and operational regulations and standards as it operates the VHIE infrastructure. Acceptable progress has been made for this recommendation. DVHA and VITL have shared operational plans for contract monitoring and deliverable acceptance criteria and processes. Progress has also been noted in an attempt to more closely define the Return on Investment derived from the HIE and VITL as a steward of that program. HTS strongly encourages continued progress based upon corrective actions for any findings from pending operational reviews; and the use of Service Level Agreements to define non-deliverable based services provided by VITL.

3.6 Increase Transparency through Improved Public Reporting on the VHIE
HealthTech Solutions reviewed the progress to increase transparency through improved public reporting on the VHIE as documented in bi-monthly progress reports beginning in May 2018 through September 2018. All activities for this task have been implemented and are satisfactory.
3.7 Use the State's contracts with VITL to transparently tie program goals to HIE financial investments
This is a two-pronged recommendation: “Extend VITL’s SFY18 contracts with the state through the first half of SFY19 to allow time for the completion of the HIT Plan, which will further define the role of the VHIE and include goals that will tie directly to future contract deliverables.” This recommendation has been completed. The second recommendation is to execute a 2019 calendar year contract with VITL that reflects priorities established in the HIE/HIT Plan to be delivered to the GMCB by November 1, 2018. This recommendation is in progress and while the process is satisfactory at this point, it should be carefully monitored.

3.8 Develop a VHIE strategic plan that is reflective of customers' needs and the strategy outlined in the HIT Plan
A strategic plan discussion memorandum was discussed at the September VITL Board of Directors meeting. A final plan to include technology and sustainability will be reviewed in November for a Board vote at its December meeting.” (DVHA September 1, 2018 status update) This recommendation is in progress.

3.9 Address the issues with VHIE core functions identified in the Act 73 report
HealthTech Solutions reviewed the progress to address the issues with VHIE core functions identified in the Act 73 report as documented in bi-monthly progress reports beginning in May 2018 through September 2018. Two of the activities under this task have been completed and have been satisfactorily addressed. The other activities are in progress and sufficient progress is being made towards these tasks.

3.10 Create an HIE Board of Directors consisting of a mix of stakeholders including subject matter experts and users to serve Vermont's HIE needs
This recommendation included three activities: 1) Fill the State’s Board of Directors slot. Act 187 of 2018 removed the State’s Director slot. This activity is no longer applicable; 2) Develop new membership criteria for Board service focused on users or potential users of core services (providers) and on stakeholders in healthcare reform who utilize the VHIE for population health management; and 3) Recruit new membership based on the criteria. The Governance Committee of the VITL Board of Directors has drafted new criteria and is set to recommend two new directors to the Board, both with technical and HIE expertise at its annual meeting in September. The Governance Committee of the VITL Board of Directors drafted new criteria for board members in accord with Act 187 of 2018. At its September 2018 meeting, the Board approved five new directors for a total of 14.

3.11 Provide the General Assembly and the GMCB with reports on progress made in implementing the recommendations from the Act 73 Evaluation report
HealthTech Solutions reviewed the progress to provide the General Assembly and the GMCB with reports on progress made in implementing the recommendations from the Act 73 Evaluation Report as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task is complete. Progress reports have been submitted to the General Assembly and GMCB as mandated.
3.12 Develop a Contingency Plan should DVHA and VITL prove unable to act on the recommendations from the evaluation report
HealthTech Solutions reviewed the progress to develop a Contingency Plan should DVHA and VITL prove unable to act on the recommendations from the Act 73 report as documented in bi-monthly progress reports beginning in May 2018 through September 2018. The Contingency Plan was completed and submitted on time. The work provided is a list of options and a large number of difficult decisions would be required if this plan is executed. Due to the additional work necessary to utilize this plan, the item is marked yellow. HTS is providing feedback on potential inclusions/additions to the plan. See section 3.23 below.

3.13 Execute a third-party analysis of progress
HealthTech Solutions reviewed the progress to execute a third-party analysis of progress as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task has been met satisfactorily. The third-party evaluation was submitted to DVHA as required by October 1, 2018.

3.14 Provide recommendations to inform future HIE and consent policy legislation and activity
DVHA has begun engaging stakeholders to assist in the development of recommendations to the legislature and administration on Vermont's consent policy. Thus far, the Office of the HealthCare Advocate, VITL, the GMCB, and the American Civil Liberties Union have been engaged. This recommendation is in progress with the status shown as “blue.”

3.15 Work collaboratively with the state and other stakeholders to develop and implement mechanisms to increase the number of Vermonters who consent to have their data viewable in the VHIE.
HealthTech Solutions reviewed the progress to work collaboratively with the State and other stakeholders to develop and implement mechanisms to increase the number of Vermonters who consent to have their data viewable in the VHIE as documented in bi-monthly progress reports beginning in May 2018 through September 2018. The Work Plan included a goal of increasing the number of Vermonters who consent to having their health data available in the HIE from 19% to 35%. According to the September 1st Progress Report, the 35% patient consent rate has been achieved as a result of the completion of electronic consent delivery by University of Vermont Medical Center and Northeastern Vermont Regional Hospital (NVRH). This task has been implemented and is satisfactory for the Act 187 report.

3.16 For the patients who have already provided consent, expend resources to match the patients with their records.
HealthTech Solutions reviewed the progress of VITL for the patients who have already provided consent, expend resources to match the patients with their records as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task is still in progress. Sufficient progress has been made so far. The Master Patient Index Assessment Plan, which was reviewed by HealthTech Solutions, is a step in the right direction.
3.17 Implement easier ways to access and use the data in the VHIE that do not burden providers and facilitate healthcare reform measures
HealthTech Solutions reviewed the progress to implement easier ways to access and use the data in the VHIE that do not burden providers and facilitate healthcare reform measures as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task has been implemented satisfactorily but should be monitored for extension beyond the two initial locations.

3.18 Improve the quality of the data in the VHIE by making sure that records are accurate and complete.
HealthTech Solutions reviewed the progress to improve the quality of the data in the VHIE by making sure that records are accurate and complete as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task is still in progress. The Terminology Services Plan was reviewed and although additional details need to be developed for it, sufficient progress has been made to date.

3.19 Require VITL to submit a corrective action plan to address the findings on VHIE’s security controls, including a description of how findings will be corrected with a detailed implementation plan and timeline.
HealthTech Solutions reviewed the progress to require VITL to submit a corrective action plan to address the findings on VHIE’s security controls, including a description of how findings will be corrected with a detailed implementation plan and timeline as documented in bi-monthly progress reports beginning in May 2018 through September 2018. VITL has addressed all high-risk items within the Plan of Action and Milestones (POA&M) and continues to meet with ADS Security team monthly. A copy of the most recent Security Meeting minutes was provided to HTS. Although this recommendation is still in progress, HTS believes sufficient progress has been made as of this report date.

3.20 Inform the assessment of the VHIE technical structure by completing the State's Architectural Assessment
HealthTech Solutions reviewed the progress to inform the assessment of the VHIE technical structure by completing the State's Architectural Assessment as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task is still in progress, but sufficient progress has been made to date.

3.21 Simplify the architecture of the VHIE.
HealthTech Solutions reviewed the progress to simplify the architecture of the VHIE as documented in bi-monthly progress reports beginning in May 2018 through September 2018. This task is still in progress, but sufficient progress has been made to date.

3.22 Review of the Work Plan
HealthTech Solutions reviewed the Work Plan developed by DVHA and VITL which was submitted to the General Assembly on May 1, 2018. Meetings were held between HTS, DVHA, and VITL to discuss the activities identified in the Work Plan to address the recommendations from the Act 73 report. HTS determined the activities were in line with steps necessary to address the recommendations from the Act 73 report.
3.23 Review of the Contingency Plan

Act 17 of 2018 required a contingency plan for health information technology to be used if the Department and VITL are unable to implement the recommendations from the Act 73 report. As stated under 3.12, a Contingency Plan was prepared by a separate outside vendor. The Plan was submitted on time, and in the opinion of HTS this plan satisfactorily addresses the five elements required of the contingency report in the legislation. However, in the opinion of HTS, if the Contingency Plan is acted upon, additional factors should be considered. These are briefly described below:

Additional Factors to Consider if the Contingency Plan is Acted Upon

If the contingency plan is implemented, in the opinion of HTS, additional research and analysis would be needed to differentiate between the identified options. These factors aggregate in two domains:

1. How the roles of federal and State oversight might shape the feasibility and desirability of each option
2. Strategies of sustainability including potential role of federal funding and how the associated integration with State services such as Medicaid can support sustainability

In terms of federal and State oversight:

- Careful consideration should be given to include federal reporting and approval requirements for making substantive changes to programs/activities and technologies that were approved and funded with federal funds.
- An assessment of the implications to timelines and option feasibility should include federal approvals needed for Request for Proposals and other procurement activities.
- Public policies continue to be fluid and option alternatives should consider the implications of current federal direction under the 21st Century Cures Act, including TEFCA, Promoting Interoperability, Medicare Conditions of Participation among others, all of which have significant implications for Vermont stakeholders.
- Options need to be considered relative to the State legislative/statute changes that are needed before each could be implemented, and potential alternatives in the event the General Assembly does not vote to change laws.

Relative to sustainability:

- Any option should consider tapping into Medicaid Enterprise funding for sustainability. Vermont Medicaid should be a key consideration in sustainability funding.
- Each option should be evaluated for consideration of the Centers for Medicare and Medicaid Services (CMS) funding (90/10, 75/25, 50/50). CMS is encouraging states to find ways to connect their HIE and HIE-related projects funded through the Health Information Technology for Economic and Clinical Health (HITECH) to the broader Medicaid enterprise allowing for ongoing funding from CMS.
- In other states, HIE sustainability is being directly linked to the provision of high value use cases to stakeholders. Given the importance of a successful HIE to the citizens of Vermont, as identified in both the Act 73 report and the Contingency Plan Report, consideration of each option should be considered in the context of the ability to provide high-value use cases.
Rapidly evolving technical solutions that may have complementary or competitive implications are in process and being encouraged by federal policies. The options could be considered within the context of these solutions.

4.0 Conclusion
DVHA and VITL have reported making significant progress toward implementing the recommendations of the Work Plan. Act 187 of 2018 established a short timeframe for the evaluation of whether DVHA and VITL have made progress in meeting the recommendations of the Act 73 report. Realistically many of these recommendations require more time to execute and complete than the six-month period allowed for this Act 187 report.

Thus, a portion of this evaluation is a summary of progress made toward the “planning” of how DVHA and VITL will meet the recommendations of the Act 73 report, while other sections report of the recommendations being completed. Progress is at a satisfactory level; the State should implement provisions that require continuous evaluation to keep HIE efforts at the forefront.