Report of the Vermont State Auditor

April 14, 2015

VERMONT HEALTH CONNECT

Future Improvement Contingent on Successful System Development Project

Douglas R. Hoffer
Vermont State Auditor
Rpt. No. 15-03

Mission Statement

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Douglas R. Hoffer
STATE AUDITOR

STATE OF VERMONT
OFFICE OF THE STATE AUDITOR

April 14, 2015

Addressees (see page 3 of letter)

Dear Colleagues,

Since the State launched Vermont Health Connect (VHC) on October 1, 2013, it has struggled to run the new health insurance exchange. While the State has taken steps to correct problems, gaps in VHC's functionality have been patched by manual and time-consuming processes that have caused hardship for Vermonters. While the State has thrown substantial personnel and financial resources at the problems facing VHC, the ultimate effectiveness of those actions won't be realized unless new versions of the exchange are successfully released in May and the fall of this year.

The State conducted and contracted for internal and external analyses of VHC that were aimed at pinpointing and troubleshooting problems. Rather than reinvent the wheel, my office drew from this extensive body of analysis. We decided to focus this audit of VHC on assessing the status of the State's corrective actions to resolve the identified shortcomings of this state-run marketplace. The attached report is the product of that performance audit.

The audit report is organized into two main sections – information technology (IT) and operational areas. The IT section of the report focuses on IT system development, governance and project management, and security. The operational part focuses on enrollment, change of circumstances, renewals, and premium payment processing.

Although the State has developed a high-level plan to correct IT shortcomings in 2015, significant obstacles and challenges remain to the successful implementation of the plan. The schedule for the first release is aggressive and the State does not yet have a defined scope of work or a contract with Optum, its current vendor, for a second major release in the fall.

The State has improved its project management processes. However, Optum has not produced documentation deliverables in a timely fashion, and the State's contract does not include provisions to measure vendor performance.

In the fall of 2014, the State reported that it had corrected VHC's highest priority security weaknesses. Despite this progress, 70 moderate risk weaknesses remained as of January 31, 2015, and the State has known about 91 percent of those weaknesses for at least 13 months. Moderate risk is defined as a threat that could have a serious adverse effect on organizational operations, organizational assets, individuals, other organizations, or the nation.

132 State Street • Montpelier, Vermont 05633-5101
Auditor: (802) 828-2281 • Toll-Free (in VT only): 1-877-290-1400 • Fax: (802) 828-2198
email: auditor@state.vt.us • website: www.auditor.vermont.gov

On the operational side of the audit, we identified actions taken to improve the enrollment process. Nonetheless, there are still errors in the enrollment files sent to insurers. Moreover, the State had still not reconciled enrollment data between state, vendor, and insurer systems by the end of February.

The absence of automatic functions that allow account information to be easily updated to reflect changes in Vermonters' circumstances (e.g., address, income, etc.) has plagued the system since it went live. The change of circumstances backlog is substantial. Manual processes reduced the backlog from the fall of 2014, but, as of March 9, VHC reported 7,256 unprocessed change requests.

The State has also developed a manual process and contracted for staff resources to renew customers in qualified health plans for 2015. Having to utilize a manual process has led to another substantial backlog. As of March 9, VHC reported there were 7,360 renewals that had not been completely processed. While Vermonters should not experience gaps in their coverage, some individuals will receive invoices for several months of premium payments at once.

The State's premium payment process is cause for concern, and the State has taken little action to improve its shortcomings. The financial controls of Vermont Health Connect's premium payment process have serious deficiencies. The lack of financial reporting, account oversight, and a full reconciliation of customer account balances is troubling.

The report makes recommendations to the Legislature about the completion of planning activities and regular reporting on the status of the project's cost, schedule, and scope. It also addresses the issue of transitioning away from VHC, should the state pursue that option.

During the 2015 legislative session, the administration proposed migrating from VHC to the federal exchange if key elements of the state-run exchange are not functioning properly in the near-term. We agree that it is prudent to consider whether to continue with VHC or to move to an alternative model for running an exchange and to develop a plan for this scenario. We also believe that such a decision should be based on strong analytics. A cost-benefit analysis of alternatives to VHC that accounts for qualitative and quantitative factors would help inform such a critical decision.

Lastly, I would like to thank the management and staff at VHC and the Department of Information and Innovation for their cooperation and professionalism during the course of this audit.

Sincerely,

Doug Hoffer
Vermont State Auditor

ADDRESSEES

The Honorable Shap Smith
Speaker of the House of Representatives

The Honorable John Campbell
President Pro Tempore of the Senate

The Honorable Peter Shumlin
Governor

Mr. Hal Cohen
Secretary
Agency of Human Services

Mr. Justin Johnson
Secretary
Agency of Administration

Mr. Steven Costantino
Commissioner
Department of Vermont Health Access

Mr. Richard Boes
Commissioner
Department of Information and Innovation

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Introduction

Since its debut on October 1, 2013, the State's health insurance marketplace exchange, called Vermont Health Connect (VHC), has been the subject of customer complaints regarding errors in their accounts and legislative and media scrutiny regarding missing system functionality and reported costs. According to Vermont's Office of the Health Care Advocate,[1] problems with the VHC operation caused some Vermonters to go without needed care for days and weeks, even though the State prioritizes fixing errors that are affecting a customer's ability to access care.[2] Other problems reported by VHC customers included incorrect invoices, termination of coverage even though payments had been made, and delays in obtaining or terminating insurance coverage.

The State decided that a different approach was needed to address these myriad problems, so it negotiated a settlement with its system integrator, CGI Technologies and Solutions (CGI), and transitioned to a new contractor, OptumInsight (Optum), as of October 1, 2014. As part of this transition, the State assumed certain CGI subcontracts, including the subcontract with Benaissance, which performs premium payment processing.

The State also contracted for independent VHC system and operations reviews, which contained recommendations for improvement. Moreover, the State itself has identified and reported on problems with the VHC system and operations.

Since there had been a series of external and internal analyses of VHC's problems, we decided to focus our audit on whether corrective actions were being taken. Accordingly, our objective is to assess the status of the State's corrective actions to resolve the reported shortcomings of VHC. We scoped our audit to review information technology subjects (system development, information technology governance/project management, and system security) and operational areas (enrollment, change of circumstances, renewals, and premium payment processing).[3] Throughout this report we

[1] The Office of the Health Care Advocate, part of Vermont Legal Aid, Inc., provides consumer assistance to Vermonters on questions and problems related to health insurance and health care.

[2] *Quarterly Report October 1, 2014 – December 31, 2014 to the Agency of Administration* (submitted by the Chief Health Care Advocate, January 21, 2015).

[3] The independent reviews identified problems in other areas that were not included in the scope of this audit, including system operations and data integrity. In addition, we limited our work in areas that were being covered by other audits, such as eligibility for enrollment and Federal grant compliance, so as not to duplicate efforts.

used statistics that were derived from reports generated from the VHC system (e.g., the number of enrollments, processing backlogs). This system is flawed and has known data integrity problems. As a result, we did not attempt to validate these statistics.

Appendix I contains detail on our scope and methodology. Appendix II contains a list of abbreviations used in this report.

Highlights: Report of the Vermont State Auditor

Vermont Health Connect: Future Improvement Contingent on Successful System Development Project

(April 14, 2015, Rpt. No. 15-03)

Why We Did this Audit	The State's health insurance marketplace exchange, called Vermont Health Connect (VHC), went "live" on October 1, 2013, and has been criticized for its system and operational deficiencies. Our objective is to assess the status of the State's corrective actions to resolve the reported shortcomings of VHC. This report is organized to address this objective by two major categories pertaining to (1) information technology (IT) issues and (2) operational areas.
Objective 1 Finding—Information Technology Issues	<u>System Development</u> The State has developed a high-level plan to correct VHC system shortcomings, but significant obstacles and challenges make the successful implementation of this plan uncertain. At the time of CGI's removal as system integrator, the State reported that only 24 percent of VHC's functional requirements had been successfully implemented (others had been delivered with defects or not delivered). Only 35 percent of the non-functional requirements had been accepted or provisionally accepted by the State. While the new systems integrator, Optum, has since implemented changes to the VHC system, major requirements remain unimplemented, such as an automated capability to make changes to customers' accounts (known as "change of circumstances"). The State plans to implement this functionality and others in a May 2015 major release. However, the schedule to meet this deadline is aggressive and the time allotted to fix defects (including retesting) that could be found during end-to-end testing with the carriers is short and does not leave a lot of leeway to address them and remain on schedule. The State also plans to implement other requirements, including an automated renewal process, in a second major release in the Fall of 2015. The high risk associated with these development efforts have been recognized in status reports by internal and external parties. Examples of issues that must be overcome include competition for staff and technical resources and the absence of a contract to complete the Fall release. Moreover, even if these changes are successfully completed, other requirements would remain outstanding, particularly the Small Business Health Options Program (SHOP), and there are no specific plans for their implementation. <u>IT Governance/Project Management</u> The State's corrective actions to address shortcomings in VHC's IT governance and project management have been noteworthy, but the effectiveness of these changes will be tested during the planned 2015 system development releases to the system. An August 2014 IT assessment noted that "until there are substantial changes to project governance and processes, the same processes will likely result in the same outcomes." Since that time, the State has made improvements in areas such as project management staffing, documentation, and processes. However, other recommended actions have not been completely implemented. In particular, while the State has improved its vendor management process, Optum's documentation deliverables have not been timely. In addition, the State's contract with Optum for the 2015 releases does not include metrics to measure the contractor's performance. <u>System Security</u> The State reported that it had corrected the VHC system's highest priority IT security weaknesses in the Fall of 2014, but 70 moderate risk weaknesses remained as of January 31, 2015. Moderate risk is defined as a threat event that could be expected to have a serious adverse effect on organizational operations, organizational assets, individuals, other organizations, or the nation. Almost all of these moderate risk weaknesses were identified in a security assessment report issued by a consultant in December 2013, so the State has known about them for at least 13 months. The State has ongoing system security corrective actions. For example, a contractor has been hired to provide security services in calendar year 2015, including security policy development and implementation, and 24/7 incident analysis, handling, and alerting. The State plans to obtain another independent security assessment report in 2015, to include areas that were not covered by the 2013 report.

Highlights (continued)

Objective 1 Finding—Major Operational Areas	Enrollment The State has taken corrective actions to improve its enrollment process, but shortcomings remain. For example, the State improved its transmission of enrollment files to the carriers, although errors in the enrollment file remain. Moreover, as of March 9, 2015, the State had a backlog of eligibility factors that had not been verified from the applications of almost 55,000 individuals. The State has developed a plan to perform these verifications and plans to start sending letters to affected customers in June 2015. Another shortcoming is that, as of the end of February 2015, VHC has performed no reconciliations of enrollment data among the VHC, Benaissance, and carriers' systems. Change of Circumstances (COC) The COC backlog is substantial—as of March 9, 2015, VHC reported that there were 7,256 unprocessed change requests—even though VHC has taken corrective action that reduced this backlog from what it was in the Fall of 2014. Among the corrective actions taken were improvements in manual processes and adding a significant number of extra personnel to process the changes. Nevertheless, the ongoing COC backlog has caused a myriad of problems, including (1) delayed access to care for customers and (2) customers paying incorrect premiums for months. Renewals The State developed a manual process and contracted for staff resources to renew customers in qualified health plans in 2015, but shortcomings in these actions led to a substantial backlog. At the request of the State, the carriers continued to cover 2014 customers in 2015 to prevent gaps in coverage. Nevertheless, the State's manual renewal process caused a backlog in processing renewals and billing delays. As of March 9, 2015, VHC reported that there were 7,360 renewals that had not been completely processed and, according to VHC, this backlog will not be cleared until May 2015. In addition, because their renewals have not been processed, some customers have not been sent invoices for their 2015 coverage, so when they receive their first invoice they may owe multiple months of premium payments. Premium Payment Processing The State has taken limited action to improve its premium payment processes and shortcomings remain. For example, the State did not yet have a process to reconcile customer account balances among the VHC, Benaissance, and carriers' systems. In addition, Benaissance had a balance in its VHC bank account of about $5 million as of January 30, 2015, that had yet to be remitted. The State did not know how many of these funds are partial customer payments (the State requires that only full payments be remitted to the carriers), amounts due to be refunded to the customer, overpayments on active accounts that will be applied to future invoices, Vermont Premium Assistance, or prepayments made by customers.
Other Matters	The current legislative session has included proposals to consider abandoning the current VHC system for a Federal alternative. We believe that such a decision should have a strong analytical basis, including a cost-benefit analysis of alternatives considering both qualitative and quantitative benefits and costs in the short and long term.
What We Recommend	We are making recommendations pertaining to the VHC system that emphasize the completion of planning activities and reporting of cost, schedule, and scope status of the 2015 system development efforts to the Legislature. We are also making recommendation related to VHC operations that focus on those areas that would continue regardless of planned VHC system changes.

Background

The federal Patient Protection and Affordable Care Act (ACA) requires the establishment of health insurance marketplaces (also called exchanges) in each state to assist consumers and small businesses in comparing, selecting, and enrolling in private market insurance plans, known as qualified health plans (QHP). These exchanges were intended to provide a seamless, single point-of-access for individuals to enroll in private health plans, apply for income-based financial assistance, and, as applicable, obtain an eligibility determination for other health coverage programs, such as Medicaid. States could elect to establish and operate their own exchange or rely on an exchange operated by the federal Centers for Medicare and Medicaid Services (CMS).

Vermont elected to develop its own exchange, called Vermont Health Connect (VHC), which went live on October 1, 2013. The VHC system is part of a broader vision within the Agency of Human Services (AHS) called the Health and Human Services Enterprise (HSE), which is envisioned to utilize a common platform for several major systems.[4] VHC was the first step in this overall vision. At this time, the VHC system is the only application on the HSE platform.

Originally the State utilized CGI Technologies and Solutions, Inc. (CGI) to perform system integration, hosting, and maintenance and operations services. From its inception, the VHC system was marred by significant deficiencies. These deficiencies eventually caused the State and CGI to reduce the scope of work remaining in the contract and transition this work to a new system integrator, OptumInsight, Inc. (Optum). In all, the State paid CGI $75.2 million for the work performed through September 30, 2014 (the end of the transition period). This amount includes payments related to contractors, such as Benaissance, who were under subcontracts to CGI and these subcontracts were later assigned to the State as part of the transition.

In moving from CGI to Optum the State changed its contracting approach. The CGI contract was a two-year (with two one-year extension options) fixed-price contract, and payments were based on State acceptance of critical artifacts and deliverables. In contrast, the June 2014 contract with Optum[5]

[4] The HSE consists of several inter-related projects, namely the VHC system, integrated eligibility, Medicaid Management Information System, and Health Information Technology service areas.

[5] The State also signed a separate contract with Optum for maintenance and operations for the VHC system for a sum not to exceed $6,756,450 for the period January 1, 2015 to June 30, 2015. Payment for this contract is also based on time and materials.

was originally for less than seven months (until December 31, 2014) and three subsequent amendments extended the contract term by short durations, with a current termination date of June 30, 2015, to perform specific bodies of work (called streams). In addition, except for the development of two plans at the beginning of the contract, which are to be paid based on a fixed-price, Optum is being paid on a time and material basis. This means that the State has agreed to reimburse the contractor based on an hourly rate schedule for different types of personnel. The current contract has a maximum amount of $57,316,337. Appendix III defines the services being provided for the different streams under the June 2014 Optum contract and the maximum amount to be paid for each stream.

CMS provided the State with grants totaling $198.7 million for VHC development and operations. As of December 31, 2014, the State reported to CMS that it had expended a total of $126.7 million under the VHC grants, of which $81 million was for information technology and $45.7 million for non-information technology (Appendix IV contains the breakdown of costs by the categories reported to CMS). However, this amount only reflects amounts paid and does not include significant costs that were incurred, but not paid, as of December 31, 2014. In particular, the amount reported to CMS does not include any costs associated with Optum, which as of April 10, 2015, had not been paid[6] for any of its work. It also excludes other VHC contracts for which the State had not made payments for services performed as of December 31, 2014. Payments to Optum alone for the work performed through December 31, 2014 could be upwards of $40 million.[7] In addition, the amount reported as expended by the State does not include an estimated $3.2 million in payments that had not been processed by AHS but were made by the Department of Information and Innovation during 2014 for work related to the VHC system.

The following is an explanation of the terminology used in this report. There are many system components to the VHC/HSE solution, which includes several integrated commercial-off-the-shelf products as well as interfaces with other systems (both internal and external to the State). For purposes of this report, we generally do not distinguish between the different technical components of the VHC/HSE solution; instead we use the term "VHC system" to improve readability. In addition, there are several State entities that work together to provide the VHC/HSE solution with critical system and

[6] In March 2015, Optum submitted its first four invoices (for the months of June, July, August, and September 2014).

[7] A precise amount cannot be determined since payments had not been made to Optum for this timeframe.

operational support, including the AHS' Department of Vermont Health Access and Department for Children and Families and the Agency of Administration's Department of Information and Innovation. In September 2014, the Governor announced a leadership structure that required all department and agency resources responsible for portions of VHC to report through a single chain of command. Unless we judged it important to a particular issue, we use the terms "the State," VHC, and VHC organization in the report rather than distinguish a specific organizational entity or combination of entities.

Objective 1 Information Technology Issues: Extent to Which Corrective Actions Will Correct Shortcomings Uncertain

The Vermont Health Connect (VHC) system has critical shortcomings and the extent to which the corrective actions, taken or planned, will resolve its deficiencies are uncertain. The VHC system is missing critical functions, such as the capability to process customer changes or renewals in an automated manner. A March 2015 high-level roadmap of planned system changes indicates that the State expects to implement two major releases in 2015 to address system deficiencies. However, to successfully implement these major releases by the intended due dates, VHC will need to overcome significant obstacles and challenges. For example, the Optum contract does not currently cover the completion of the second major release, which includes an automated renewals function. Moreover, even if the State negotiates terms for the needed work and successfully implements the planned 2015 releases, the VHC system will still be missing significant requirements, including the capability to allow small employers to shop for and purchase health coverage for their employees. On a positive note, the State has strengthened its information technology (IT) governance and project planning capabilities, including the development of a project management plan that defines how the project will be executed, monitored, and controlled. The State's likelihood of success can be increased if it completes certain documents and plans (e.g., a scope statement) and sustains the disciplined practices outlined in its project management plan and executed through related project management processes. The VHC system also had system security shortcomings, many that have been known since late 2013. The State took corrective actions in the Fall of 2014 that remediated those shortcomings that were considered high-risk; 70 moderate risk deficiencies remain.

System Development

While it has significant shortcomings, the VHC system can perform certain critical functions. For example, the system allows interested parties to browse and select qualified health plans through its website, processes a single common application for new enrollment, and performs an automatic determination of an applicant's eligibility for Medicaid and qualified health plans (QHP). The system can also transmit and receive data from other systems, such as those of the premium payment processor, insurance carriers, and the Federal government. Moreover, in an August 2014 assessment, Optum concluded that the VHC architecture is sufficient to support the exchange and Medicaid for the foreseeable future, provided the population of the state does not grow significantly and the number of users who use the system at the same time remains at current levels.

A year after the VHC system went live on October 1, 2013, the State was reporting that there were still a substantial number of requirements that the system could not meet. Specifically, at the end of September 2014 (the end of the transition from CGI to Optum), the State reported that only 24 percent of the VHC system's functional requirements had been successfully implemented. Of the remaining 76 percent of functional requirements, 19 percent were delivered with a defect and 57 percent were not delivered at all or were not completed (e.g., were partially developed or were not tested). For example, the system did not include functionality that would allow it to automatically process changes to customer accounts (called change of circumstances or COC) nor did it include small business eligibility, enrollment, and billing functionality (also known as the Small Business Health Options Program or SHOP). The State also reported that only 35 percent of the non-functional requirements to be delivered by CGI were accepted or provisionally accepted.[8] These undelivered non-functional capabilities impacted how easy the system is to use as well as the security[9] of the system.

Since mid-2014, the State has been working on analyzing the undelivered requirements, as well as newly discovered requirements, to set priorities for implementation based on urgency of need and available funding. For example, during an October 2014 evaluation of 80 unimplemented functional requirement areas, the State evaluated each requirement on the basis of whether it (1) impacted effectuation, which is when a carrier activates

[8] Requirements were not accepted if the State had rejected the contractor's approach or the contractor had not performed the work to resend it to the State for review.

[9] VHC system security issues are discussed in a later section of the report.

enrollee information in its system, (2) improved the efficiency of addressing customer service requests, (3) improved customer service, (4) addressed a legal or policy compliance issue, and (5) improved operational efficiency. This process was used to help determine the priority level of each of these requirements should desired funding levels not be available. The State continued to reprioritize and make decisions related to requirements subsequent to this timeframe as funding levels became clearer.

For the short term, Optum was directed to implement changes to the system to address upcoming deadlines pertaining to the (1) 2015 open enrollment/renewal period (which started in November 2014) and (2) delivery of Internal Revenue Service (IRS) forms to customers in support of their tax filings.[10] In addition, Optum has been making periodic maintenance and operations changes (e.g., fixing defects) and making technology improvements, such as remediating existing VHC system environments to ensure that they all have identical functionality and are on the same OneGate™ software[11] version.

The State also developed several draft high-level roadmaps to deliver new or improved functions and IT infrastructure items in 2015. As of March 10, 2015, the current high-level roadmap shows that the State expects to execute two major software releases before the beginning of the next open enrollment period, which starts on November 1, 2015.

The State signed a contract amendment with Optum on February 20, 2015, to complete the first major release (Release 1), which is targeted to be completed by May 30, 2015. Among the development efforts scheduled for Release 1 are the following:

- *Automated COC.* This is the process to facilitate changing account information and, potentially, redetermining eligibility, disenrolling from a plan, and allowing for the selection, payment, and enrollment in health plans. Initially this automated functionality will only be available internally and VHC customers will need to continue to call in changes. As of March 2, 2015, it had not yet been determined when this functionality will be available for VHC customers to use, although it is expected to be after Release 1.

[10] The State was required to send out IRS 1095-A forms to customers by January 31, 2015.

[11] The Exeter Consulting Group's OneGate™ Health Insurance Exchange is a core component of the VHC system and is comprised of five components: (1) eligibility screening, (2) benefits application, (3) plan selection, (4) account maintenance, and (5) case management (called Siebel).

- *Reconciliation.* Includes the processes (manual and automated) and reports to support a reconciliation of customer accounts among the VHC system, the carriers, and the premium payment processor (Benaissance). As of March 4, 2015, the extent to which the reconciliation process will be automated has yet to be determined.

- *Notices*. This is the process to automatically generate notifications (currently performed manually) that pertain to eligibility decisions and change of circumstances.

As part of planning for the requirements to be delivered in Release 1, the State and Optum have been working on defining detailed requirements, developing design documents, and developing test scenarios, scripts, and plans. For example, between November 12, 2014, and February 10, 2015, the State and Optum held 22 joint application design sessions related to the change of circumstances function, which are meetings in which requirements are defined.

On April 3, 2015, VHC approved a baseline integrated master schedule. A baseline schedule represents the plan of record and is the reference point against which progress and deviations are measured. It includes activities of both the State and its relevant vendors (primarily Optum, but also Benaissance and the insurance carriers). This schedule is also supposed to include the critical path of the project, which is the sequence of events that, if delayed, will impact the planned completion date of the project. The April 3rd baseline schedule had errors for some of the tasks pertaining to milestones and percentage of the tasks that were completed. As of April 10, 2015, the VHC program manager was in the process of reviewing this schedule and identifying and correcting these errors. It is expected that the VHC change control board will approve these corrections to the baseline schedule by April 16, 2015. Because of these errors, we did not perform a detailed review of the baseline schedule.

As of April 7, 2015, Optum has assessed the Release 1 project risk as high due to the aggressive schedule. In addition, the carriers indicated that there could be difficulties meeting one or more of the dates in the schedule; one carrier reported to VHC that it sees a significant schedule risk with the testing component of the plan. For example, the time allotted to address defects (including retesting fixes) that could result from end-to-end testing with the carriers is short. Since the completion of end-to-end testing is close to the Release 1 deadline, there is not a lot of leeway to address defects and remain on schedule.

Other documents critical to ensuring the timely implementation of Release 1 and required by the VHC project management plan (PMP) had not been

completed. For example, as of April 10, 2015, VHC had not completed its scope statement, which contains a detailed description of the project, deliverables, constraints, assumptions, and acceptance criteria. VHC also had not completed a requirements traceability matrix[12] or test plan by this date. According to the VHC IT officials, these documents were in process and are expected to be completed shortly.

The State is also planning for a second major release in the Fall of 2015 (Release 2), which is expected to include automated renewals processing for qualified health plans and Medicaid, as well as additional functionality related to notices, billing, and reconciliations processes. As of April 13, 2015, the scope of Release 2 had not been established.

The State faces significant obstacles and challenges that make the successful achievement of its 2015 system development plans uncertain. The high risks associated with this project have been recognized in status reports from VHC program managers, Optum, and the vendor that performs independent verification and validation services for VHC (Gartner, Inc.). The following are examples of major issues, some of which the original project also faced:

- *Optum performance.* The success of the planned 2015 development efforts is contingent upon Optum's performance. While the State has taken measures to oversee and monitor Optum's performance (addressed more fully in our next section), the State's contract with Optum does not contain provisions that allow the State to impose monetary consequences if Optum fails to provide timely and quality deliverables. The Optum contract for the delivery of Release 1 and initial work under Release 2 contains a warranty clause that states that all deliverables will be free of material errors and shall perform in accordance with specifications at the time of delivery. However, the contract does not contain clauses addressing penalties or liquidated damages that the State could apply if Optum fails to deliver. In addition, the contract does not contain a retainage provision in which a portion of the contractor's earned funds are withheld until the project is complete. Without these types of clauses, Optum has assumed little contractual risk and the State has limited its ability to seek recourse if the contractor's performance is unacceptable. This seems to be a result of the State's limited leverage to negotiate better terms. The State was facing critical deadlines (e.g., the open enrollment and renewal period) and fallout from the system's inability

[12] A requirements traceability matrix is a tool to ensure that deliverables meet the requirements of the project

to perform change of circumstances and other functions, which have been causing critical operational and financial consequences for VHC and its customers.

- *Competition for limited staffing.* The 2015 system development plans require the participation of VHC operations leaders and staff as subject matter experts, particularly for requirements development and user acceptance testing. According to a March 16, 2015, internal project status report, the resources to support the delivery of the 2015 releases had not been confirmed. There was a lack of agreement between various Agency of Human Services (AHS) organizations about which resources would be allocated to the VHC system development project. This has been a long-standing concern. An August 2014 IT assessment identified staffing for user acceptance testing as a weakness in the VHC system development effort with CGI. In addition, in eight bi-weekly reports issued between November 28, 2014, and March 6, 2015, an independent verification and validation contractor stated that the scheduling of resources was unclear and that resource availability was a significant risk. This problem may be exacerbated by a late February 2015 decision to organizationally remove VHC operations into a unit separate from the VHC system project and physically move certain VHC operations staff from Winooski to Essex Junction in March and April 2015. Many of the operations staff members are expected to continue to support the system development effort. On March 19, 2015, AHS's Operations Steering Committee approved a VHC resource plan that details the system development project's resource needs for 2015.

- *Competition for technical resources.* The system development effort will be using a limited number of system environments to perform software development, maintenance and operations, testing, and training activities.[13] For example, the same system environment will be used to conduct user acceptance, security, and performance testing as well as training. In an August 2014 assessment, Optum identified the limited number of VHC system environments as one of the deficiencies with the State's original VHC development effort (with

[13] In order to perform system activities concurrently, the State currently has six environments: (1) DEV1 to be used for the software development associated with Release 1 and Release 2, (2) DEV2, which is used for maintenance and operations development activities, (3) TST/PRD, which is a shared environment for training and user acceptance, performance, and security testing, (4) STG-LIVE, which is the current production environment, (5) TRN, which is dedicated to quality assurance activities in Release 1, and (6) DR, which is used for disaster recovery.

CGI) because it can prevent activities from being performed concurrently.

- *Key dependencies.* The implementation of the automated COC functionality in Release 1 is dependent on the completion of certain activities that need to be performed by VHC's operations group and the carriers. With respect to VHC's operational readiness for Release 1, Optum has raised a concern that in order to implement this release, the State needs to finish entering its backlog of 2015 renewals as well as complete a reconciliation of the 2014 data with Benaissance and the carriers (both of these topics are discussed in more detail in a later section of the report). According to an internal VHC status report dated April 13, 2015, if VHC's manual operational processes are not supported once Release 1 is implemented, the State would need to determine how it would process related backlogs or delay the release. The goal for the completion of the renewals backlog is May 2015, the same month as the Release 1 implementation date. VHC, Benaissance, and the carriers have only recently begun to discuss how a reconciliation process could be approached. Regarding the carriers, they need to provide development resources and perform testing for Release 1. VHC's original assumption regarding the carriers' approach to these activities proved to be invalid and a new approach had to be developed, which has caused a change in the expected scheduling of these activities.

- *Contract for Release 2.* The State does not have a contract with Optum for the implementation of Release 2 in the Fall of 2015. In general, the current Optum amendment only covers the delivery of requirements and design documentation. According to a March 16, 2015, project status report, if the new contract amendment is executed within the next couple of months, the delivery timeline of Release 2 is considered feasible. Nonetheless, the State will not know whether it has the funding to pay for all of the expected Release 2 development work until it has negotiated a price with Optum. If the pricing is higher than the funding available, the State would have to reduce the scope of its plans or find an alternative funding source. Moreover, because the State does not have a contract to complete the Release 2 work, there is no agreed upon schedule or deadline for completion. This is a significant issue because timely contracting has been a problem. According to an independent verification and validation contractor, as of April 3, 2015, the VHC development project has been in long-term "red," or high-risk, status due to continuous contracting delays and unresolved agreement on the scope to support all VHC requirements.

- *Hosting vendor change.* The VHC system is housed at CGI's data centers in Phoenix, Arizona (primary site) and Philadelphia, Pennsylvania (disaster recovery site).[14] In December 2014, the State became aware that CGI did not intend to extend its contract with the State for these services beyond June 30, 2015. As of April 9, 2015, the State had not signed a contract with a vendor to take over these hosting responsibilities. In mid-February 2015, the Department of Information and Innovation (DII) estimated that the change to a new hosting vendor would take 4-5 months, which means that it is expected to be completed between Release 1 and Release 2. Should problems arise with this transition, it could negatively affect the timing of the development effort.

Even if releases 1 and 2 are successfully implemented, the VHC system will still be missing significant requirements. The State has reduced the scope of its VHC system development plans and is not including all requirements in the 2015 releases because of funding constraints. It is expected that some of these requirements will be addressed over time through the system maintenance and operations process. In the case of other requirements, however, there are no specific plans in place for how and when they will be addressed. Specifically, as of February 18, 2015, there were at least 45 requirements in areas such as case management, mechanisms to submit notices to customers, and master data management[15] that were removed from the scope of Release 1 or Release 2 and were not slated to be addressed as part of a maintenance and operations release.

Among the requirements that are not scheduled to be implemented in 2015 is the Small Business Health Options Program (SHOP) function. The Patient Protection and Accountable Care Act (ACA) requires that all states create an exchange or marketplace where small employers can shop for and purchase health coverage for their employees. Because the SHOP functionality in the VHC system did not work as needed, the State opted to have small employers enroll directly with the VHC insurance carriers rather than via the VHC system for the 2014 and 2015 plan years. No delivery date has been set for the implementation of SHOP functionality in the VHC system nor is there a

[14] CGI provides cloud hosting services, called "Infrastructure as a Service" in which the provider delivers and manages the basic computing infrastructure of servers, software, storage, and network equipment upon which a platform (i.e., operating system and programming tools and services) to develop and execute applications can be developed by the customer.

[15] Master data management is defined as a set of processes, governance, standards, and tools that manages a set of non-transactional data entities of an organization. When fully implemented, the master data management component will house and control the definitive citizen and provider master data, which may be utilized by all connecting components.

contract in place to perform the system development work that would be required. In addition, since SHOP is an ACA requirement, the State would need permission from the Centers for Medicare and Medicaid Services (CMS) to allow direct carrier enrollment for another year. As of April 13, 2015, the State had requested, but not received, written permission.

Information Technology (IT) Governance/Project Management

The State's IT governance and project management approach to the original VHC project has been identified as a contributing factor to the system's subsequent shortcomings. Specifically, an August 2014 IT assessment[16] concluded that (1) the State lacked project ownership and CGI lacked accountability due at least in part to weaknesses in the project's governance structure and processes and (2) project management processes did not align with industry best practices and were insufficient or ineffective. The assessment also found inadequacies in the State's (and CGI's) testing processes. The report stated that "until there are substantial changes to project governance and processes, the same processes will likely result in the same outcomes" and made a variety of recommendations for improvements. An earlier lessons learned project performed by a consultant also made recommendations to improve the State's processes for future phases of the VHC project as well as other Health and Human Services Enterprise (HSE) projects.[17]

The State's corrective actions to strengthen the VHC IT governance and project management structure were noteworthy although additional action items remain. With the pressure associated with two upcoming major releases, the State's ability to maintain the discipline to follow the processes that it has put in place to manage and control the project will be tested. One of the criticisms of the original VHC project is that those processes that were established were not followed. The following provides information on the status of VHC governance and project management activities.

AHS governance

The March 2014 lessons learned report recommended documenting the project governance model. AHS laid out an enterprise governance model in which major AHS projects, such as VHC, report on the status of their project, address major risks, and obtain leadership decisions. This model includes a

[16] *Vermont Health Connect IT Assessment* (Optum, August 29, 2014).

[17] *State of Vermont Health Services Enterprise Release 1 Lessons Learned Report* (BerryDunn McNeil & Parker, March 27, 2014).

program management office (PMO), which is an organizational body assigned responsibilities related to centralized and coordinated management across multiple projects. The model also includes two committees—the Operations Steering Committee[18] and Executive Steering Committee[19]—that meet to discuss issues and make decisions related to VHC and other HSE projects.

The decisionmaking responsibilities of these committees have not been defined. Accordingly, it has been left up to project leadership to decide what to bring to the attention of the AHS governance entities. The director of the program management office has drafted a standard operating procedure to clarify communications and decisionmaking. As of March 24, 2015, this document was being reviewed.

VHC organizational structure

The August 2014 IT assessment recommended that the State define its organization model based on program requirements. Beginning in September 2014, VHC began working under an incident command structure, which allowed coordination of resources of multiple departments without organizational restructuring. In this structure, VHC business operations (e.g., enrollment), IT development, and IT maintenance and operations staff reported to a single incident commander, the Department of Vermont Health Access (DVHA) Deputy Commissioner for VHC, even though some of the staff who filled these roles were located in other State organizations.

There have been significant recent changes to this VHC organizational structure. In late February 2015, the commissioners of the Department of Vermont Health Access and Department for Children and Families announced an organization realignment of the VHC operations group and created a Health Care Eligibility and Enrollment Operations Matrix Organization. As part of this reorganization, the VHC operations and the VHC systems development project functions were separated. In addition, in mid-March 2015, the incident command structure was terminated.

[18] The core focus of the Operations Steering Committee is to (1) ensure clarity of business imperatives and alignment of project plans with Executive Committee mandates and statutory authority, (2) provide oversight of core projects' resource and vendor allocation plans, and (3) review and respond to project risks and risk mitigation strategies.

[19] The core focus of the Executive Steering Committee is to (1) set program mission and goals, (2) establish priorities and mandates, and (3) review, comment, and approve Operations Steering Committee plans and key work products.

It is too early to tell what effect, if any, the restructuring of how VHC organizationally operates will have on the VHC system development efforts. However, it is particularly important that decisionmaking responsibility and collaboration requirements are clear and agreed-upon in the VHC environment because of the multiple State organizations involved. While the DVHA has overall responsibility for VHC, there are multiple State organizations responsible for activities that significantly impact the VHC system and operations, including DII's enterprise architecture and security units, the AHS Office of the Chief Information Officer, and the AHS Department for Children and Families.

Project management staffing

In response to findings and recommendations in the August 2014 IT assessment, managers have been changed or added to the VHC project. For example, the State hired a new director of VHC who has health care IT project management experience and added a program manager to align the project with HSE and DII project management standards.

One major position that had not been filled is the test manager position. The number and skillset of state testers who performed user acceptance testing was identified as a major weakness in the original VHC project. Optum identified this issue as a medium risk, mitigated by the temporary assignment of a staff member from the AHS Office of the Chief Information Officer to the VHC project. The test manager position was recently filled, effective April 1, 2015.

Project management documentation and processes

Under the CGI contract, the contractor was responsible for the PMP, which is a formal approved document that defines the overall plan for how the project will be executed, monitored, and controlled. The August 2014 IT assessment criticized this model and recommended that a PMP be developed to manage the VHC project from the State's perspective with input from the contractor.

The State took ownership of the PMP and published a new one on January 26, 2015. In addition, the State took responsibility for ensuring that the PMP standards are being followed by Optum and the State. The PMP includes other subsidiary plans that address critical items such as scope management, requirement management, schedule management, risk management, quality management, and communications management. As of April 10, 2015, this

document had important pieces, such as an approved project scope statement[20] that were in process, but had not yet been finalized.

In an August 2014 IT assessment, the contractor criticized, and made recommendations to improve, various aspects of the VHC project, including risk[21] management,[22] change management, and quality management (including testing).[23] The VHC organization made improvements in each of these areas. For example, based on a review of the VHC project's risk and change request registers, risks and issues and proposed changes are being actively identified, tracked, and addressed. With respect to quality assurance processes, the State contracted with Optum to implement an automated new tool to facilitate more effective and efficient testing. This was a recommendation of the March 2014 and August 2014 lessons learned and IT assessment, respectively.

Vendor management

The lessons learned report recommended that the State seek ways to improve vendor contract management, including adding contract management positions on projects and working to measure vendor progress on key project milestones in a manner that is reasonable and achievable. The AHS PMO is in the process of establishing a vendor management structure and has installed a vendor manager within the VHC organization. This manager has been charged with managing the VHC vendors to contracted obligations. With respect to measuring vendor progress, in a document submitted to CMS, the State stated that it planned to include performance metrics in its contracts with vendors and monitor performance because "having a PMP and IMS [integrated master schedule] in place are only good if you plan to measure

[20] According to the PMP, a project scope statement is to be created for each major release. A scope statement provides a detailed description of the project, deliverables, constraints, assumptions, and acceptance criteria.

[21] VHC tracks both risks and issues. A "risk" is defined as an uncertain event or condition that, if it occurs, would have an impact on project scope, schedule, budget, or quality. An "issue" is an unresolved project question, conflict, or dependency that prevents planned program and work products from being completed as scheduled.

[22] Risk management is the process of identifying, assessing, responding to, monitoring, and reporting risks. It outlines what risk/issue management activities will be conducted and how they will be performed, recorded, and monitored throughout the life of the project.

[23] Quality management describes the approach that will be followed to manage and ensure project quality during the project. It includes (1) the metrics that will be used to measure quality and how any necessary quality corrections will be implemented and (2) the strategy and methods the project will deploy to ensure the project's deliverables are of acceptable quality.

performance against the standards set forth within each of them."[24] Among the metrics that the State recommended were (1) schedule variance, (2) quality of product, and (3) staffing metrics. However, performance metrics like these that the State could use to monitor and hold Optum accountable were not included in the contract for Release 1 and Release 2.[25]

An August 2014 IT assessment noted that CGI had not met contractual commitments and a deliverable tracking process had not been implemented. The State and Optum have reached agreement on a deliverable review process and a deliverable tracking spreadsheet has been established. Nevertheless, many of the Optum documentation deliverables have not been submitted by Optum and approved by the State in a timely manner. For example, amendment 4 of the Optum contract requires 40 deliverables for Optum's development of the IRS 1095-A form, which was implemented on January 14, 2015. As of February 24, 2015, 16 (40 percent) of the required deliverables had been submitted and approved by the State and only two documents were approved before the implementation date. Among the documents that were not submitted or approved by this date were the requirements document and test results.

System Security

The State is responsible for protecting and ensuring the confidentiality, integrity, and availability of information in the VHC system. DII is the State organization charged with overseeing the activities that provide assurance that this responsibility is accomplished. In this role, DII has assigned an information security specialist to the VHC project to (1) monitor VHC's compliance with federal security requirements, (2) oversee the implementation of information security controls, and (3) administer and monitor security contracts.

At the Federal level, CMS is charged with overseeing the exchanges as well as operating the Federal Data Services Hub with which the VHC system exchanges data to verify applicant information, such as social security numbers and income data. To gain access to the Federal Data Services Hub, states must obtain an "authority to connect."[26] CMS has defined a minimum

[24] Vermont Health Connect Level One Exchange Establishment Grant Request, Project Narrative (November 14, 2014).

[25] The State's contract with Optum for the maintenance and operations of the VHC system includes a provision for the State and the contractor to reach agreement on service level agreements. As of February 26, 2015, these service level agreements were still under development.

[26] CMS notified the State that it had approved the "authority to connect" on September 27, 2013.

set of security requirements that state exchanges must address, called the Minimum Acceptable Risk Standards for Exchanges (MARS-E).

CMS required states to submit security documentation, including a security assessment, a plan of action and milestones (POAM), and corrective action plan. Between July 17, 2013, and December 18, 2013, a consultant under a subcontract with CGI performed a security assessment of the VHC system in which it evaluated the VHC system against the MARS-E standards as well as those of the National Institute of Standards and Technology and the Internal Revenue Service.[27] The consultant's report stated that while its review was limited in scope,[28] it had identified noncompliance in about 65 percent of the controls evaluated as well as several major findings that had a direct impact on the ability to secure the system and to even determine whether the system was running securely. Further, the report asserted that "while it is not unusual for an initial system to have a larger number of finding [sic], the number of findings, the areas of findings, and the severity of the findings makes this notable."

The system security problems outlined by the security consultant can be attributed to requirements that were not implemented by CGI. In particular, the State reported that only about half of the security requirements in the CGI contract had been accepted. Requirements were not accepted if the State had rejected the contractor's approach or the contractor had not performed the work to resend it to the State for review. According to CGI, the compressed timeframe associated with the original VHC project and prioritzation of system functionality and the user experience over security contributed to security issues in the VHC system.[29] Another contributing factor expressed by State and CGI staff and reported by CGI, was a de facto high-risk tolerance level that was not the result of a reasoned decision-making process or calculated assessment and acceptance of risk.

In response to the security assessment report, DII submitted its initial POAM to CMS in January 2014. For each weakness, the POAM includes a

[27] *Vermont Health Connect (VHC) Security Assessment Report (SAR)*, (Referencia, December 20, 2013).

[28] An example of a scope limitation was the lack of physical testing.

[29] *Vermont Health Connect Solution: Information Security Risk Assessment* (CGI, September 23, 2014).

description, assigns a risk level of high, moderate, or low,[30] describes the resources needed for remediation, and tracks it to completion. CMS requires the POAM to be updated quarterly.

After reviewing the State's January 31, 2014, and March 31, 2014, POAM submissions, CMS sent a letter the Commissioner of DVHA in June 2014 indicating that it had identified a significant number of open high risk security findings and/or moderate risk findings that potentially could pose a risk to the security of the Federal Data Services Hub. CMS further informed the State that it needed to address these findings within 90 days or risk having its authority to connect to the hub terminated.

In mid-September 2014, the State voluntarily disconnected the VHC system from the Federal Data Services Hub as it worked to remediate its highest level weaknesses. The VHC system was reconnected to the hub a month later after the State reported that all of the IT security findings rated as high-level risks had been remediated and CMS had reviewed supporting documentation submitted by the State and had agreed with the State's assessment. According to a CMS security official, CMS granted the State's request to reconnect to the Federal Data Services Hub because of significant progress made by the State.

As part of its remediation efforts, the State has taken both short-term and long-term corrective actions. In the short term, the State obtained an Information Security Risk Assessment from CGI on September 23, 2014. The purpose of risk assessments is to inform decision makers and support risk responses by identifying: (1) relevant threats to organizations or threats directed through organizations against other organizations; (2) vulnerabilities both internal and external to organizations; (3) impact (i.e., harm) to organizations that may occur given the potential for threats exploiting vulnerabilities; and (4) likelihood that harm will occur. The State also signed a task order under the Optum contract for the contractor to perform security services between September 15, 2014 and December 31, 2014 to include: (1) external penetration testing and vulnerability scanning, (2) logging and monitoring improvements, (3) security and risk management operational leading practices, (4) an internal vulnerability assessment, configuration baseline scanning, and advanced persistent threat simulation, and (5)

[30] CMS defines high risk as a threat event that could be expected to have a severe or catastrophic adverse effect on organizational operations, organizational assets, individuals, other organizations, or the nation. Moderate risk is defined as a threat event that could be expected to have a serious adverse effect on organizational operations, organizational assets, individuals, other organizations, or the nation. Low risk is defined as a threat event that could be expected to have a limited adverse effect on organizational operations, organizational assets, individuals, other organizations, or the nation.

compliance consulting services to document a security POAM and system security plan. On December 23, 2014, State information security officials accepted the Optum deliverables performed under the security task order.

With respect to long-term corrective actions, on November 21, 2014, the HSE Executive Steering Committee approved a DII proposal to implement a state-managed security solution. (Under the CGI contract, the system integrator was responsible for managing security.) As part of this role, DII signed a contract with a vendor (NuHarbor Group) to provide security testing, training, and consulting between January 1, 2015, and December 31, 2015. Among the services to be provided under this contract are (1) security policy development and implementation; (2) 24/7 incident analysis, handling, and alerting; and (3) secure code analysis using a software tool.

Despite these corrective actions, the State's most recent POAM submission to CMS (January 31, 2015) showed the State still had 70 moderate risk weaknesses related to the VHC system. Ninety-one percent of these moderate risk weaknesses had been known for at least 13 months, as they were identified in the December 2013 security assessment report. Table 1 lists the number of completed and open security weaknesses by the applicable class and family of controls established by CMS. The table also indicates the risk levels associated with the open weaknesses. The description of each of the control families can be found in Appendix V.

Table 1: Listing of the Number of Completed and Open VHC System Security Weaknesses by Class of Security Controls, as of January 31, 2015

Name of Class of Control/Family of System Security Controls	Completed	Number of Open Weaknesses			
		Total, Open Weaknesses	High Risk	Moderate Risk	Low Risk
Management Controls, which includes: Security assessment and authorization Planning Risk assessment System and services acquisition Program management	12	29	0	17	12
Operational Controls, which includes: Awareness and training Configuration management Contingency planning Incident response Maintenance Media protection Physical and environmental protection Personnel security System and information integrity	16	48	0	34	14
Technical Controls, which includes: Access control Audit and accountability Identification and authentication System and communications protection	26	48	0	19	29
Other	1	0	0	0	0
Total number of weaknesses	55	125	0	70	55

DII plans to obtain another independent security assessment report in 2015. This security assessment is expected to address areas that were not addressed by the prior review. In particular, other vendors such as Benaissance and the new hosting provider are to be in the scope of the review. As of March 24, 2015, DII had not signed a contract for this assessment.

The State's contract with Optum includes design work associated with adding security features to the VHC system, including in the areas of audit trails and role-based access controls.[31] These security improvements are supposed to be part of the second major 2015 release to be implemented in the Fall. However, the State's contract with Optum does not currently cover implementation of the Fall release.

[31] Role-based access controls are based on users' roles and responsibilities.

Objective 1 Operational Areas: Corrective Actions Taken, But VHC Operations Still Plagued by Backlogs and Process Shortcomings

The State has taken corrective actions in its enrollment, change of circumstances (COC), renewals, and premium payment processing operations, but there are still significant backlogs in responding to customer requests as well as process shortcomings. Because of deficiencies in the Vermont Health Connect (VHC) system, the State had to implement large scale manual workarounds to enroll and bill customers, reporting that 80 percent of its VHC business processes were manual workarounds. VHC manual workarounds in the major operational areas covered by our audit have been improved by corrective actions taken in response to recommendations in assessments of VHC operations conducted by contractors in 2014.[32] One of the actions was to contract with Optum for up to $15 million to provide staffing and other support to augment VHC operations for processing enrollment applications, COCs, and renewals. Nevertheless, significant COC and renewal backlogs of customer requests remain. To illustrate, as of March 9, 2015, VHC had a backlog of 7,256 COC requests and 7,360 renewals that remained unprocessed.

VHC also has shortcomings in the billing, payment, and termination of qualified health plan (QHP) and Medicaid customers. For example, the State:

- does not allow Benaissance to remit premiums to the carriers unless full payment has been made, even if only a small shortfall exists or if it is the Vermont Premium Assistance (VPA) payment that is missing;
- split the billing and dunning/termination processes between Benaissance and the carriers, which has resulted in differences between the State and the carriers in whether customers are past due in their payments and should be terminated; and
- has not performed reconciliations among the VHC, Benaissance, and carriers' systems.

In a February 2015 letter, Blue Cross Blue Shield of Vermont expressed serious concerns that its aging customer balances have become uncollectible, citing VHC's operational deficiencies as the cause. Blue Cross Blue Shield stated that it did not think it was fair either to pursue full collection of these past due balances from customers, or to trigger grace periods for potential

[32] *Operations Assessment: Vermont Health Connect* (HES Advisors, June 5, 2014) and *Vermont Health Connect: Operations Assessment* (Optum, August 1, 2014).

termination and it therefore intended to invoice the State. In a March letter to Blue Cross Blue Shield, the State's Chief of Health Care Reform stated that the receivable balances had been reduced and that "if the trend holds" by the end of the planned 2014 reconciliation process, the accounts receivable would be nominal. The chief added that the State would work to collect everything that is properly due.

Enrollment

VHC has an annual open enrollment period during which customers can apply for enrollment. In certain circumstances, regulations allow special enrollment periods during which a qualified individual or enrollee who experiences qualifying events, such as marriage or adoption, may enroll or change enrollment in a QHP outside of open enrollment periods. To date, VHC has held two open enrollment periods, the most recent one between November 15, 2014, and February 15, 2015. As of March 23, 2015, VHC had completed the enrollment of 3,948 individuals in QHPs and 7,330 individuals in Medicaid.[33] As of the same date, VHC had an inventory of 751 paper applications awaiting action from state staff.

Upon receiving an enrollment application, the VHC system (1) checks the application against eligibility rules[34] and (2) submits applicant self-reported information to the Federal Data Services Hub[35] for verification. In the case of a Medicaid-eligible applicant, the system transmits a file to ACCESS, the State's legacy integrated eligibility system. If an applicant is not eligible for Medicaid, the VHC system determines whether the QHP applicant is eligible to receive financial assistance via the Federal advanced premium tax credit (APTC) or VPA. Some QHP enrollees also qualify for federal and Vermont cost sharing subsidies for out-of-pocket expenses, such as deductibles. Once the QHP applicant submits his or her first premium payment,[36] the VHC system transmits the enrollment and payment data to the insurance carrier to

[33] The VHC system includes Medicaid customers, whose eligibility is based on their modified adjusted gross income (MAGI) being generally at or below 133 percent of the Federal poverty level. However, the VHC system does not contain all of the Medicaid customers who meet these criteria as some of them remain in the State's legacy eligibility system along with the Medicaid customers who meet the aged, blind, or disabled criteria for Medicaid enrollment.

[34] The independent reviews of the VHC system did not identify significant problems with the accuracy of the system's implementation of the eligibility rule so we did not perform any procedures related to this process. The Department of Health and Human Service's Office of the Inspector General is auditing VHC's eligibility process.

[35] The Federal Data Services Hub is a CMS system that acts as a single portal for exchanging information between CMS and state-based exchanges and is used to verify information from applicants, such as social security numbers, immigration status, and household income.

[36] The customers submit the payment to Benaissance, the State's premium payment processor which, in turn, provides payment data to the VHC system.

effectuate[37] the enrollment. VHC transmits the enrollment data to a carrier on a, so-called, 834 enrollment file. A successfully transmitted 834 enrollment file triggers completion of the enrollment process, availing customers' access to care.

In 2014, two operations assessments of the VHC system and processes highlighted shortcomings in the VHC enrollment process. For example, the August 2014 operations assessment found that system, process, and human errors were creating a backlog of 834 enrollment transactions that were not being transmitted to the insurance carriers, preventing timely enrollments. As a result, QHP customers who applied and paid their first monthly payment did not always have their accounts effectuated in a timely manner and, in some cases, were not able to access needed care until their enrollment errors were fixed. To illustrate, a customer reported that he had been making premium payments since March 2014, but his account still had not been effectuated by September 2014.

In response to recommendations in the operations assessments, VHC took corrective actions to reduce errors in the 834 enrollment file and more efficiently correct those errors that still occurred. Specifically:

- Optum staff helped VHC personnel better understand the 834 enrollment file process and become more efficient in resolution of 834 transaction errors, according to a director in the VHC operations unit.

- VHC, assisted by Optum, created and updated enrollment process documentation, including flowcharts, job aids, and standard operating procedures.

- To more efficiently correct errors, VHC developed an error handling guide, used an error report derived from the system to manage the error remediation process, and utilized Optum specialists to troubleshoot technical issues with the 834 enrollment file transmission.

VHC and the carriers also instituted an escalation path so that customers with urgent medical needs whose accounts had not been effectuated would have their cases prioritized so that they could access the needed care.

[37] Effectuation is when a carrier enters and activates enrollee information into its system.

There have been indications that these corrective actions are improving the 834 enrollment file process. For example, according to Blue Cross Blue Shield, they have not seen any file transmission issues for months. Nevertheless, errors in the 834 enrollment file remain (e.g., as of March 18, 2015, VHC reported that there were 188 outstanding errors).[38]

While VHC has taken action to address the problems with the 834 enrollment file, it has not been effective in resolving two other issues related to the enrollment process. Specifically, VHC has not established effective processes for verifying applicant self-reported information or performing enrollment reconciliations with Benaissance and the carriers.

Verification of applicant information

State and Federal regulations for the health benefit exchange and for Medicaid require that certain financial and non-financial information be verified to validate eligibility for QHP or Medicaid and for financial assistance. Among the factors that are required to be verified are income, social security number, citizenship, residency, immigration status, and household composition.

In June 2014, the Federal Department of Health and Human Services' Office of the Inspector General reported[39] that Vermont was unable to resolve inconsistencies between applicant information and Federal and other sources. In addition, internal VHC organization reports noted that many of these verifications were not being performed.

The VHC organization has a large backlog of enrolled customers whose information has not been verified. As shown in Table 2, as of March 9, 2015, over 54,000 individuals needed to have one or more eligibility factors on their application verified. This can be attributed to unresolved verification inconsistencies in that these were individuals whose information had not been verified with the Federal Data Service Hub or another data source.

[38] The VHC report that contains the number of errors in the 834 enrollment file contained mistakes in how it was characterizing errors, which means that this number might be understated.

[39] *Marketplaces Faced Early Challenges Resolving Inconsistencies With Applicant Data*, (Department of Health and Human Services, Office of Inspector General, report no. OEI-01-14-00180, June 2014).

Table 2: Status of Verification Items for QHP and Medicaid for 2014 and 2015 Enrollments, as of March 9, 2015

Verification Item	Total Number of Individuals	% Pending Review	% Verified	Plan for resolution[c]
Annual income	17,123	96%	4%	Manual process.
Eligibility for Minimum Essential Coverage[a]	54,743	100%	0%	Automated process with manual resolution of inconsistencies.
Identity	54,743	0%	100%	Automated process with manual resolution of inconsistencies.
Immigration status	1,540	97%	3%	Automated process with manual resolution of inconsistencies.
Modified adjusted gross income for household[b]	18,041	100%	0%	Manual process.
Social security number	54,215	6%	94%	Manual verification started in December 2014.
U.S. citizenship	52,487	8%	92%	Manual verification started in January 2015.

[a] Minimum Essential Coverage is the type of coverage an individual needs to have to meet the individual responsibility requirement under the Affordable Care Act. This includes individual market policies, job-based coverage, Medicare, Medicaid, and certain other coverage.

[b] Modified adjusted gross income is based on the customer's adjusted gross income plus certain other income sources, such as social security, interest, or foreign income.

[C] From plan submitted to CMS, October 2014.

The VHC organization has not verified these factors due to resource constraints. The organization reported that it did not have the staff available to perform the manual processes needed to verify the eligibility factors. The State has begun the process of taking corrective actions, such as developing and implementing manual processes, to ensure that eligibility factors are being verified. In addition, it plans to send manual verification letters to affected customers with outstanding items in June 2015.

Without a resolution to the problem of unverified customer information, the State runs the risk that customers may have inappropriately obtained health insurance or financial assistance. For example, if a customer substantially under-reported or over-reported the household's income, this customer's APTC or VPA could be incorrect. In the case of APTC, this risk is mitigated since the Internal Revenue Service (IRS) plans to reconcile the income reported at enrollment with income claimed on the tax return, and differences could result in the VHC customer owing more or less in taxes. With respect to VPA and the State's cost sharing subsidy, on the other hand, the State elected not to reconcile customers' income at the end of the year, making the need to verify self-reported data even more critical.

In the case of Medicaid, the State is at risk of having made improper payments to the extent that it has paid claims for customers later determined to be ineligible for this program. According to a Department of Vermont Health Access (DVHA) deputy commissioner, the State has received verbal assurance that it will receive a waiver from the Centers for Medicare and Medicaid Services (CMS) that would eliminate this risk. As of March 24, 2015, the State had not received this waiver.

Enrollment Reconciliations

According to 45 C.F.R. §155.400(d) and the State Administrative Rule §71, VHC is required to conduct monthly enrollment reconciliations with the carriers. Two operations assessments recommended that VHC implement enrollment reconciliation among the VHC, Benaissance, and carriers' systems.

The VHC system currently does not support the automated reconciliation of enrollment information. Accordingly, as of end of February 2015, VHC has performed no reconciliations of enrollment data. Per a VHC operations manager, the lack of enrollment reconciliation was attributed to VHC's focus on other priorities, such as the need to provide customers with IRS 1095-A forms in January 2015.

The carriers have expressed concerns with the lack of enrollment reconciliation, emphasizing that enrollment data needs to be accurate and timely in order to provide quality service to VHC customers. Blue Cross Blue Shield, for example, wrote to VHC leadership asking for implementation of routine reconciliation and/or audit of the VHC data, including enrollment records.

As a short term solution, representatives from VHC, Benaissance, and the carriers met in mid-February to start examination of 2014 reconciliation issues and to develop an approach to conduct a year-end 2014 reconciliation. Further, the VHC representatives met with each of the carriers to discuss the technical details of the process, including the file format, time lines, and logistics.

In the longer term, Optum has been tasked with developing a reconciliation process as well as reports that identify discrepancies. The extent to which this process will be an automated or manual process, or when it would be delivered, is as yet unknown.

With respect to Medicaid, as of March 4, 2015, there had been no reconciliation of enrollment information between the VHC system and the relevant Medicaid systems. According to a VHC operations official,

discussions about how such a reconciliation could be performed had only recently begun.

Change of Circumstances

Once a customer is enrolled in a plan, changes to his or her account are handled as a change of circumstances (COC).[40] These changes can be simple (such as a change of address) or complex (such as a birth or changes in income). Because the VHC system cannot automatically process COCs, all changes must be processed manually by various teams of VHC operations personnel, using a highly complex and time-consuming process.

In the first phase of manual processing, the original application must be withdrawn from the system and a new application manually re-entered using the same information as the original application but updated with the changes. This creates a second customer account in the VHC and premium payment processor systems. In the second phase of processing, VHC operations personnel work with the carriers and the premium payment processor to ensure that the changes are correctly entered in the outside systems and that information from the original account is moved, as needed, to the new account. In the third phase of processing, the carriers must execute the new plan for a QHP; for Medicaid, the information must be transmitted to the legacy ACCESS system. Also in phase three, the premium payment processor may have to shift funds from the old account to the new one.

Two 2014 operations assessments reported that the COC process was causing backlogs, duplicate records, and other data integrity issues in the VHC system. These problems have caused significant hardship to VHC customers. Because of the problems, customers (1) delayed obtaining needed care, (2) paid claims out-of-pocket despite paying thousands in premiums, and (3) paid incorrect premium amounts, sometimes for several months. For example, one customer, whose spouse passed away, was required to pay the premium for the decedent for several months in order to keep coverage while the change was being processed. The insurance carriers and VHC operations have also been negatively affected. For example, the tardy processing of COCs has caused cancellation of insurance plans months after the effective date of the customers' termination requests. Because of this, carriers reported that they have paid claims for customers who wanted their insurance cancelled. In the case of VHC operations, COC cases contribute to backlogs in other processes and premium payment processing errors.

[40] To reduce complexity, we use the term change of circumstances for both changes that are merely changes in information (name, address, phone number) and changes that are more complex and involve redetermination of eligibility (circumstances).

VHC has taken corrective action to alleviate the COC backlog by increasing the number of staff working on COC transactions and improving the process.

- *Staffing.* Two operational assessments recommended adding operational support. The State has been addressing this by internal and external means. Internally, the State recently trained Department for Children and Families staff to process COCs and was in the process of training additional processing staff . Externally, the State contracted with Optum to augment the VHC staff that process COCs. For example, between June 16, 2014, and November 14, 2014, Optum reported that its workers spent 109,416 hours working on the COC backlog. In addition, the State trained seven agents of its call center vendor in the COC process and they are working on 2015 COC requests.

- *Process.* An August 2014 operational assessment recommended that VHC change its COC process to make it more efficient. Accordingly, VHC operations staff worked to document and simplify the COC manual processes. Shortly after the assessment was issued, staff had created several job aids, which detailed the steps and decisions to be made in processing the COCs. VHC operations staff members continued to work on refining the process and were able to significantly reduce the number of steps to process a COC. The State also installed a quality control process to reduce the number of COCs that required rework. At least in part because of these improvements, processing time for a COC change has been reduced, on average, from six to seven hours to about 2.5 hours.

Despite the addition of staff resources and improved processes, the backlog of COCs, though diminished, remains substantial. Specifically, the peak of the backlog of 17,734 unprocessed COCs in October 2014 has been reduced to 7,256 unprocessed COCs as of March 9, 2015. These unprocessed COCs continue to cause problems for customers as previously described. In addition, VHC did not process all 2014 COCs prior to having to provide customers with a required tax form by January 31, 2015,[41] and customers had to be sent corrected forms. In early March 2015, the State sent 1,720 customers one or more corrected tax forms.

[41] Individuals who received APTC are required to reconcile the amount they received to the correct subsidy amount based on their income. As part of that reconciliation VHC is required to provide its customers with the information on the amounts of premiums paid and APTC received by issuing to them an IRS 1095-A form. VHC also provides a copy of this information to IRS.

The State's staff augmentation and process improvements were not as effective in reducing the backlog as they could have been because of high error rates on the part of some Optum staff. For example, in September 2014 the rate at which COCs prepared by workers who performed the first phase of the COC process passed a quality check review on average varied from 46 percent to 52 percent. In December 2014, VHC downsized their use of the Optum staff and retained only those that were the highest performing. According to a VHC operations official, the error rate was reduced to less than 1 percent by March 2015.

Of the State's five task orders with Optum to perform the first phase of COC processing only the latest had performance measures. This task order was also the only one to require Optum to retrain staff at their own expense as the penalty for missing the performance measure. An additional complication is that both Optum and State workers face competing priorities because the same workers are used for the COC and renewals changes.

The State is planning to have automated COC system functionality ready by the end of May 2015.

Renewals

State and Federal rules require that, on an annual basis, the enrollment of an individual in a QHP or Medicaid be renewed. The most recent QHP renewal period ran from November 15, 2014, through February 15, 2015. At that time, the state renewed QHP customers and Medicaid customers in mixed households.[42] Other Medicaid customers are required to be renewed on the anniversary date of their original enrollment. The following explains the process and status of the QHP and Medicaid renewals for 2015.

QHP Renewals

An August 2014 operations assessment identified as a risk the possibility that the VHC system will not be able to process renewals and recommended that VHC plan for manual processing. In response the State created an integrated master schedule, and all tasks on the schedule were completed.

The State ultimately implemented a manual renewals approach that contained two main components. First, to ensure that QHP customers did not have gaps in insurance coverage as renewals were processed, the State requested that

[42] A mixed household consists of a household in which at least some members are eligible for a QHP and other members are eligible for Medicaid (i.e., Dr. Dynasaur, a program for children and pregnant women).

the insurance carriers continue to cover their 2014 customers until the VHC organization completed processing the 2015 renewals. Second, the State processed all QHP and mixed household customer accounts as if the customers would keep the same coverage and have no other changes to their account. This process included (1) manually withdrawing the customer's account and (2) manually re-entering all of the information into a new account. If customers notified VHC that they would like a change to their 2015 plan, VHC then withdrew these customers' accounts again and processed the change via the manual COC process. On average, renewals without changes took about 30 minutes to process, while renewals with changes took about 145 minutes to process.

Although the renewal period ended February 15, 2015, the State has a large backlog of unprocessed renewals (almost entirely for customers that requested changes). As of March 9, 2015, VHC reported that there were 7,360 renewals that include customer changes that had not been completely processed. A VHC operations official stated that it is expected that the backlog of these renewals will not be cleared until May, three months after the end of the renewal period.

Because carriers were instructed to retain coverage of all 2014 customers, these individuals should not experience gaps in their health insurance coverage. However, the extended processing period and the complex manual processes for renewals could have other serious repercussions for customers and others. First, some customers have yet to receive invoices for their 2015 coverage, so when they receive their first invoice they may owe multiple months of premium payments. For example, if a renewal is processed in March for a plan with an effective date of January 1, 2015, the customer will receive an invoice for four months of premium payments (three retroactive months plus the upcoming month of coverage). Second, customers who have been sent an invoice but who requested a change may receive multiple invoices. For example, as of February 19, 2015, about a quarter of households were sent more than one invoice (see Table 3).

Table 3: Number of Invoices Sent to Households Who Have Renewed their Insurance for 2015, as of February 19, 2015

Number of invoices sent	Number of households sent this number of invoices	Percentage of Households
0	1,642	8%
1	13,046	65%
2	3,950	20%
3	942	5%
4	303	1%
5 or more	222	1%

Other repercussions pertain to the carriers and VHC operations. Specifically, the State's manual renewal process could cause carriers to pay claims on behalf of individuals who renew with another carrier or choose not to renew their coverage. Regarding VHC operations, it has incurred additional expenses to augment their operational staff resources to process renewals manually. VHC requested assistance from AHS employees, and 228 of them volunteered to work overtime to perform quality control over no-change renewals. According to a report sent to CMS, AHS estimated that these staff would work 3,418 hours at a cost of $204,000.[43] The State also contracted with Optum for additional staff to assist with renewals. The Optum contract called for 250 additional agents and supervisors to perform this work. As of December 31, 2014, Optum reported that its workers had spent about 57,000 hours processing renewals (Optum has not yet been paid).

According to the State's plans, the VHC system is expected to be modified to include automated renewal processing by the Fall of 2015. However, there are significant uncertainties that could affect whether this date can be met. In particular, the State has not signed a contract to complete development of this work.

Medicaid Renewals

Federal Medicaid rules require enrollees to renew annually and have the State re-determine their eligibility. Of the State's approximately 118,000 Medicaid customers enrolled because they meet Federal requirements pertaining to modified adjusted gross income, the VHC system contains 80,000 while the remaining 38,000 are in the legacy integrated eligibility system (called ACCESS).[44]

The State did not have a process in place to renew Medicaid recipients (except for mixed households, as previously described), but these individuals continued to receive Medicaid benefits. With respect to those households in the VHC system, this has been caused by the lack of an automated renewal process. For those Medicaid households in ACCESS, however, a renewal process was not implemented because the State had planned to renew the households as part of transferring them to the VHC system. This transfer did not occur due to VHC system limitations and the State's concerns about having resources available to process the renewal applications. According to

[43] We requested AHS' actual expenditure related to paying overtime to the volunteer staff, but as of March 17, 2015, have not received this information.

[44] *Vermont Health Connect Report: In accordance with Act 48 of 2011, Section 2(a)(2)(C),* (Agency of Administration and Department of Vermont Health Access/Vermont Health Connect, January 15, 2015)

the State, it began the renewal process for Medicaid recipients in ACCESS on March 9, 2015.

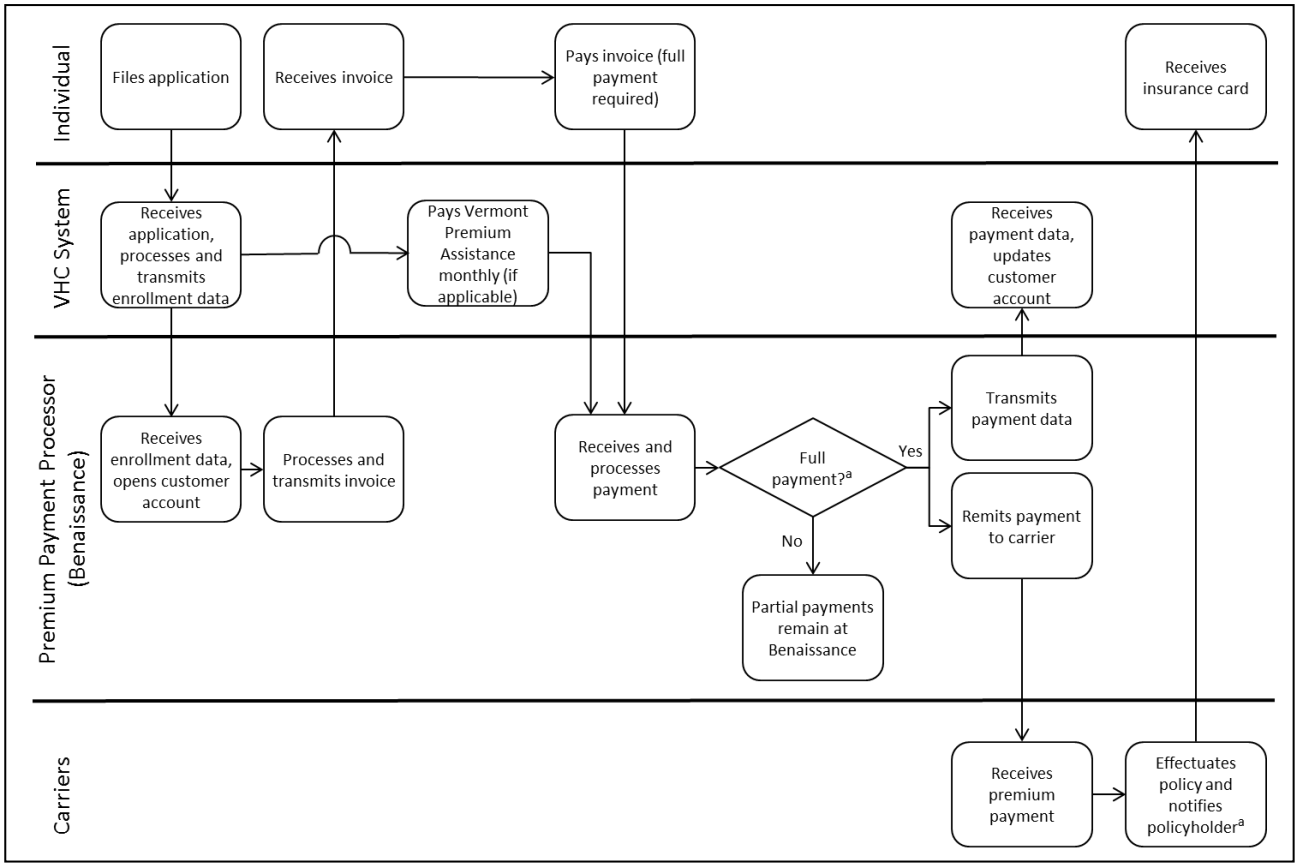
Since the State had not been processing Medicaid renewals, customers who are not eligible for this program may be inappropriately receiving benefits. Additionally, the State is at risk of having made improper payments to the extent that it has paid claims for customers who are later determined to be ineligible for Medicaid based on their renewal. According to a DVHA deputy commissioner, the State has received verbal assurance from CMS that would eliminate this risk. As of March 24, 2015, the State had not received this waiver.

Premium Payment Processing

The problems associated with other VHC operations (enrollment, COC, renewals) manifest themselves in the premium payment process. Specifically, they result in inaccurate premium billing, including multiple invoices sent to customers in the same month. This section focuses on the shortcomings in the premium payment process itself.

VHC premium payment processing is complex and involves several different organizations, including the State, Benaissance, and carriers. See Figure 1 for a simplified overview of the premium payment process when it works as designed.

Figure 1: Simplified Overview of the Premium Payment Process



[a] Full premium presumes payment of both the individual and VPA portions. Effectuation of the policy can occur if the individual, but not the State's, portion of the payment has been received.

Several assessments contracted by VHC highlighted problems with premium payment processing, including duplicate records and a lack of consistency in the data between the VHC, Benaissance, and carriers' systems. These discrepancies required VHC to research and manually adjust individual records to ensure that the amounts billed reflect customers' choices and that any resulting premium assistance amount is deducted from billed amounts. The Healthcare Advocate's Office reported that premium payment processing issues were the most frequent complaint that it received about VHC, including customers who did not receive invoices and payments that were not recorded although they had been made. For example, one customer's insurance was terminated even though he had paid his premium and had not been notified of his past due status.

VHC has taken limited actions to address some of the issues raised in the operational assessments. For example, the State developed flowcharts, job aids, and standard operating procedures to document their processes. In

addition, in mid-February 2015, a contractor developed a report for VHC that can be used to update the "paid through" field in the VHC system with data from Benaissance. This was done because the VHC system does not calculate the paid-through date automatically.

Nevertheless, VHC's design of its premium payment processing contributed to customer hardship and carrier difficulties. In addition, VHC has failed to implement processes that would provide assurance that it is exercising prudent financial controls. The following sections provide additional information related to flaws in the current premium payment processes and the Benaissance contract.

Customer Billing and Dunning/Termination Processes

By design, VHC splits its customer billing and dunning/termination processes.[45] Benaissance sends out invoices and collects payments while the carriers are responsible for sending out termination notices and cancelling plans, when applicable. A single invoice sent to a customer may contain premiums for multiple carriers[46] and/or Medicaid. The State requires customers to pay the full amount of the invoice to maintain coverage. Accordingly, Benaissance does not remit any payments to the carriers on behalf of a customer until its records show that the premium (both the customer and VPA portions) has been paid in full. If the carrier does not receive a remittance from Benaissance, the customer appears delinquent to the carrier even if payment has been received by Benaissance. Such apparent delinquencies could be caused by (1) an error in a payment by the customer, no matter how small;[47] (2) an unprocessed COC in which a customer terminates a policy for one of the members of a household and pays only the premiums for the remaining members; or (3) the State not transmitting the VPA payment.

To avoid terminating customers who may have, in fact, made their payments, VHC implemented dunning and termination workarounds for Blue Cross Blue Shield and Northeast Delta Dental customers (MVP Health Care does not utilize this workaround).[48] In these workarounds VHC tells the carriers

[45] Dunning is the process of carriers providing notice to their customers of their intent to terminate or cancel the plan at the end of the statutory defined grace periods if the balances are not paid.

[46] VHC includes plans from three carriers, Blue Cross Blue Shield of Vermont, MVP Health Care, and Northeast Delta Dental.

[47] According to the three carriers that provide QHP plans through VHC, they do not dun their non-QHP customers for small shortfalls in their payments (e.g., $1 or $5).

[48] MVP Health Care sends out termination notices based on its records.

which delinquent customers should be excluded from the dunning and termination processes (e.g., a customer with a pending COC). Accordingly, Blue Cross Blue Shield and Northeast Delta Dental terminated only some of the accounts that their records show as delinquent.

This convoluted process has led to the following repercussions for customers, carriers, and the State.

- There are significant discrepancies between the State and Blue Cross Blue Shield regarding customer balances related to premium payments.[49] For example, according to Blue Cross Blue Shield, as of February 28, 2015, its accounts receivable records showed 6,310 customers owing $5.5 million who should have received termination notices. However, only 2,046 customers who owed $1.5 million in premium payments were sent termination notices at the direction of the State. At the request of Blue Cross Blue Shield, the State has sent some of these customers past due notices.[50]

  In a February 2015 letter, Blue Cross Blue Shield of Vermont expressed serious concerns about the collectability of its accounts receivables as of December 31, 2014. Citing VHC's operational deficiencies as the cause of the magnitude of its receivables, Blue Cross Blue Shield stated that it did not think it fair to pursue full collection of these past due balances from customers nor to trigger grace periods for potential termination. Therefore, the carrier stated that it intended to invoice the State for 2014 amounts that are past due by 90 days or more, as of the end of March 2015 (according to a Blue Cross Blue Shield official, this has been delayed until at least April 30, 2015). In a March letter to Blue Cross Blue Shield, the State's Chief of Health Care Reform stated that the receivable balances had been reduced and that "if the trend holds" by the end of the planned 2014 reconciliation process the accounts receivable would be

[49] Northeast Delta Dental also reported that it had outstanding accounts receivable for VHC customers, but they reported much smaller unreconciled account balances than did Blue Cross Blue Shield (about $32,000 at the end of calendar year 2014).

[50] The State needed to send these past due notices because there were circumstances in which Benaissance could not to send out past due notices. This occurred when VHC gave a customer a new account number when it processed a COC or renewal and the old customer account had a past due balance. In such cases, the Benaissance system closes the first customer account number (the one with the past due balance) and opens the second customer account number. The Benaissance system could not accommodate transferring the past due balance from the first to the second account number without a system modification. VHC and Benaissance developed a workaround, but it could not be applied in all circumstances.

nominal. The chief added that the State would work to collect everything that is properly due.

- Blue Cross Blue Shield reported that it paid claims for customers that should have been terminated but were not because the State directed the carrier not to terminate the customer as part of the dunning workaround. In some cases, VHC retroactively terminated customers as they processed COCs. For example, a customer may have requested that a plan be terminated in September 2014 and the State processed the COC in January 2015 with an effective termination date of September. In such cases, Blue Cross Blue Shield reported that it sometimes paid claims to providers for which it was not responsible. A Blue Cross Blue Shield official told us that in general the carrier planned to offset future provider[51] payments for these claims. According to the official, the carrier believes that most of the customers in these circumstances had moved to a different carrier or Medicaid and therefore the provider should be able to obtain payment from the responsible party.

- Because MVP Health Care was not participating in the dunning workaround process[52] and therefore was not made aware that some members' premiums had been paid, it issued termination notices to customers who had paid their invoices, but whose payments had not been remitted to the carrier by Benaissance. In those cases in which Benaissance later remitted the customers' payments, the customers' accounts were reinstated.

Some of the customers affected by the dunning workaround may not have been affected if the State had implemented an Administrative Rule[53] allowing Benaissance to apply partial payments according to a hierarchy set forth in the rule. For example, the rule calls for premiums for the Medicaid Dr. Dynasaur program to be paid first and premiums for dental insurance to be paid last. Because the partially paid premiums for customers in households with multiple carriers or Medicaid are not apportioned in this manner, none of the carriers or Medicaid would have received a payment, so all applicable carriers would have considered the customer delinquent. Had the payment hierarchy process been put in place, the customer may have been able to be current on at least one of the plans. The State would need to modify the VHC

[51] This does not apply to pharmacy providers.

[52] MVP Health Care initially participated in the dunning workaround but found its accounts receivable balance growing too large and so stopped its participation.

[53] Department for Children and Families Bulletin No. 14-04 §64.05(b)(1)(i)

system to implement this rule. According to the State's plans, VHC might include this functionality in the scope of the Fall of 2015 release. There are significant uncertainties that could affect whether this date can be met. In particular, the State has not signed a contract to complete development of this work.

Medicaid – Dr. Dynasaur

Medicaid premiums apply only to Dr. Dynasaur program customers. Upon the receipt of Medicaid premium payments, Benaissance remits them to the State. According to a Benaissance official, as of the end of February 2015, 1,147 of the 5,334 Dr. Dynasaur customers (22 percent) in the VHC system were delinquent. However, delinquent Medicaid accounts in the VHC system have not been terminated for non-payment. A VHC operations official told us that the lost premium revenue was about $143,000 as of the end of February 2015. Of this amount, about $43,000 was owed by terminated customers[54] and about $100,000 by active customers. Without timely terminations from the program, such Dr. Dynasaur customers remain covered when they should not be and the State could be paying claims for these individuals. In contrast, according to this official, Dr. Dynasaur customer accounts in the State's legacy integrated eligibility system (ACCESS) are terminated if the premium is not paid.

VHC has not implemented a termination process for Dr. Dynasaur customers because the VHC system does not accommodate this process. A system fix is planned to be included in a release scheduled to be deployed this Fall. However, there are significant uncertainties that could affect whether this date can be met. In particular, the State has not signed a contract to complete development of this work.

Financial Controls

VHC's complex premium payment process calls for strong financial controls because it involves multiple organizations and manual workarounds that have proven to be error-prone. VHC's financial controls have serious deficiencies, described below.

- *Financial reports.* The VHC system does not currently provide financial reports, such as weekly and monthly reporting on the dollar amounts of what has been invoiced, collected, and remitted by Benaissance. Several key reports are in development: (1) a premium

[54] These customers were terminated for reasons other than non-payment of Dr. Dynasaur premiums.

processing detail report that provides transactional level detail, (2) an effectuation report that provides visibility into the volume of individuals who receive VPA and cost sharing reduction, and (3) an overall financial report that demonstrates the flow of money from the time that the bill is sent to the customer to when the remittance is sent to the carriers. The completion of these reports has been delayed due to competing priorities.

- *Benaissance bank account.* Under the State's contract with Benaissance, the contractor maintains a bank account "for the benefit of" the State of Vermont. This account includes misapplied or unallocated payments, as well as prepayments and overpayments. Per a VHC financial official, VHC has performed very limited monitoring over the bank account. As of January 30, 2015, Benaissance had a large balance—$5 million—owed to carriers, customers, and the State. As of March 24, 2015, the State had not received requested reports from Benaissance that provided details on the makeup of this balance. Specifically, the State did not know how much of the money in the Benaissance account relates to partial customer payments, amounts due to be refunded to the customer, overpayments on active accounts to be applied to future invoices, VPA, or prepayments made by customers. This information is important for the State to monitor the type and frequency of Benaissance's remittances from this account to ensure that distributions are being made in a timely and appropriate manner. In addition, this information would enable VHC to improve its review of the reconciliation that Benaissance submits to the State monthly. At this time, the VHC financial official who reviews this bank account reconciliation does not have sufficient detail with which to confirm the veracity of this process.

- *Reconciliation.* In two operations assessments, the contractors recommended VHC reconcile its premium payment data with Benaissance and the carriers. As of March 2015, a full reconciliation of customer account balances has not been performed although customer cases are reconciled on an as needed basis or whenever an issue is escalated. The State has made some efforts to compare and resolve data discrepancies. For example, to prepare for the submission of tax forms to customers, VHC compared data in its system to that of Benaissance and resolved differences between the Benaissance and VHC systems in the paid-through date. However, until customer account balance reconciliation is performed, discrepancies among the VHC, Benaissance, and carrier systems will remain unresolved. A full reconciliation has not been performed because the VHC system lacks the functionality to support this activity. Optum has been tasked with

developing a reconciliation process and reports that identify discrepancies. The extent to which this process will be an automated or manual process is as yet unknown. The State has held conversations with the carriers and Benaissance about the process to be used to perform reconciliation. As of March 10, 2015, Optum had designated the lack of clarity about the scope of the planned reconciliation activities as a high risk.

Benaissance Contract

Benaissance was originally a subcontractor to CGI. This subcontract was reassigned to the State in August 2014 as part of the transition from CGI. This reassigned contract included service levels that Benaissance was required to meet or face monetary consequences. However, according to DVHA, Benaissance and the department do not believe that the service levels in the assigned contract were applicable. As a result, the State has not been measuring Benaissance's performance against agreed-upon service levels. VHC has been negotiating a new contract with Benaissance that is expected to include service levels. However, as of March 24, 2015, this contract has not been signed.

Another consequence of the lack of a new Benaissance contract is that the State is paying Benaissance for a service that is not being provided. Specifically, under the terms of the reassigned contract, Benaissance is required to be paid a minimum of $41,750 a month for processing payments related to SHOP customers. The State has been paying these amounts, totaling about $580,000 as of the end of February, even though small employers are enrolled directly with the carriers, who also invoice for and collect their premium payments. The longer it takes for the State to negotiate a contract with Benaissance, the more costs the State will incur for services that are not provided.

Other Matters

In the 2015 legislative session there have been proposals related to migrating from the VHC system to the Federal exchange. For example, on March 20, 2015, the Administration proposed this option as a contingency to be considered if the planned changes to the VHC system are not successful.[55] The Administration's proposal includes deadlines for the Chief of Health

[55] This proposal would have the State switch from a state-based exchange to a federally-supported state based marketplace, which includes utilizing the Federal exchange.

Care Reform to make a recommendation to the Joint Fiscal Committee and for requesting U.S. Department of Health and Human Services approval to migrate to the Federal exchange should it be determined to be the proper course. In addition, bills have been introduced in both the House and Senate that would require the Administration to develop a plan to transition VHC to an alternative system.[56]

We agree that it is a prudent step to consider whether to continue with the VHC system or to move to an alternative model for operating the exchange and to develop a plan for this possibility. However, we believe that such a decision should be based on a strong analytical foundation. In particular, a cost-benefit analysis of alternatives to take into account the qualitative and quantitative benefits and costs in the short and long term of making a change versus continuing with the VHC system would provide valuable information to inform decisionmaking. As of March 24, 2015, the Administration did not have a specific plan to perform such an analysis and the legislative proposals did not include this as a requirement. In commenting on a draft of this report, the Agency of Human Services (AHS) stated that they strongly agreed with the need to have an analytical basis for the decision, including a cost-benefit analysis of alternatives.

Another consideration is the timing and activities associated with moving from a state-based exchange to the federal exchange. 45 CFR §155.106(b) states that if a state ceases to operate its exchange that it must notify the U.S. Department of Health and Human Services of this intent at least 12 months prior to ceasing operations and coordinate with the Department on a transition plan. In responding to a draft of this report, the Secretary of AHS reported that the Chief of Health Care Reform had engaged senior management at the Centers for Medicare and Medicaid Services (CMS)[57] regarding these timelines and was advised that the State would need to inform CMS of its intent to move to the federal exchange by December 2015 in order to transition to open enrollment for the 2017 plan year. This date should drive the timing of the Legislature's analysis of the Administration's recommendation to the Joint Fiscal Committee to ensure that the recommendation is early enough to provide adequate time for the Committee to deliberate and weigh the consequences of any proposals that are submitted. Another consideration are the activities that the State would be expected to undertake prior to a transition to the Federal exchange. According to CMS, tasks associated with migrating to the exchange would include, among others, developing a migration plan, determining data migration requirements

[56] H.60, H.177, and S.112.

[57] CMS is a component of the U.S. Department of Health and Human Services.

(including security), assessing the impact to interfaces to other systems, and developing a test plan.

Conclusions

When the VHC system went live on October 1, 2013, it had significant shortcomings that caused the development of lengthy manual processes and data in the system that was error-prone. These shortcomings have produced hardship for customers as well as operational difficulties for the State and the insurance carriers. The State has spent millions of dollars (and is due to spend millions more) on corrective actions, such as fixes to the VHC system and manual workarounds, but serious problems remain at this time. Modifications to the VHC system are planned to occur in two major releases before the next open enrollment and renewal period in the Fall of 2015. If these modifications work as intended, they are expected to alleviate much of the operational burden with which the State has been struggling. However, the State must overcome significant uncertainties and obstacles in order to successfully implement these releases. The critical nature of these 2015 releases warrants close oversight by the Legislature to ensure that the schedule is being maintained and, if not, that corrective actions have been implemented. Because it is expected that time-consuming manual workarounds that we reviewed will be addressed by the planned system changes, we are limiting our operational recommendations to those areas that are expected to continue in which we found problems.

Recommendations

We make the following recommendations to the Secretary of the Agency of Human Services and describe the related issues in Table 4:

Table 4: Recommendations and Related Issues

Recommendation	Report pages	Issue
1. Expeditiously complete the VHC project management plan documents for the 2015 releases, including a scope statement, requirements traceability matrix, and test plan.	10-11	These documents, critical to the timely implementation of Release 1 and Release 2 and required by the VHC project management plan, have not been finalized.
2. Include in future VHC system development contracts clauses that provide monetary consequences tied to the contractor's performance.	11	The State's development contract with Optum does not contain provisions that provide monetary consequences if Optum fails to provide timely and quality deliverables.

Recommendation	Report pages	Issue
3. Document the roles and responsibilities of each of the organizations that provide system and operations support to VHC, including explicitly laying out decisionmaking responsibilities and collaboration requirements.	16-17	There have been significant recent changes to the VHC organizational structure. It is too early to tell what affect, if any, the restructuring of how VHC organizationally operates will have on the VHC system development efforts. However, it is particularly important that decisionmaking responsibility and collaboration requirements are clear and agreed-upon in the VHC environment because of the multiple State organizations involved.
4. Include expected service levels or performance metrics in future VHC system development and premium payment processor contracts and establish mechanisms to track contractor performance against the performance levels in these agreements.	18, 19, 42	The State's contract with Optum for Release 1 and Release 2 does not include performance metrics that the State could use to monitor and hold Optum accountable. The State has not enforced the service levels in the Benaissance contract because it believes that they were no longer applicable. VHC has been negotiating a new contract with Benaissance that is expected to include service levels.
5. Establish a process and expeditiously perform reconciliations of enrollment data between the VHC, Benaissance, and the carriers' systems.	29	The VHC system currently does not support the automated reconciliation of enrollment information. Accordingly, as of end of February 2015, VHC has not performed enrollment reconciliations among the VHC, Benaissance, and the carriers' systems.
6. Establish a process and expeditiously perform reconciliations of enrollment data between the VHC system and the relevant Medicaid system(s).	29-30	As of March 4, 2015, there had been no reconciliation of enrollment information between the VHC system and the relevant Medicaid systems.
7. Reconsider decisions that have complicated the premium payment processing function, including the requirement that the full premium payment be at Benaissance without exception before remittance to the carriers and the split of the billing and dunning/termination processes between different organizations.	37-40	By design, VHC splits its customer billing and dunning/termination processes. Benaissance sends out invoices and collects payments while the carriers are responsible for sending out termination notices and cancelling plans, if applicable. A single invoice sent to a customer may contain premiums for multiple carriers and/or Medicaid. The State requires customers to pay the full amount of the invoice to maintain coverage. Accordingly, Benaissance does not remit any payments on behalf of a customer to the carriers until its records show that the premium (both the customer and Vermont Premium Assistance portions) has been paid in full. If the carrier does not receive a remittance from Benaissance the customer appears delinquent even if payment has been received by Benaissance.
8. Establish a process to terminate Dr. Dynasaur recipients in the VHC system who meet the State's termination criteria.	40	As of late February 2015, 1,147 of the 5,334 VHC customers (22 percent) that included a Dr. Dynasaur plan recipient (called a mixed household) were delinquent. However, delinquent Medicaid accounts in the VHC system have not been terminated for non-payment. A VHC financial official told us that the lost premium revenue was about $143,000 as of the end of February 2015.
9. Expeditiously develop VHC financial reports to implement stronger financial controls.	40-41	The VHC system has not been generating financial reports to be used as a financial control.

Recommendation	Report pages	Issue
10. Obtain and review reports from Benaissance that provide detail on the makeup of the balance in the VHC bank account and monitor this account to ensure that payments are being remitted appropriately and in a timely manner.	41	Based on external and internal documentation, the bank account maintained by Benaissance, which had a $5 million balance as of January 30, 2015, includes misapplied, unallocated payments, as well as prepayments and overpayments. The State did not know the complete makeup of this account balance in terms of how much of it was partial customer payments, amounts due to be refunded to the customer, overpayments on active accounts to be applied to future invoices, VPA, or prepayments made by customers.
11. Establish a process and expeditiously perform reconciliations of payment data among the VHC, Benaissance, and the carriers' systems.	41-42	The VHC system currently does not support the automated reconciliation of payment data. Accordingly, as of March 2015, VHC has not performed payment reconciliations among the VHC, Benaissance, and the carriers' systems.

Matters for Legislative Consideration

1. We recommend that the Legislature require the Secretary of the Agency of Human Services to issue bi-weekly reports to the health care oversight committees on the schedule, cost, and scope status of the VHC system's Release 1 and Release 2 development efforts, including whether any critical path items did not meet their milestone dates and corrective actions being taken.

2. We recommend that the Legislature require the Secretary of the Agency of Human Services to report semi-annually to the health care oversight committees on the status of future VHC development efforts, including the implementation of the Small Business Health Options Program.

3. We recommend that the Legislature require the Commissioner of the Department of Information and Innovation to periodically provide a high-level update to the health care oversight committees on the status of corrective actions to address system security weaknesses in the VHC system.

4. We recommend that during its consideration of proposals to migrate from the VHC system to the Federal exchange, the Legislature require that a cost-benefit analysis of alternatives be undertaken to inform this decision.

Managements' Comments

The Secretary of the Agency of Human Services provided written comments on a draft of this report on April 10, 2015, which is reprinted in Appendix VI along with our evaluation. The Commissioner of the Department of Information and Innovation provided written comments on a draft of this

report on April 13, 2015, which is reprinted in Appendix VII along with our evaluation of these comments.

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In accordance with 32 V.S.A. §163, we are also providing copies of this report to the commissioner of the Department of Finance and Management and the Department of Libraries. In addition, the report will be made available at no charge on the state auditor's website, http://auditor.vermont.gov/.

Appendix I
Scope and Methodology

To address our objective, we analyzed several independent reviews of the Vermont Health Connect (VHC) system and operations to identify shortcomings and recommended corrective actions. These independent reviews included:

- A December 2013 security assessment by Referencia.[58]
- A March 2014 lessons learned report by BerryDunn, McNeil & Parker.[59]
- A June 2014 assessment of the status of customer service, enrollment, and premium processing operations by HES Advisors.[60]
- An August 2014 review of risks and process gaps in eight key operational areas that were driving backlogs and sub-optimal customer experience by Optum.[61]
- An August 2014 information technology (IT) assessment by Optum.[62]
- 2014 and 2015 bi-weekly status reports by an independent verification and validation contractor, Gartner.

We also reviewed quarterly reports by Vermont's Office of the Health Care Advocate, internal VHC and Optum status reports and State requests for Federal funding to identify other shortcomings and/or to obtain additional detail on shortcomings identified by the independent reviews.

After reviewing these documents, we scoped our audit to focus on selected IT and operational shortcomings and corrective actions. Regarding IT, we reviewed system development, governance/project management, and system security activities. On the operations side, we focused on enrollment, change of circumstances, renewal, and premium payment processing. Another consideration in determining our scope was that there are ongoing audits in areas such as enrollment eligibility.

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[58] *Vermont Health Connect (VHC) Security Assessment Report (SAR)* (Referencia, December 20, 2013).

[59] *State of Vermont Health Services Enterprise Release 1 Lessons Learned Report* (BerryDunn McNeil & Parker, March 27, 2014).

[60] *Operations Assessment: Vermont Health Connect* (HES Advisors, June 5, 2014).

[61] *Vermont Health Connect: Operations Assessment* (Optum, August 1, 2014).

[62] *Vermont Health Connect: IT Assessment* (Optum, August 29, 2014).

Appendix I
Scope and Methodology

For each of these seven focus areas, we identified the corrective actions being taken and planned by interviewing VHC leadership, IT and operational managers, as well as officials in the Agency of Human Services (AHS) central office, Department of Vermont Health Access (DVHA), and Department of Information and Innovation (DII).

In addition, we reviewed a wide variety of documentation supporting VHC's actions and plans, such as (1) contracts, including the CGI and Optum contracts; (2) documentation supporting implemented and planned changes to the VHC system; (3) current IT governance and project management plans; (4) IT security plans of actions and milestones, (5) process documentation pertaining to the four operational areas in our scope, and (6) operational reports that provide the status of backlogs.

Throughout our report we used statistics (e.g., the number of enrollments, processing backlogs) that were derived from reports generated from the VHC system. This system is flawed and has known data integrity problems. As a result, we did not attempt to validate these statistics.

We also interviewed officials from the three insurance carriers that have qualified health plans on the exchange: Blue Cross Blue Shield of Vermont, MVP Health Care, and Northeast Delta Dental. The focus of these discussions and reviews of related documentation pertained to operational problems caused by VHC system deficiencies, internal policies and processes put in place to address these problems, and summaries of account balances related to their VHC customers. In addition, we discussed the premium payment process with a Benaissance official.

We performed our work between September 2014 and March 2015 primarily at VHC headquarters in Winooski. We conducted this performance audit in accordance with generally accepted government auditing standards, which require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II
Abbreviations

ACA	Patient Protection and Affordable Care Act
AHS	Agency of Human Services
APTC	Advanced Tax Premium Credit
CGI	CGI Technologies and Solutions, Inc.
CFR	Code of Federal Regulations
CMS	Centers for Medicare and Medicaid Services
COC	Change of Circumstances
DII	Department of Information and Innovation
DVHA	Department of Vermont Health Access
HSE	Health and Human Services Enterprise
IMS	Integrated Master Schedule
IRS	Internal Revenue Service
IT	Information Technology
MARS-E	Minimum Acceptable Risk Standards for Exchanges
Optum	OptumInsight, Inc.
PMO	Program Management Office
PMP	Project Management Plan
POAM	Plan of Action and Milestones
QHP	Qualified Health Plan
SHOP	Small Business Health Options Program
VHC	Vermont Health Connect
VPA	Vermont Premium Assistance

Appendix III
Breakdown of the Optum Contract

The State's contract with OptumInsight, Inc.[63] to perform system development and operational support has a maximum value of $57 million and expires on June 30, 2015. Table 5 defines the services being provided under the different streams of this contract and the maximum amount to be paid for each stream.

Table 5: Services Associated With Each Stream Under the OptumInsight Contract and their Maximum Amount

Stream #	Services	Completed?[a]	Maximum Amount
1	IT plan	Yes	$ 497,663
2	Operations stabilization plan	Yes	117,875
3	Supplemental operations support	No	14,948,468
4	IT project management and other services, such as security and requirements, design and test services	No	11,832,561
5	Design, development, and implementation of the VHC 2015 open enrollment and renewals workaround solution	No	2,341,219
6	Maintenance and operations services	No[b]	6,427,133
7	Design, development, and implementation services through June 30, 2015	No	21,151,418
Total			$ 57,316,337

[a] Based on an Optum status report dated March 10, 2015. If a stream had deliverables that had not yet received sign-off by the State it was not considered to be complete.

[b] As of January 1, 2015, maintenance and operations was covered by another contract with Optum.

[63] The State also signed a separate contract with Optum for maintenance and operations for the VHC system for a sum not to exceed $6,756,450 for the period January 1, 2015 to June 30, 2015. Payment for this contract is also based on time and materials.

Appendix IV
Total VHC Costs Reported to CMS as of December 31, 2014

The State reported that it had paid $126.7 million to develop and operate the VHC system as of December 31, 2014.[64] Table 6 contains the breakdown of these costs.

Table 6: VHC Costs Reported by the State to the Centers for Medicare and Medicaid Services as of December 31, 2014[a]

Cost category	Information technology	Non-information technology	Total
Contractual	$ 74,792,275	$ 25,894,953	$ 100,687,227
Equipment	170,279	620,113	790,391
Personnel	3,784,379	9,697,168	13,481,547
Fringe benefits	1,471,793	2,929,885	4,401,679
Supplies	13,910	133,043	146,954
Travel	88,232	168,934	257,165
Other	634,117	6,292,982	6,927,099
Total	$ 80,954,985	$ 45,737,077	$ 126,692,062

[a] Totals may not add due to rounding.

[64] This amount reflects amounts paid and therefore does not include significant costs that were incurred, but not paid, as of December 31, 2014

Appendix V
Definition of Each Family of IT Security Controls

The Centers for Medicare and Medicaid Services (CMS) has published a suite of security control guidance for exchange systems called the Minimum Acceptable Risk Standards for Exchanges (MARS-E). This guidance organizes the minimum security controls into control families, which are described in the following table.

Table 7: Family Descriptions for Minimum Security Controls for Exchanges

Name of Class of Control	Name of Family of Control	Description
Technical	Access control	Focuses on how the Exchange shall limit IT system access to authorized users, processes acting on behalf of authorized users, or devices, and to the types of transactions and functions that authorized users are permitted to exercise.
Operational	Awareness and training	Focuses on how the Exchange shall (1) ensure that managers and users of Exchange IT systems are made aware of the security risks associated with their activities and of the applicable laws, Executive Orders, directives, policies, standards, instructions, regulations, or procedures related to the security of IT systems; and (2) ensure that Exchange personnel are adequately trained to carry out their assigned IS-related duties and responsibilities.
Technical	Audit and accountability	Focuses on how the Exchange shall: (1) create, protect, and retain IT system audit records to the extent needed to enable the monitoring, analysis, investigation, and reporting of unlawful, unauthorized, or inappropriate IT system activity; and (2) ensure that the actions of individual IT system users can be uniquely traced to those users so they can be held accountable for their actions.
Management	Security assessment and authorization	Focuses on how the Exchange shall: (1) periodically assess the security controls in Exchange IT systems to determine if the controls are effective in their application; (2) develop and implement plans of action designed to correct deficiencies and reduce or eliminate vulnerabilities in Exchange IT systems; (3) authorize the operation of Exchange IT systems and any associated IT system connections; and (iv) monitor IT system security controls on an ongoing basis to ensure the continued effectiveness of the controls.
Operational	Configuration management	Focuses on how the Exchange shall: (1) establish and maintain baseline configurations and inventories of Exchange IT systems (including hardware, software, firmware, and documentation) throughout the respective system development life cycles; and (2) establish and enforce security configuration settings for IT technology products employed in Exchange IT systems.
Operational	Contingency planning	Focuses on how the Exchange shall establish, maintain, and effectively implement plans for emergency response, backup operations, and post-disaster recovery for Exchange IT systems to ensure the availability of critical information resources and continuity of operations in emergency situations.
Technical	Identification and authentication	Focuses on how the Exchange shall identify IT system users, processes acting on behalf of users, or devices and authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to Exchange IT systems.
Operational	Incident response	Focuses on how the Exchange shall: (1) establish an operational incident handling capability for Exchange IT systems that includes adequate preparation, detection, analysis, containment, recovery, and user response activities; and (2) track, document, and report incidents to appropriate Exchange officials and/or authorities.

Appendix V
Definition of Each Family of IT Security Controls

Name of Class of Control	Name of Family of Control	Description
Operational	Maintenance	Focuses on how the Exchange shall: (1) perform periodic and timely maintenance on organizational information systems; and (2) provide effective controls on the tools, techniques, mechanisms, and personnel used to conduct information system maintenance.
Operational	Media protection	Focuses on how the Exchange shall: (1) protect IT system media, both paper and digital; (2) limit access to information on IT system media to authorized users; and (3) sanitize or destroy IT system media before disposal or release for reuse.
Operational	Physical and environmental protection	Focuses on how the Exchange shall: (1) limit physical access to information systems, equipment, and the respective operating environments to authorized individuals; (2) protect the physical plant and support infrastructure for information systems; (3) provide supporting utilities for information systems; (4) protect information systems against environmental hazards; and (5) provide appropriate environmental controls in facilities containing information systems.
Management	Planning	Focuses on how the Exchange shall develop, document, periodically update, and implement security plans for Exchange IT systems that describe the security controls in place or planned for the IT systems and the rules of behavior for individuals accessing the IT systems.
Operational	Personnel security	Focuses on how the Exchange shall: (1) ensure that individuals occupying positions of responsibility within organizations (including third-party service providers) are trustworthy and meet established security criteria for those positions; (2) ensure that organizational information and information systems are protected during and after personnel actions such as terminations and transfers; and (3) employ formal sanctions for personnel failing to comply with organizational security policies and procedures.
Management	Risk assessment	Focuses on how the Exchange shall periodically assess the risk to Exchange operations (including mission, functions, image, or reputation), Exchange assets, and individuals, resulting from the operation of Exchange IT systems and the associated processing, storage, or transmission of Exchange information.
Management	System and services acquisition	Focuses on how the Exchange shall: (1) allocate sufficient resources to adequately protect Exchange IT systems; (2) employ system development life cycle processes that incorporate IS considerations; (3) employ software usage and installation restrictions; and (4) ensure that third-party providers employ adequate security measures to protect information, applications, and/or services outsourced from the organization.
Technical	System and communications protection	Focuses on how the Exchange shall: (1) monitor, control, and protect Exchange communications (i.e., information transmitted or received by Exchange IT systems) at the external boundaries and key internal boundaries of the IT systems; and (2) employ architectural designs, software development techniques, and systems engineering principles that promote effective IS within Exchange IT systems.
Operational	System and information integrity	Focuses on how the Exchange shall: (1) identify, report, and correct information and IT system flaws in a timely manner; (2) provide protection from malicious code at appropriate locations within Exchange IT systems; and (3) monitor IT system security alerts and advisories, and take appropriate actions in response.
Management	Program management	These standards complement the security controls in the other 17 families by focusing on the organization-wide information security requirements that are essential for managing information security programs.

Appendix VI
Comments from the Secretary of the Agency of Human Services and Our Evaluation

State of Vermont
Agency of Human Services
Office of the Secretary
208 Hurricane Lane, Suite 103
Williston, VT 05495
www.humanservices.vermont.gov

Hal Cohen, Secretary

[phone] 802-871-3009
[fax] 802-871-3001

April 10, 2015

State of Vermont
Agency of Human Services
Department of Vermont Health Access
Vermont Health Connect

The following represent the responses to the State Auditor's report entitled *Vermont Health Connect: Future Improvement Contingent on Successful System Development Project* dated March 27; 2015

We want to thank the auditor and staff for a productive audit that complements rather than overlaps with other audits and oversight efforts. Most particularly, we appreciate the consideration given to making sure the work of the audit did not disrupt open enrollment. The experience of the Vermont Health Connect project offers many lessons learned, and we are committed to ensuring that those lessons are shared throughout state government. We are encouraged that we have implemented or are in the process of implementing improvements to address all of the Auditor's recommendations.

We agree that while significant improvements have been made to project and operational management, the real issue is completing the system so that Vermonters can get the quality customer service they deserve. We are focused on making major system improvements by the end of May, and completing critical reconciliations in the same time frame. As reported, we are also developing contingency plans if that effort is not successful. We strongly agree with the recommendation that "such a decision should have a strong analytical basis, including a cost-benefit analysis of alternatives considering both qualitative and quantitative benefits and costs in the short and long term."

Despite all of the well-documented problems associated with the rollout of the exchange, Vermont's uninsured rate dropped from 6.8 to 3.7 percent, the second lowest in the nation. It is important to ensure that we have the tools to get all Vermonters the coverage that they need.

Recommendation 1: Expeditiously complete the VHC project management plan documents for the 2015 releases, including a scope statement, baseline integrated master schedule, requirements traceability matrix, and test plan (Page 10).

The dates for completion for the documents are:

See comment 1 on page 59

- Baseline Integrated Master Schedule: Completed April 3, 2015
- Requirements documentation: Completed April 5, 2015
- Scope Statement: Completed April 8, 2015
- Requirements Traceability matrix: Draft under review April 8, 2015; completion target April 10.
- Test plan: Completion target April 14, 2015

Recommendation 2: Include in future VHC system development contracts clauses that provide monetary consequences tied to the contractor's performance (page 11).

Section VII.A.6 of Agency of Administration Bulletin 3.5 addresses Penalties and Retainage. Following standard contracting procedures the project team did consider, and made a substantial effort in negotiations to obtain monetary consequences tied to contractor's performance. The contractor was taking over work-in-progress from another contractor

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Appendix VI
Comments from the Secretary of the Agency of Human Services and Our Evaluation

under troubled conditions and the unknowns made either fixed-price or monetary penalty difficult to achieve at a responsible price. We will continue to work to include those conditions in future contracts wherever appropriate.

Recommendation 3: Document the roles and responsibilities of each of the organizations that provide system and operations support to VHC, including explicitly laying out decision making responsibilities and collaboration requirements (page 16).

Vermont Health Connect is now completing a reorganization designed to provide improved customer service. As part of this we are updating all documentation of roles and responsibilities, and these will fulfill the recommendations laid out in the audit report. This will include updating as needed the various project charters and memoranda of understanding that govern the participation of the multiple organizations involved.

Recommendation 4: Include expected service levels in future VHC system development and premium payment processor contracts and establish mechanisms to track contractor performance against the performance levels in these agreement (page 18)

See comment 2 on page 59

Specific service levels are not generally applicable in a development contract, where monitoring of deliverables is the critical activity, but are an important component of all Hosting and Maintenance-and-Operations contracts.
The new contract awaiting acceptance by the premium processing service provider does incorporate specific service level agreements; and stipulates the performance monitoring reports to be provided.

Recommendation 5: Establish a process and expeditiously perform reconciliations of enrollment data between the VHC, Benaissance, and the carriers' systems (page 28).

We have begun a reconciliation process with the carriers using an interim solution supported by our contractors. We will complete all reconciliations necessary for a successful deployment of the next release by the end of May. The system capability to support enrollment and financial reconciliation between the VHC, Benaissance, and carrier systems is included in the scope of the May 30th release. This release will provide the reporting mechanisms needed to identify discrepancies across all of the systems and perform monthly reconciliations.

Recommendation 6: Establish a process and expeditiously perform reconciliations of enrollment data between the VHC system and the relevant Medicaid system(s) (page 29).

The system capability to support enrollment and financial reconciliation between the VHC, Benaissance, and Medicaid systems is included in the scope of the May 30th release. This release will provide the reporting mechanisms needed to identify discrepancies across all systems and allow monthly reconciliations going forward. Once this occurs we will use the process we are developing to reconcile data to ensure that all of the individuals who are eligible for and enrolled in Medicaid are correctly recorded in each system to ensure that claims are only paid for services allowed under the enrollee's specific Medicaid program.

Recommendation 7: Reconsider decisions that have complicated the premium payment processing function, including the requirement that the full premium payment be at Benaissance without exception before remittance to the carriers and the split of the billing and dunning/termination processes between different organizations (pages 36-38).

While the cause of the most challenging billing issues today will be addressed with the May 30th release, we agree that many of the underlying policies create unnecessary difficulty for customers. For example, the 100% premium paid before remittance requirement does not reflect common industry practice that accepts a small shortfall as a complete payment and bills the balance with the following month's premium. A full reconsideration of the premium payment processing function is a critical next step, with participation of the premium processor, all carriers, and Medicaid. This is planned to occur when the 2014 reconciliation is complete so that we are in a position to review the decisions with the benefit of information from the reconciliation.

Appendix VI
Comments from the Secretary of the Agency of Human Services and Our Evaluation

Recommendation 8: Establish a process to terminate Dr. Dynasaur recipients in the VHC system who meets the State's termination criteria (page 39).

This recommendation relates to Dr. Dynasaur recipients who are delinquent in their premium payments. The state intends to initiate a rulemaking process to revise a DCF promulgated Medicaid eligibility rule (HBEE section 64.00 Premium Rules and 70.02 Premium Obligation) to implement necessary changes relating to termination for non-payment. Rule changes would allow for a 60-day grace period, and eliminate the requirement for past due premium payments prior to re-enrolling individuals whose coverage was terminated for non-payment of premiums. The rulemaking process takes approximately six months from start to finish. Rulemaking is anticipated to begin in May of 2015 with scheduled completion by the end of calendar year 2015.

Effective January 2014, the state started to transition enrollment and re-enrollment for MAGI Medicaid determinations into VHC. New enrollments are currently being processed in VHC, however, due to resource and system constraints, and with the approval of CMS, annual renewal of Medicaid beneficiaries has been delayed in VHC and for those still in the Legacy system, including some Dr. Dynasaur recipients. Vermont will be in compliance with standard Medicaid rules regarding non-payment of premiums once all Dr. Dynasaur enrolled children are transitioned into VHC.

The state is actively working with CMS on a migration plan to restart Medicaid renewals. The final timeline depends upon CMS approval of the plan. Programming for system functionality in VHC to terminate coverage for non-payment of premiums following a 60-day grace period is scheduled for September 2015 and implementation will be consistent with the revised rule.

Recommendation 9: Expeditiously develop VHC financial reports to implement stronger financial controls (pages 38-40).

The DVHA business office has worked with the contractors to get the necessary reports by the end of April 2015 in order to complete the interrelated reviews and reconciliations identified in recommendations 9, 10, and 11.

The system capability to support enrollment and financial reconciliation between the VHC, Benaissance, and the carriers' systems is included in the scope of the May 30th release. This release will provide the reporting mechanisms needed to identify discrepancies across the three systems.

Recommendation 10: Obtain and review reports from Benaissance that provide detail on the makeup of the balance in the VHC bank account and monitor this account to ensure that payments are being remitted appropriately and in a timely manner (page 40).

The DVHA business office has worked with the contractors to get the necessary reports by the end of April 2015 in order to complete the interrelated reviews and reconciliations identified in recommendations 9, 10, and 11.

The system capability to support enrollment and financial reconciliation between the VHC, Benaissance, and the carriers' systems is included in the scope of the May 30th release. This release will provide the reporting mechanisms needed to identify discrepancies across the three systems.

Recommendation 11: Establish a process and expeditiously perform reconciliations of payment data among the VHC, Benaissance, and the carriers' systems (page 40).

The DVHA business office has worked with the contractors to get the necessary reports by the end of April 2015 in order to complete the interrelated reviews and reconciliations identified in recommendations 9, 10, and 11.

The system capability to support enrollment and financial reconciliation between the VHC, Benaissance, and the carriers' systems is included in the scope of the May 30th release. This release will provide the reporting mechanisms needed to identify discrepancies across the three systems.

Appendix VI
Comments from the Secretary of the Agency of Human Services and Our Evaluation

See comment 3 on page 59

Recommendation 12: **Obtain from the U.S. Department of Health and Human Services the latest date when the State would need to request to migrate to the Federal exchange in order to perform this transition in time for the 2017 plan year and provide this information to the Legislature (41-42)**

The Chief of Health Care Reform had engaged senior management at CMS in discussions about whether or not a move to the FSSBM could be considered prior to release of the Administration's contingency plan. CMS has advised that VHC would need to inform CMS of the State's intention to move to a Federally Supported State Based Market Place by December 2015, to transition for open enrollment for the 2017 plan year.

Hal Cohen
Secretary
Agency of Human Services - State of VT

Appendix VI
Comments from the Secretary of the Agency of Human Services and Our Evaluation

The following presents our evaluation of comments made by the Secretary of the Agency of Human Services.

Comment 1	Our draft report stated that the baseline integrated master schedule, scope statement, requirements traceability matrix, and test plan were not yet completed. We confirmed that on April 3, 2015, VHC approved a baseline integrated master schedule. However, this schedule had errors for some of the tasks pertaining to milestones and percentage of the tasks that were completed. As of April 10, 2015, the VHC program manager was in the process of reviewing this schedule and identifying and correcting these errors. It is expected that the VHC change control board will approve these corrections to the baseline schedule by April 16, 2015. Because of these errors, we did not perform a detailed review of the baseline schedule. Nevertheless, since the schedule was completed, we removed this document from the list in recommendation 1. We also checked whether the scope statement, requirements traceability matrix, and test plan were completed. As of April 10, 2015, these documents were still in process. We updated the report, but did not change the recommendation since the documents had not been finalized.
Comment 2	In a document submitted to CMS, the State itself stated that it planned to include performance metrics in its contracts with vendors and monitor performance. Among the metrics that the State recommended were (1) schedule variance, (2) quality of product, and (3) staffing metrics. However, AHS may have misconstrued our use of the term "service level" with respect to the development contract. Accordingly, we have clarified our recommendation to state that the contracts should include service levels or performance metrics.
Comment 3	Because of the State's assertion that CMS has been consulted about when they would need to be notified if the State decides to move to the Federal exchange, we have removed the recommendation pertaining to obtaining such information.

Appendix VII
Comments from the Commissioner of the Department of Information and Innovation and Our Evaluation

VERMONT

State of Vermont
Department of Information & Innovation
133 State Street, 5th Floor
Montpelier, VT 05633-0210

Agency of Administration

[phone] 802-828-4141

MEMORANDUM

FROM: Richard Boes, CIO & Commissioner E-SIGNED by Richard Boes on 2015-04-13 17:38:10 GMT
DATE: April 13, 2015
TO: Douglas R. Hoffer, Vermont State Auditor
SUBJECT: DII's Comments on Draft Report: *Vermont Health Connect: Future Improvement Contingent on Successful System Development Project.*

In response to your letter, regarding the draft report entitled *Vermont Health Connect: Future Improvement Contingent on Successful System Development Project*, I am submitting the following comments:

Section Reference	Comment
Security section of the report.	The security section of the report is accurate and can be cleared for release. Our comments should reflect: Pen-testing will be conducted under an existing DII contract with the Center for Internet Security.
Page 6, second paragraph, last sentence: In addition, the amount reported as expended by the State does not include an estimated $3.2 million in payments that had not been processed by AHS but were made by the Department of Information and Innovation during 2014 for work related to the VHC system.	These payments are for EA Staff Aug and I believe PM Staff Aug. There was also an 800k oracle business process work that came through us at the request of AHS.
Pg. 21, third paragraph, last sentence: Among the services to be provided under this contract are (1) security policy development and implementation; (2) 24/7 incident analysis, handling, and alerting; and (3) secure code analysis using a software tool.	Should reflect that NuHarbor Security is also responsible for vulnerability assessment.

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Comments from the Commissioner of the Department of Information and Innovation and Our Evaluation

See comment 1 on page 62

In addition to the above, we believe it is important to call out that the technical architecture of all of this is not mentioned within this report, whereas in numerous other reports it has always been noted as solid.

If you have any questions regarding any of the above comments please do not hesitate to contact me by phone at (802) 828-4141, or via email at Richard.Boes@state.vt.us.

Thank you.

Appendix VII
Comments from the Commissioner of the Department of Information and Innovation and Our Evaluation

The following presents our evaluation of comments made by the Commissioner of the Department of Information and Innovation.

Comment 1	Page 8 of the report includes a summary of the results of an August 2014 assessment of the VHC architecture.