

1. Parties. This is a contract for services between the State of Vermont, Department of Vermont Health Access (DVHA) (hereinafter called "State"), and Capitol Health Associates, LLC, with a principal place of business in Washington, DC, (hereinafter called "Contractor"). Contractor's form of business organization is a limited liability company. Contractor's address is 400 N. Capitol St. NW, Suite 585, Washington, DC 20001. It is Contractor's responsibility to contact the Vermont Department of Taxes to determine if, by law, Contractor is required to have a Vermont Department of Taxes Business Account Number.

2. Subject Matter. The subject matter of this contract is services generally on the subject of providing technical support and program management services for maintenance and operations of State's Vermont Clinical Registry (VCR), and to provide project management and consulting services for Data Quality initiatives related to clinical healthcare data inputs for the VCR. Detailed services to be provided by Contractor are described in Attachment A.

3. Maximum Amount. In consideration of the services to be performed by Contractor, State agrees to pay Contractor, in accordance with the payment provisions specified in Attachment B, a sum not to exceed \$2,114,518.66.

4. Contract Term. The period of Contractor's performance shall begin on January 1, 2018, and end on December 31, 2019. State and Contractor have the option of extending this contract for two (2) additional one-year terms, subject to the agreement of both parties.

5. Prior Approvals. This contract shall not be binding unless and until all requisite prior approvals have been obtained in accordance with current State law, bulletins, and interpretations.

6. Amendment. No changes, modifications, or amendments in the terms and conditions of this contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of State and Contractor.

7. Termination for Convenience. This contract may be terminated by State at any time by giving written notice at least thirty (30) days in advance. In such event, Contractor shall be paid under the terms of this contract for all services provided to and accepted by State prior to the effective date of termination.

8. Notices to the Parties Under this Agreement. To the extent notices are made under this contract, the parties agree that such notices shall only be effective if sent to the following persons as representative of the parties:

	STATE REPRESENTATIVE	CONTRACTOR
Name	DVHA Legal Counsel	Hans Kastensmith, Managing Partner
Address	Dept. of Vermont Health Access 280 State Dr., NOB 1 South Waterbury, VT 05671-1010	Capitol Health Associates, LLC P.O. Box 425 Oakton, VA 22124
Email	AHS.DVHALegal@vermont.gov	hck@capitolhealthdc.com

The parties agree that notices may be sent by electronic mail except for the following notices which must be sent by United States Postal Service certified mail: termination of contract, contract actions, damage claims, breach notifications, alteration of this paragraph.

9. Attachments. This contract consists of 97 pages including the following attachments which are incorporated herein:

- Attachment A - Specifications of Work to be Performed
- Attachment B - Payment Provisions
- Attachment C - Standard State Provisions for Contracts and Grants
- Attachment D - Information Technology System Implementation Terms and Conditions And Other Conditions
- Attachment E - Business Associate Agreement
- Attachment F - Agency of Human Services' Customary Contract
- Appendix I: Required Forms
- Appendix II: Performance Requirements and Service Level Requirements
- Appendix III: Technology Infrastructure Summary as Of October 1, 2017

10. Order of Precedence. Any ambiguity, conflict or inconsistency in the contract documents shall be resolved according to the following order of precedence:

- 1) Standard contract (this document)
- 2) Attachment D
- 3) Attachment C
- 4) Attachment A
- 5) Attachment B
- 6) Attachment E
- 7) Attachment F
- 8) Other Attachments

WE THE UNDERSIGNED PARTIES AGREE TO BE BOUND BY THIS CONTRACT

By the State of Vermont:
DEPARTMENT OF VERMONT HEALTH ACCESS

By the Contractor:
CAPITOL HEALTH ASSOCIATES, LLC

e-Signed by Cory Gustafson
on 2018-01-10 13:47:43 GMT January 10, 2018

CORY GUSTAFSON, COMMISSIONER DATE
280 State Drive, NOB 1 South
Waterbury, VT 05671-1010
Phone: 802-241-0239
Email: cory.gustafson@vermont.gov
AHS/DVHA

e-Signed by Hans Kastensmith
on 2018-01-09 15:20:14 GMT January 09, 2018

HANS KASTENSMITH, MANAGING PARTNER DATE
P.O. Box 425
Oakton, VA 22124
Phone: 703-622-6896
Email: hck@capitolhealthdc.com
CAPITOL HEALTH ASSOCIATES, LLC

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**ATTACHMENT A
SPECIFICATIONS OF WORK TO BE PERFORMED**

Background

The Vermont Clinical Registry ("the VCR") is an existing, operational, clinical-data repository which aggregates data from Electronic Health Record ("EHR") systems used by Vermont healthcare providers. The VCR is managed by Vermont's Blueprint for Health program ("Blueprint"), and data from that registry is used for healthcare outcomes analysis and reporting for the purposes of quality improvement, cost reduction, and the calculation of payment incentives for healthcare providers. A Technology Infrastructure Summary for the current system is provided in Appendix III of this RFP.

Contractor will: 1) provide technical support and program management services for hosting maintenance and operations of the VCR, and 2) provide task management and consulting services for data quality initiatives, also known in Vermont as data-quality "Sprints" ("Sprints"), with the goal of improving the scope and quality of clinical healthcare data inputs to the VCR.

Contractor shall maintain and operate processes for the reliable transmission of accurate healthcare information from electronic medical records ("EMRs") and other health information sources, either through the Vermont Information Technology Leaders' ("VITL") Vermont Health Information Exchange ("VHIE") or directly from healthcare provider organizations into the VCR (e.g. via flat files).

Contractor and its approved subcontractors will perform all functions required for hosting, maintenance, and operations of the VCR, including, but not be limited to:

- Securely hosting the VCR system.
- Providing program, project, and vendor management for maintenance and operations of the VCR application.
- Updating, authoring, and maintaining required system documentation and operational plans, as needed, based on State requirements.
- Conducting quarterly vulnerability scans on the VCR to identify any high-risk threats to the system and remediate those risks.
- Maintaining and updating the system security plan, and conducting ongoing application and network security tasks.
- Acquiring and implementing any third-party licenses required to run State's instance of DocSite on behalf of State and installing and testing said software to ensure full compatibility with the DocSite application.
- Maintaining and operating an appropriate interface engine for the system.
- Remediating any critical findings of any independent review pursuant to 3 V.S.A. § 2222.
- Maintaining and operating the DocSite source code and any other pre-existing source code of the VCR.
- Supporting activities involved in onboarding interfaces from new organizations into the VCR, including acquiring Business Associate Agreements ("BAAs") on behalf of State from all user organizations and practices that submit data to the VCR.

- Providing ongoing support of end-users. End-users are defined as individuals who use the web interface of the VCR.
- Providing to State, and/or its State-authorized designees, expanded extracts of all available clinical data from the VCR. Full extracts (or incremental-update equivalents) are to be provided on at least a quarterly basis beginning in the first full calendar quarter following the start date of this contract. The extracts are to enable State to conduct independent analytics on data availability and data quality in the VCR, and use the data for healthcare analytic purposes. Such clinical data extracts constitute the primary and ultimate deliverables of this contract.

The data quality activities, project management, and vendor management of the VCR for maintenance and operations will be performed by Contractor.

Contractor shall subcontract for hosting and security assessments with vendors approved by State's Blueprint Executive Director and/or designated Assistant Director(s). Contractor may elect to engage subcontractors to perform the other services required to maintain and operate the VCR, such as migration, setup, configuration, and testing services of any update components; hosting; security testing; other maintenance and operations; updates and enhancements to the source code; interface engine selection, configuration, and testing; and end-user transition and ongoing support services.

Contractor shall subcontract for dedicated hosting services from a vendor with a secure data center which meets industry standards, and which is approved by State (the system is currently hosted at Rackspace), or for cloud hosting services from a FedRAMP-approved vendor which is approved by State.

Contractor shall subcontract with a vendor approved by State to conduct security assessments of the system, and ongoing vulnerability tests.

Any proposed staffing changes involving Key Personnel, as defined in Appendix II (page 95), or other named resources assigned by Contractor or a subcontractor must be submitted in writing to State and are subject to review and approval by the Blueprint Executive Director and/or designated Assistant Director(s).

All requests to subcontract are subject to advance written approval of State and must be in accordance with Attachment C, Section 19 of this contract.

Data Quality Project Management

Contractor agrees to complete the following tasks in consultation with State:

Task 1: Blueprint Data Quality Program Management

This task pertains to expert consultation on the overall Health Information Technology ("HIT")/VHIE strategy and operations for State of Vermont and inclusive of major stakeholders and projects as requested by the Blueprint Executive Director. Contractor shall provide recommendations for optimization of system capabilities for data capture to ensure exchange of the maximum number of structured data elements in a quality manner.

Contractor shall provide high-level oversight of and recommendations related to Sprints, in coordination with VITL as necessary. Expertise and input on other related initiatives and projects may be requested at the discretion of the Blueprint Executive Director.

In coordination with State's Blueprint analytics vendor (currently Onpoint Health Data), using reports and analyses generated from the VCR, Contractor shall evaluate the level of quality and completeness of current clinical data capture (via end-to-end transmission from practice EHR to VHIE to clinical registry, or via flat files directly from practice EHR to clinical registry), provide summarized findings, and recommend targeted sites and projects for enhancement and expansion of clinical data collection to the Blueprint Executive Director.

Deliverables Task 1:

1. Involvement in HIT/VHIE strategy and operations meetings as requested by the Blueprint Executive Director, examples of which may include:
 - a. Weekly check-in/status update meeting with Blueprint Executive Director and/or designated Assistant Director(s)
 - b. State/VITL Quarterly Grant Review meetings
 - c. Weekly Blueprint analytics meetings
 - d. Analytic and Evaluation Workgroup meetings
2. Leadership of Sprint management team. The Sprint management team will oversee the prioritization and coordination of statewide data quality, connectivity, and data optimization efforts.
3. Summarized findings of data frequency and quality from analytics reports, including recommended plans for optimization strategies
4. Contractor shall develop and submit written monthly progress reports that include the following information:
 - a. Total hours by staff member and contractual task.
 - b. Bulleted summary descriptions of activities, work completed, meetings attended, and current project status.
5. Contractor shall provide detailed verbal project status reports from relevant project staff as requested by, and directly to, the Blueprint Executive Director. Such verbal reports are to include opportunities for extensive discussion and provision of answers in response to questions from the Blueprint Executive Director.
6. As specifically requested, and only when specifically requested by the Blueprint Executive Director, Contractor shall develop and submit program reports for specified time periods that include the following information:
 - a. Programs/initiatives on which consultation services were provided
 - b. New projects/initiatives on which consultation services were requested by the Blueprint Executive Director within the specified time period
 - c. Actual hours spent on each program/initiative included in the report
 - d. High-level summaries of advisory expertise given on these programs/initiatives
 - e. Dates and times of meetings attended
 - f. Anticipated next steps based on direction given

Task 2: Project Management of Statewide Blueprint Data Quality Initiatives

Contractor shall commit the necessary resources and time allotments required to perform work and continue project management of active Sprint projects to completion. Additionally, Contractor shall help identify, using analyses from statewide clinical data

sources, opportunities for data quality optimization and shall initiate and manage these targeted projects to completion.

Contractor shall complete a set of key items to outline the high-level project management tasks for each Sprint project, including targeted data optimization projects for practices/organizations that have already completed an initial Sprint project.

The monitoring system for each Sprint process contains the following components:

1. Blueprint Community Evaluation
2. Initial IT Evaluation
3. Initial Data Mapping Verification
4. Project Plan
5. First Sprint Meeting Defining Tasks and Issues
6. Weekly Progress Meetings on Continuing Work
7. Final Data Continuity and Validation
8. Sprint Completion
9. Ongoing Maintenance

Data optimization projects shall contain components 4 through 9 above.

Performance Measures: For Sprint and data optimization projects, Contractor shall demonstrate progress towards stated goals using a combination of performance measures as follows:

- a. Schedule Performance Measure: Project schedule status shall be tracked by Contractor, updated at least weekly, and reported to the Blueprint Executive Director upon request. Actual progress will be tracked against the project baseline. The actual schedule shall reflect tasks as completed (100% complete), in process (report the percent complete), and not yet started.
- b. Weekly Meetings with Blueprint staff (as requested by the Blueprint Executive Director): Contractor shall meet/call on a regular basis with State's Blueprint staff to review ongoing tasks, discuss issues with tasks, and recommend modifications to ongoing activities. These meetings/calls will ensure that the tasks are meeting State's needs.
- c. Project Status Reporting: Upon request by the Blueprint Executive Director, Contractor shall provide Blueprint Management with detailed status reports on the project. Required status reporting may involve metrics-based and narrative-based information about the progress of the task or particular projects. This information will serve to supplement weekly telephonic meetings on project issues.
- d. Metrics-Based Management: Contractor shall prepare metrics on schedule and deliverable acceptance throughout the project, and submit those to Blueprint management, upon request by the Blueprint Executive Director.
- e. Direct Communication with End Users in Development of Deliverables: Contractor shall communicate with appropriate clinicians throughout the development of deliverables. This communication is intended to ensure greater accuracy and utility of the produced deliverables. Deliverables shall be

considered completed upon a satisfactory review by State.

Deliverables Task 2:

For each project, Contractor shall generate the following deliverables, and provide them to State upon request of the Blueprint Executive Director:

1. Project plan/timeline to be created within 15 days of project start
2. Project Initiation document to be created within 15 days of project start
3. Agendas for and leadership of weekly project team calls
4. Attendance at and (upon request) leadership of Sprint management team calls as scheduled
5. Verbal and/or written updates to Blueprint Executive Director and Assistant Directors as requested by those State staff, including proactive escalation of issues presenting obstacles to project completion and requiring timely attention
6. Documentation of project completion
7. Contractor shall develop and submit written monthly progress reports that include the following information:
 - a. Total hours by staff member and contractual task.
 - b. Bulleted summary descriptions of activities, work completed, meetings attended, and current project status.
8. Contractor shall provide detailed verbal project status reports from relevant project staff as requested by, and directly to, the Blueprint Executive Director. Such verbal reports are to include opportunities for extensive discussion and provision of answers in response to questions from the Blueprint Executive Director.

Task 3: Recruitment and Onboarding Relating to new Blueprint Data Quality Initiatives

Contractor shall coordinate recruitment of health care provider practices for Sprint or targeted data optimization projects, including education and outreach activities on the Sprint process both proactively and upon request.

Contractor shall evaluate health care provider practices ("Practice" or "Practices") for project readiness based on several factors, including commitment of Practices to completing data quality work in a timely manner and technical capabilities of the Practice's EHR system for connectivity to the VHIE network, and prioritize new projects accordingly as slots and required resources become available.

Once a new Practice has been recruited to use the VCR/VITL system, Contractor shall perform all project management activities for it as defined in Task 2.

Contractor shall provide technical expertise to Practices, VHIE partners, and EHR vendors on data mapping, interface connectivity, and data optimization, in addition to direct work with Practices on data quality evaluation and remediation methods.

Deliverables Task 3:

During the recruitment and onboarding process, Contractor shall provide the following deliverables:

1. Outreach to Practices about the Sprint process or targeted data optimization initiative via phone calls or on-site meetings (if required and travel approved through the Blueprint management team)
2. In consultation with the Blueprint Executive Director and/or Assistant Directors, prioritize Practices/organizations for new Sprints as project slots become available (up to 8 concurrent project slots available at a time)
3. Tracking of prioritized projects in the queue awaiting a project slot and communication to relevant project staff of status and level of urgency for connecting new Practices to the VHIE/VCR via appropriate interfaces
4. Provision of technical expertise on connectivity (interface) setup efforts, data quality remediation at the source EHR systems, and/or data optimization strategies to project teams
5. Mentoring and management of other identified Sprint project leaders
6. Support of future recruitment and onboarding activities for the VCR
7. Upon request by the Blueprint Executive Director, status reports related to recruitment and onboarding that includes the following information:
 - a. Names of Practices in the recruitment and onboarding stage for new Sprints or data optimization efforts and outreach performed
 - b. EHR vendors involved
 - c. Identification of resources for the recruitment and onboarding, such as individuals at VHIE vendors upon whom Contractor may depend for project completion
 - d. Obstacles encountered during the recruitment and onboarding process and, if applicable, feasibility of project continuation and estimated date for project slot availability
8. Contractor shall develop and submit written monthly progress reports that include the following information:
 - a. Total hours by staff member and contractual task.
 - b. Bulleted summary descriptions of activities, work completed, meetings attended, and current project status.
9. Contractor shall provide detailed verbal project status reports from relevant project staff as requested by, and directly to, the Blueprint Executive Director. Such verbal reports are to include opportunities for extensive discussion and provision of answers in response to questions from the Blueprint Executive Director.

Task 4: Involvement in Projects Supporting Data Quality Work

Contractor shall perform data quality work related to data mapping out of EHR source systems, ~~establishing interface connections to VHIE systems and evaluating data quality~~ within those systems, flat file transfers, data quality reporting mechanisms, and master patient index ("MPI") functionality and shall use this knowledge and experience to provide input and support to the Blueprint management team on projects related to data quality work, but not specifically part of Sprint or data optimization projects. (Data Quality shall be indicated by the number of usable healthcare measures captured by the VCR from EHR source systems.)

Examples of projects supporting data quality work that shall require Contractor's involvement and expertise include, but are not limited to, the following:

- Project management of new/alternate/pilot methods for data mapping, acquisition, and verification
- Understanding of workflows, data quality requirements, and reporting needs of Blueprint programs, including Support and Services at Home ("SASH"), Tobacco Cessation Counseling ("TCC"), Community Health Teams ("CHTs"), and self-management workshops
- Acquisition and secure transfer of clinical data extract(s) for analysis and merging with claims data by Blueprint analytics vendor
- Assist Blueprint analytics vendor with matching of clinical to claims data, interpretations of data, and mapping of values to measures being generated, such as those for Accountable Care Organizations ("ACOs") and provider networks
- Project management and implementation planning for the VCR maintenance, operations, and user support.
- Participation in strategic planning sessions for future tool selection where technical expertise of Contractor and risk assessment based on past experience is brought to bear.

Deliverables Task 4:

1. As directed by the Blueprint Executive Director or as required for proper support of Sprint project work, Contractor shall participate in and, as appropriate, lead projects related to data quality efforts.
2. Upon request of the Blueprint Executive Director, Contractor shall submit status reports related to these projects that include the following information by project:
 - a. Name of project based on specific work in which Contractor is involved
 - b. Report of work performed, including but not limited to: time spent on the project, meetings attended, stakeholders involved, etc.
 - c. Identification of resources for the project, if needed, such as individuals at VHIE vendors upon whom Contractor may depend for project completion
 - d. The project's current status, including, but not limited to: obstacles encountered, project successes, anticipated timeline, and upcoming project plans.
3. Contractor shall develop and submit written monthly progress reports that include the following information:
 - a. Total hours by staff member and contractual task.
 - b. Bulleted summary descriptions of activities, work completed, meetings attended, and current project status.
4. Contractor shall provide detailed verbal project status reports from relevant project staff as requested by, and directly to, the Blueprint Executive Director. Such verbal reports are to include opportunities for extensive discussion and provision of answers in response to questions from the Blueprint Executive Director.

Vermont Clinical Registry Maintenance and Operations

Contractor shall operate and maintain the VCR in accordance with the Performance Requirements and Service Level Requirements set forth in Appendix II.

Task 5: VCR Program, Project, and Vendor Management

Contractor shall manage the services required to maintain and operate the VCR, such as: migration, setup, configuration, and testing services; hosting; security testing and documentation; other maintenance and operations; updates and enhancements to the source code; interface engine selection, configuration, and testing; and end-user transition and ongoing support services. Contractor will also evaluate, estimate and manage any additional technical enhancements requested by the Blueprint Executive Director.

Contractor shall also manage all subcontractors engaged to perform portions of the scope of work included in this contract.

Description of Services

Contractor shall assign a Contractor Project Manager ("PM") who will:

- a. Be experienced at managing the contracted services on behalf of Contractor's organization and have the information, authority and resources available to properly discharge the responsibilities required hereunder
- b. Serve as the primary contact for State with primary accountability and responsibility for Contractor's performance of its obligations under this Attachment A
- c. Be responsible for the successful delivery of all Contractor tasks and sub-tasks
- d. Have day-to-day responsibility for, and authority to manage, State customer satisfaction
- e. Devote the dedicated time and effort needed to manage and coordinate all work under this Attachment A

Contractor PM shall create and maintain task and sub-task documentation that has been requested by State. A list of documentation and timelines are detailed below

Vendor (Subcontractor) Management

Contractor PM is responsible for the coordination and oversight of subcontractor activities identified in this contract. Contractor PM will collaborate and communicate with the VHIE vendor manager ("VM") assigned, providing copies of status reports, and immediate notification on risks and/or issues related to the subcontractor performance or inability to complete work identified.

Project Management Deliverables

Contractor PM shall be responsible for performing all project management duties, including updating all project-management artifacts that are requested by State to manage the project. Contractor PM shall work in conjunction with a State Program Manager ("SPM") to update the project management deliverables listed in the table below, as directed by the Blueprint Executive Director. Project-related documentation shall be stored in a State-owned SharePoint site, as identified by State, unless otherwise agreed to by State and Contractor.

Deliverable	Description	Delivery Date
Deliverable Appendix II-1A	Interface Design Document	Update within two weeks of written request by the Blueprint Executive Director, or within two weeks of a significant system change.
Deliverable Appendix II-3A	Test Plan	Update within two weeks of written request by the Blueprint Executive Director.
Deliverable Appendix II-4A	Deployment Plan	Update within two weeks of written request by the Blueprint Executive Director.
Deliverable Appendix II-5A	System Incident Reports – M&O	Update within two weeks of written request by the Blueprint Executive Director.
Deliverable Appendix II-5B	Operations and System Administration Procedures Manual	Update within two weeks of written request by the Blueprint Executive Director, or within two weeks of a significant system change.
Roles & Responsibilities RACI Matrix	A chart or list of the project participants' roles and level of responsibility (R-Responsible, A-Accountable, C-Consulted, I-Informed) (RACI).	Update within two weeks of written request by the Blueprint Executive Director, or within two weeks of a relevant change.
Communication Management Plan	Describes the types, modes, frequency, recipients, location of meetings, and archive (i.e. links to communications published) for project communications	Update within two weeks of written request by the Blueprint Executive Director.
Engagement Status Reports	Provides SPM with a weekly report on the project, health, accomplishments, upcoming tasks, risks and significant issues.	Weekly.
Engagement Schedule	An ongoing schedule to be updated and sent to the SPM, for anticipating and tracking changes to project tasks, deliverables and milestones.	Bi-weekly.
Milestones	Finalized list of milestones of deliverables.	Update within two weeks of written request by the Blueprint Executive Director.
Engagement Management Plan	In collaboration with the SPM and at the direction of the Blueprint Executive Director, develop a plan for the approach to managing the tasks, including sub -tasks, that	Update within two weeks of written request by the Blueprint Executive Director, or within two weeks of a significant change.

Deliverable	Description	Delivery Date
	include the standup of the VCR system and the planned modifications including the messaging engine deployment and extract development.	
Meeting Agenda/ Minutes	All scheduled meetings will have an agenda provided prior to the meeting, and minutes of meeting highlights, decisions made, and action items assigned published within 3 business days after the meeting.	As needed, and as directed by the Blueprint Executive Director.
Risk Log	Tracks the project risks (current and past). Responsible for reporting new risks identified to SPM (and VM when applicable). This includes such information as likelihood, impact, and mitigation strategy.	Update as needed, and within two weeks of written request by the Blueprint Executive Director.
Issue/Action Items/Decisions Log	A log of open and resolved/completed action items, issues and decisions. Responsible for reporting new issues/action items/decisions to SPM (and VM when applicable).	Update as needed, and within two weeks of written request by the Blueprint Executive Director.
Formal Acceptance	Contractor PM obtains sign-off from the Blueprint Executive Director for each completed deliverable or set of deliverables signifying acceptance.	As needed for invoice payments.

1. This task pertains to expert consultation on the overall VCR strategy and operations for the State of Vermont. Direct oversight of all program staff, subcontractors, program goals and objectives. Direct all tasks as requested by the Blueprint Executive Director. In particular, Contractor shall provide recommendations for optimization of system capabilities to ensure the VCR meets or exceeds all programmatic goals.
2. Contractor PM shall provide high-level oversight of and recommendations related to VCR operations, maintenance and development in coordination with Contractor and subcontractor project leader(s).
3. Cooperation with any independent review required by the State of Vermont.
4. Deliverable Appendix II-4C – System Source Code and Documentation.
5. Contractor shall, in consultation with the VHIE Health Insurance Portability and Accountability Act (“HIPAA”) expert and attorney, draft new BAAs between State and

manual entry user organizations and practices. Contractor shall communicate with all manual entry user organizations and practices that have historically submitted data to the VCR, explain the need for the new BAAs and the altered terms, and collect signed BAAs from these organizations. Contractor shall identify a secure electronic storage location acceptable to State for the executed BAAs and file all BAAs in this location.

6. Contractor shall be fully responsible for the management, compensation, and performance of all Contractor personnel, and the filing of any and all returns and reports and the withholding and/or payment of all applicable federal, State, and local wage tax, or employment-related taxes, including, but not limited to, income taxes, gross receipt taxes, taxes measured by income, social security taxes, and unemployment taxes for Contractor and Contractor's employees. Notwithstanding the foregoing, Contractor's employees shall adhere to State's policies and procedures, of which Contractor is made aware while on State premises, and shall behave and perform in a professional manner. State's right to request replacement of Contractor personnel hereunder relates solely to the removal of individuals from work on this contract with State and does not create an employment relationship. Nothing in this contract authorizes State to direct Contractor's termination of the employment of any individual.

In consultation with State, identify risks and issues related to VCR maintenance and operations, and facilitate agreement on mutual decision points in a timely manner.

Task 6A: Hosting Management Services and General Operational Support for the VCR

Contractor shall provide the hardware, software, and personnel resources required to maintain and operate the VCR, including hosting management. Contractor, directly or through its subcontractor, shall maintain the VCR software in both a test and a production environment set up by the hosting vendor. Contractor shall make best efforts to give State not less than one hundred twenty (120) days advance written notice of any change to Contractor's agreement with the hosting vendor and/or change to where the VCR system is being hosted. State may terminate this contract if it determines, in its sole discretion that such change is not in the best interests of State.

Contractor shall ensure any third-party hosting environment on which the VCR system is hosted shall meet the requirements of this contract, and the hosting must remain entirely within the continental United States of America. State shall have no direct contractual relationship with the hosting vendor and no obligation to manage Contractor's relationship with a hosting vendor. Requirements herein for State access to the hosting platform shall be for compliance monitoring purposes only and shall in no way relieve Contractor of its obligations with respect to managing the agreement with the hosting vendor or in meeting the requirements of this contract.

Contractor shall maintain fully functional versions of State's test and production environments for the VCR, including older versions of Microsoft hot fixes, if necessary.

Contractor shall also maintain and/or obtain the necessary third-party software licensing required for running the VCR on behalf of State, including, but not limited to, SQL Server Enterprise. Contractor shall allocate appropriate network assets for this purpose, including, but not limited to, firewall, intrusion detection and network use. In the event State is required to

contract directly with third-party software providers in order to utilize the software services, Contractor shall facilitate communications between State and the third-party software providers.

Contractor, directly or through its subcontractor, shall cause the hosting vendor to provide local server administrative privileges and direct remote access to all components of the test and production environments prepared for the VCR to itself or its subcontractor upon request.

Contractor, through its subcontractor, shall provide access as specified by Contractor to the VCR test and production environments for the purposes of maintaining and operating installations of the VCR on the test and production servers.

State's perpetual license of the DocSite software and source code is variably referred to in this contract and known by State as the VCR software or VCR application.

Contractor, in consultation with State, shall ensure that its instances of the VCR software in the test and production environments are maintained in a manner that meets the following success criteria (referred to herein as the "Success Criteria"):

1. Manual entry users can successfully log in to the system, navigate the system, enter data, and add a new patient according to their workflows in State's production instance of the VCR. Manual entry users may include:
 - a. SASH program users
 - b. CHTs program users
 - c. TCC program users
 - d. Self-Management Support Programs ("SMSPs") users
2. All data can be successfully extracted from the database.

Development, testing, and support of specific system functions for manual-entry users (e.g., SASH, CHTs, and SMSPs) may be waived or modified per written direction of the Blueprint Executive Director, in response to changing program needs.

Deliverables Task 6A:

For the hosting management of the VCR, Contractor shall:

1. Provide technical expertise and consultation on how best to maintain and operate the VCR in the hosting environment
2. Maintain a successful application setup in the hosting vendor's environment.
3. Provide services required to maintain test and production environments for the VCR, within three (3) business days of hardware availability within the hosting vendor.
4. Acquire, install, and/or maintain on behalf of State specified third-party licenses required to run the DocSite system. Required third-party licenses may include:
 - a. SQL Server Enterprise – 14 licenses
 - b. Telerik – 1 license
 - c. Active Reports Professional – 1 license
 - d. MediSpan – 1 license
 - e. Nevron Chart for .NET – 1 license
 - f. EVO PDF – 1 license

5. If direct State licensing is required, Contractor shall facilitate communications between State and the third-party software provider.
6. Provide necessary access to the VCR hosting environment to Contractor and/or its subcontractor, to ensure the successful operation of the test and production servers.
7. Provide local server administrative privileges and direct remote access to the VCR environment to itself and/or its subcontractor, as soon as the environments are available from the hosting vendor.
8. Successfully maintain the build of an operational instance of the VCR software, including a load of State's historical data, on the test servers, as needed for testing purposes.
9. Perform hosting environment troubleshooting and testing as needed to maintain a successful build and validation of an operational instance of the VCR software on the test servers.

Task 6B: Message Processing: Rhapsody Interface Maintenance and Operations

Contractor shall maintain, operate, and support the system interface to VITL's Rhapsody interface engine for the VCR.

Contractor shall ensure successful operation of all software components, including any third-party software components, required to maintain a successful interface to the Rhapsody interface engine.

Contractor shall work with VITL to ensure proper software configuration of the Rhapsody interface engine and investigate how messages from existing Practices' EHR interfaces, including those flowing into the VHIE and those captured via flat files, will be processed by the Rhapsody interface engine or any other conversion process.

Testing and troubleshooting of data feeds into the VCR shall include verification of the organization hierarchy within the registry, processing of messages, and message validation at the field level.

Deliverables Task 6B:

For maintenance and operations of the interface with Rhapsody, Contractor shall:

1. In consultation with State, identify and ensure successful operation of all software components, including any third-party software components, required to maintain and operate the VCR interface to the Rhapsody interface engine or any other conversion process.
2. Using previously delivered documentation from the original DocSite developer, maintain documentation on how messages from existing Practice EHR interfaces, including those flowing into the VHIE and those captured via flat files, are processed by the Rhapsody interface engine or any other conversion process. Verify that data passed through Rhapsody files or any other conversion process correctly flow into the discrete database fields of State's instances of the VCR software.
3. Support interface testing in a test instance of the VCR to ensure successful filing of messages, including verification of the organization hierarchy within the registry, processing of messages, and message validation at the field level.

Task 6C: Reporting Functions: Reports Maintenance and Operations

Contractor shall monitor and ensure successful operation of all software components, including any third-party software components, required to maintain the reporting objects ("RO") jobs of the VCR.

Contractor shall ensure proper software configuration of the VCR RO jobs for generating reports.

As directed in writing by the Blueprint Executive Director, Contractor shall also recruit representatives from each user group for testing of program-specific reporting functionality, including but not limited to, SASH, CHT staff, SMSPs, TCC, and staff from Practices who use the system for reporting activities.

Based on input received, Contractor shall develop reporting test plans for each manual entry user group, coordinate testing with representatives from each program, including the creation and delivery of new user credentials for this purpose, and track testing results, and route issues to relevant parties for resolution. Contractor shall also perform testing of reports as needed, especially where Contractor expertise can be applied.

Development, testing, and support of specific system functions for manual-entry users (e.g., SASH, CHTs, and SMSPs) may be waived or modified per written direction of the Blueprint Executive Director, in response to changing program needs.

Deliverables Task 6C:

For the maintenance and operation of reporting functions, Contractor shall:

1. Maintain and operate all software components, including any third-party software components, required to operate the RO jobs of the VCR.
2. Properly maintain all software required to verify the accuracy of reporting services.
3. Take the lead role in coordinating reporting services testing (validation) of the reporting functions of the VCR software, as requested by the Blueprint Executive Director.
4. Perform reports testing as needed, and based on expertise during prior testing.

Task 7: Ongoing Security Assessments, Vulnerability Scans, and Remediation

Contractor shall conduct ongoing application and network vulnerability scans on State's instance of the VCR software in the production environment using a well-developed matrix of existing threats, vulnerabilities, and real-world recommendations to identify any potential security weaknesses. Such tests will be conducted quarterly beginning in the first full calendar quarter following the start date of this contract.

The ongoing application and network vulnerability scans should assess the following elements of network information security:

- User authentication protocols and policy
- Firewall configuration, updating, and use
- Server configuration, updating, and use

- Operating system and service vulnerabilities
- Network architecture vulnerabilities
- Network reconnaissance efficacy
- Sensitive data protection
- Intrusion detection and response

Upon completion of the testing, Contractor will contact the Agency of Human Services (“AHS”) Security Director via email to provide notification of availability of results. As applicable, notification will be provided to State within 30 days of the vulnerability scans being conducted. The vulnerability reports shall contain details on:

- Findings regarding network security posture as assessed by the security subcontractor on the basis of the conducted scans
- Network reconnaissance results
- List of cyber-security standard or best-practice documentation associated with any recommended security control
- List of existing vulnerabilities associated with VCR network elements and services
- Vulnerable VCR data and systems
- Any potential penetration vectors
- Outlined and prioritized actionable recommendations for mitigating current information security risks to the VCR
- Artifacts and evidence by which Contractor came to its conclusions

Contractor and AHS Security Director will then agree upon a secure delivery mode for the report and discuss the outcomes and recommendations of each scan together.

Contractor will remediate any deficiencies or threats known, discovered, or reported, and create controls for associated policies and procedures. Contractor will make available the results of the application audits, vulnerability assessments, and the completed remediation or mitigation steps to State.

Contractor shall update and/or develop all security documentation as required by State including but not limited to application security plan, control assessments, risk assessment, and disaster recovery plan.

Deliverables Task 7:

During the ongoing security assessments and vulnerability scans of the VCR, Contractor shall:

1. Conduct application and network vulnerability scans of the VCR, including threat modeling, review, and reconnaissance. Contractor will also provide an updated copy of the VCR source code to the Vermont Agency of Digital Services (“ADS”) upon ADS's request. (ADS has already received a copy of the DocSite source code as of January 2016.)
2. Conduct quarterly vulnerability scans of the VCR in Production.
3. Produce a detailed final report from vulnerability scans and provide email notification to AHS Security Director of the findings of the report within 30 days of conducting the scan.
4. Work with AHS Security Director to identify a method to review the findings of the report and to discuss the outcomes and recommendations of the scan.

5. Remediate any known deficiencies or threats identified in the report and make available the remediation or mitigation steps taken to State.
6. Update and or develop application security plan, control assessments, risk assessment, and disaster recovery plan, and vulnerability assessment test report.

Task 8: Ongoing Hosting of VCR

Contractor will provide, via a qualified subcontractor, hosting support for the following applications:

- State's operational instance of the DocSite software (loaded by Covisint for validation testing).
- The test environment of the VCR.
- The production environment of the VCR.

Contractor shall host the VCR within the continental United States of America using a qualified subcontractor (the system is currently hosted at Rackspace) to provide the hosting environment. At no time shall the system or data be accessed by personnel or systems outside the continental United States.

The hosting environment will be available for use at all times with the exception of planned service and maintenance, which must occur outside of normal business hours. For this service, State defines normal business hours as 8 a.m. through 10 p.m. EST, Monday through Friday. Contractor will notify State in advance of any planned outages that are scheduled within these times.

Contractor will maintain 99.0% yearly uptime for the production environment within normal business hours for the application (8 a.m. through 10 p.m. EST). If at any time during the contract period the production hosting environment experiences downtime within normal business hours which exceed the 1.0% threshold, State will be reimbursed according to Contractor's agreement with the subcontracted hosting vendor.

Contractor shall deliver assistance required by State in the event of a disaster.

In the event of technical failure in the hosting environment, such as a server going down, service shall be restored within 24 hours. In the event of a catastrophic event, Contractor shall make every effort to restore service within 72 hours, assuming it is possible to do so. (For example, an extended East Coast power outage might prevent restoration from occurring within this timeframe.)

Contractor working with its subcontractor, will review patches and updates provided by the ~~manufacturers of the software systems on the server used to fulfill the obligations of this~~ contract to identify and implement patches and updates that should be applied to the server. This review will be done weekly at a minimum. Critical security patches and updates will be applied according to software manufacturers' recommendations.

Deliverables Task 8:

1. Contractor shall host the test and production environments of the VCR through a third-party hosting provider.
2. Contractor shall use best efforts to provide 120-day advanced written notice to State of any changes to the hosting provider or location.
3. Contractor shall provide copies of the latest VCR security plans, risk assessments, operational guides, disaster recovery plans, policies and procedures pertaining to system operation and maintenance, due within 30 calendar days of request by State.
4. Contractor will maintain 99.0% yearly uptime for the production environment within normal business hours for the application (8 a.m. through 10 p.m. EST) once the system has been deployed into the production environment.
5. Contractor shall review patches and updates provided by the manufacturers of the third-party software in the test and production environments. This review will be done weekly at a minimum. Critical security patches and updates will always be immediately applied.

In addition to the subtasks listed above and any other obligations of Contractor under this Task 8, Contractor agrees to the following:

Data

1. Data and derived data products (including aggregated, “de-identified”, or “randomized” data) manipulated, or directly purchased as part of this contract shall become the exclusive property of State. State is considered the custodian of the data and shall determine the use, access, distribution, and other conditions based on appropriate State statutes and regulations.
2. Licensed and/or copyrighted data shall be governed by the terms and conditions identified in the terms of agreement or the license.
3. Contractor shall ensure that in the event of a major incident, the VCR may lose no more than the last 24 hours of production data. (Recovery Point Objective).

Encryption

Contractor will address encryption requirements as follows:

1. All personally identifiable information (PII) and protected health information (PHI) data must be encrypted and must not impact system functionality, to include data at rest and data in motion, particularly when State is not in physical control of the data.
2. Additional system data, as determined by the data owner, may be encrypted.
3. Data encryption methods may encompass cell-level, table-level, database-level, or file-level encryption, as long as objectives 1 and 2 are met. Additionally, all applications forming part of the VCR system, Application Programming Interfaces (“API”), and services must be able to consume the data successfully using the selected method of encryption.
4. Encryption must use cryptographic key hierarchy conventions or its equivalent.
5. For encryption level, no encryption and simple encryption are unacceptable. Advanced Encryption Standard (AES) with keys of at least 128-bit blocks shall be used whenever it is feasible to do so, consistent with the Federal Information Processing Standard (FIPS) for encryption.

Backups

1. Contractor will provide the ability to perform archival (full backup)/incremental (changed or new since last backup) backups and the ability to perform open/closed database backups.
2. Contractor shall execute full weekly backups and daily differential backups must be taken.
3. Database backup files must not be stored on the same subsystem as the primary database files. Separate storage is necessary.
4. A virtual machine snapshot will be taken periodically and following any major change to the production environment.

Required Project Policies, Guidelines and Methodologies

Contractor shall maintain and will provide State with the subcontractor's current security plan which will include results of the most recent risk assessments, the incident/response plan, and the Plan of Action and Milestone ("POAM") report. Contractor will implement a plan for compliance with relevant National Institute of Standards and Technology (NIST) guidelines and 45 CFR 95.621. Contractor and its subcontractors will be required to comply with all applicable laws, regulations, policies, standards, and guidelines affecting information technology projects, which may be created or changed periodically. It is the responsibility of Contractor and its subcontractors to ensure adherence to and to remain abreast of new or revised laws, regulations, policies, standards, and guidelines applicable to Contractor's obligations under this contract. Agency-specific confidentiality and privacy policies, such as HIPAA, may apply.

Hosted System Requirements

In addition to the audit provisions set forth in Attachment C and Attachment D, State will have the right to review Contractor's information security program from time to time during the term of this contract. During the performance of the services, on an ongoing basis from time to time and without notice, State, at its own expense, will be entitled to perform, or to have performed, an on-site audit of Contractor's information security program. In lieu of an on-site audit, upon request by State, Contractor agrees to complete, within forty-five (45) days of receipt, an audit questionnaire provided by State regarding Contractor's information security program.

Contractor will implement any reasonably required safeguards as identified by State or information security program audits based on industry standards for such safeguards.

If State determines it is needed, Contractor will sign a confidentiality agreement.

State reserves the right to periodically audit Contractor application infrastructure to ensure physical and network infrastructure meets the configuration and security standards and is in adherence to relevant State policies governing the system. Non-intrusive network audits (basic port scans, etc.) may be done randomly, without prior notice. More intrusive network and physical audits may be conducted on or off site with 24 hours' notice as coordinated with Contractor and as long as there is no impact on Contractor's other customers in the multi-tenant environment.

Security events will be reported to State. Security-related events include, but are not limited to:

- Evidence of unauthorized access to privileged accounts

- Evidence of unauthorized access to data

All security-related events on critical or sensitive systems must be logged and audit trails saved for one year.

Contractor will have a third party perform methodology-based (such as Open Source Security Testing Methodology (“OSSTM”)) vulnerability assessments quarterly beginning in the first full calendar quarter following the start date of this contract and provide results of that testing to State within 15 business days along with a remediation plan to address the issues.

Hosted systems will issue passwords using one of the following methods:

1. Require administration to give password over the phone after identifying the individual.
2. Set a temporary password and have each user change it after.

Contractor shall adhere to the principle of “Fail Safe” to ensure that, and meaning that, a system in a failed state does not reveal any sensitive information or leave any access controls open for attacks.

Vermont Clinical Registry Ongoing Technical Support

Performance requirements and Service Level Requirements (SLR) for technical support activities to be performed by Contractor are provided in Appendix II.

Task 9: Technical Support of VCR

On behalf of State, Contractor, directly and/or through its subcontractor, shall administer, update, optimize, maintain, and support the VCR database and application source code.

Contractor shall provide expert-level technical guidance and support for the VCR, including:

- Maintenance and enhancement of source code, including database optimization
- Onboarding of interfaces or flat files for new organizations
- Interface engine consultation and integration

Development, testing, and support of specific system functions for manual-entry users (e.g., SASH, CHTs, and SMSP may be waived or modified per written direction of the Blueprint Executive Director, in response to changing program needs.

Deliverables Task 9:

Contractor shall:

1. Implement enhancements to the source code or data dictionary for the VCR based on end-user requests and requirements and as directed and approved by the Blueprint Executive Director and/or designated Assistant Director(s) in writing.
2. Deliverable Appendix II-2 – System Maintenance and Support.
3. Deliverable Appendix II-5B – Operations and System Administration Procedures Manual.
4. In support of Onboarding Sprints (Task 3), perform technical tasks related to onboarding data from new organizations into the VCR, including:
 - a. Set up of new organization hierarchy
 - b. Processing of messages
 - c. Message validation at the field level

5. Upon request by the Blueprint Executive Director, submit status reports related to Task 9, including:
 - a. Enhancement requests, grouped by pending approval, approved, and denied;
 - b. Deployments, including minor defect fixes through major upgrades for new functionality or reporting;
 - c. Onboarding Sprint work performed, including status of each site, sites set up and brought live, and those in the pipeline with estimated completion dates and dependencies; and,
 - d. Time spent on each project, including meetings attended, etc.
6. Create and maintain VCR system documentation as outlined in Appendix II.
7. Deliverable Appendix II-1A–Interface Design Document
8. Contractor shall develop and submit written monthly progress reports that include the following information:
 - a. Total hours by reporting entity and contractual task.
 - b. Bulleted summary descriptions of activities, work completed, meetings attended, and current project status.
9. Contractor shall provide detailed verbal project status reports from relevant project staff as requested by, and directly to, the Blueprint Executive Director. Such verbal reports are to include opportunities for extensive discussion and provision of answers in response to questions from the Blueprint Executive Director.

Vermont Clinical Registry End-User Training and Support

Performance Requirements and Service Level Requirements for Help Desk Support to be performed by Contractor are provided in Appendix II.

Task 10: Vermont Clinical Registry User Support

Contractor shall provide support via an established help desk for VCR users including Tier 1, Tier 2, and Tier 3 levels of support for:

- Blueprint practices
- CHT members
- SMSP leaders and coordinators
- TCC

Contractor shall develop and implement an issue tracking system to triage and prioritize user-reported issues. Contractor shall organize the issues into a reporting format for weekly meetings with the VCR management team. Urgent issues (such as “system down”) shall be reported immediately to Tier 2 support and State or its designee(s). Tier 2 support is defined as advanced technical troubleshooting and analysis.

Contractor shall assign a resource to the server at Tier 1 help desk support. Tier 1 support is the initial support level responsible for basic customer issues. The support resource shall perform, at a minimum, the following tasks:

- Provide general support to VCR users via tracking system, email, telephone, and troubleshooting
- Perform new user account setup and assign permissions, as well as communicate credentials and instructions for accessing the system to new users
- Provide support to Blueprint program users, including CHT, TCC, and SMSP personnel, including support for their data entry
- Communicate reported user issues to the VCR management team during weekly meetings, for non-critical issues, and immediately via email for critical issues, such as "system down"

Development, testing, and support of specific system functions for manual-entry users (e.g., SASH, CHTs, and SMSPs) may be waived or modified per written direction of the Blueprint Executive Director, in response to changing program needs.

Deliverables Task 10:

1. Assign at least one support resource to State who shall Tier 1 support to the VCR users during normal business hours (8 a.m. through 10 p.m. EST, Monday through Friday).
2. Develop and implement an issue tracking system for triaging and prioritizing user-reported VCR issues
3. Report critical issues to State or its designee(s) immediately
4. Meet weekly and upon request with the VCR management team to review the list of user-reported issues and discuss possible paths to resolution
5. Upon request by the Blueprint Executive Director, submit verbal or written status reports to include high-level support issues from the specified time period and any issues requiring attention or action from the Blueprint Executive Director and/or Assistant Directors
6. Contractor shall develop and submit written monthly progress reports that include the following information:
 - a. Total hours by reporting entity and contractual task.
 - b. Bulleted summary descriptions of activities, work completed, meetings attended, and current project status.
7. Contractor shall provide detailed verbal project status reports from relevant project staff as requested by, and directly to, the Blueprint Executive Director. Such verbal reports are to include opportunities for extensive discussion and provision of answers in response to questions from the Blueprint Executive Director.

Vermont Clinical Registry Data Extracts

Task 11: Delivery of Clinical Data Extracts from the VCR

As described in further detail below, Contractor shall provide secure delivery of expanded, full, clinical data extracts from the VCR to State and/or its State-authorized designees per the specifications of the Blueprint Executive Director.

Definitions for this Task:

- Full clinical data extracts are those that contain all clinical data in the VCR as of the date and time of the extract, including all clinical records and all clinical data elements. Full clinical data extracts shall contain fully identifiable patient and healthcare provider data.

- Limited clinical data extracts are those that contain some subset of the clinical data in the VCR as of the date and time of the extract, representing a subset of the clinical records and/or a subset of the clinical data elements.
 - Limited clinical data extracts may be a customized subset of data for a particular purpose.
 - A special type of limited clinical data extract is an incremental update, or incremental addition, to data extracts delivered earlier to a particular recipient.
- Expanded clinical data sets are those that contain new, valid, clinical data records not received previously by State and/or its State-authorized designees, while containing no reduction in the number of data elements delivered previously unless such a reduction in data elements has been specifically authorized in writing by the Blueprint Clinical Director. (Records with no valid data in any data element will not count as valid.)
- Enhanced clinical data extracts are those that contain data elements and/or formats that are altered and thereby more useful for analytic purposes than those received previously by State and/or its State-authorized designees.
- A particular data extract may be any combination of full versus limited, and expanded and/or enhanced.

Deliverables Task 11:

Acceptance of any clinical data extract as a deliverable must be obtained in writing by Contractor from the Blueprint Executive Director.

1. Prime Deliverable. Contractor shall securely deliver to State-authorized-and-designated Blueprint analytics provider a minimum of four (4) full clinical data extracts per year, or incremental-updates which cumulatively provide equivalents to full data extracts, as specified by the Blueprint Executive Director, beginning in the first full calendar quarter following the start date of this contract, plus one final data extract as of the final month of the contract term. Each of these minimum-requirement clinical data extracts is to be an expanded one, and shall be enhanced per specifications of the Blueprint Executive Director received by Contractor prior to creation of the extract. Contractor agrees that failure to deliver the products and services under this specific task will constitute a material breach of the contract.
2. Contractor shall provide additional clinical data extracts upon the request of, and to the specifications of, the Blueprint Clinical Director, as this contract's budget allows. Those additional clinical data extracts may be any combination of full versus limited, and expanded and/or enhanced.
3. Upon the request of, and to the specifications of, the Blueprint Executive Director, Contractor will provide file summary reports to file recipients and to State regarding the contents of each clinical data extract, for content verification purposes. Unless otherwise specified by the Blueprint Executive Director, those file summary reports will include at minimum the following information:
 - Overall file information:
 - File extraction date and time.
 - File size.
 - Total number of data elements.

- Total number of records.
 - Total number of included healthcare organizations.
 - Earliest record date.
 - Latest record date.
- Information for each included healthcare organization:
 - Organization ID.
 - Organization name.
 - Number of records.
 - Number of included unique patients.
 - Earliest record date.
 - Latest record date.

Out of Scope

The Integrated Health Record (“IHR”) (currently disabled in the system) is out of scope for maintenance and operations of the VCR.

End-user support of Support and Services at Home (SASH) staff is out of scope for this agreement.

Contact Persons for This Contract.

The contacts for this contract are as follows:

	<u>State Fiscal Manager</u>	<u>State Program Manager</u>	<u>For the Contractor</u>
Name:	Susan Dzurus Bradley	Timothy Tremblay	Hans Kastensmith
Phone #:	802-241-0389	802- 241-0230	703-622-6896
E-mail:	susan.dzurusbradley@vermont.gov	timothy.tremblay@vermont.gov	hck@capitolhealthdc.com

DVHA MONITORING OF CONTRACT

The parties agree that the DVHA official State Program Manager is primarily responsible for the review of invoices presented by Contractor.

**ATTACHMENT B
PAYMENT PROVISIONS**

The maximum dollar amount payable under this contract is not intended as any form of a guaranteed amount. Contractor will be paid for products actually delivered or services actually performed as specified in Attachment A up to the total maximum allowable amount specified in this contract. State payment terms are Net 30 days from date of invoice, payments against this contract will comply with State's payment terms. The payment schedule for delivered products, or rates for services performed, and any additional reimbursements, are included in this attachment. The following provisions specifying payments are:

1. The total maximum amount payable under this contract shall not exceed \$2,114,518.56, of which \$536,600.14 is budgeted for State fiscal year ("SFY") 2018, \$1,051,764.28 is budgeted for SFY 2019, and \$526,154.14 is budgeted for SFY 2020.
2. Contractor shall submit invoices with a current date of submission, invoice number, and contract number on or by the 15th of each month for the prior month's expenses. Contractor shall invoice State monthly for staff time, travel, and operating expenses for work associated with tasks specified in Attachment A and Appendix II and this Attachment B. Invoices shall include the line item amount or the actual expenses incurred for each task, total hours worked per hourly-paid task, names of employees (as applicable) and a brief description of services performed, depending on the payment provisions, and the total amount billed.
3. Monthly invoices shall be accompanied by a completed financial reporting form (Appendix I: Required Forms). All reports and invoices related to this contract should be submitted in electronic format to the State Fiscal Manager and the State Program Manager specified in Attachment A of this contract.
4. Contractor shall be reimbursed based on a combination of defined monthly, hourly, or project-based amounts for each task (budget line item), milestone payments, and actual expenses incurred, as further set forth in this Attachment B, dependent on acceptance by State of monthly progress reports and deliverables as completed. Payment for activities under each task will only be issued after all monthly progress reports are received and accepted by State.
5. All payments to Contractor shall be based upon State's acceptance of the deliverables outlined in Attachment A and Appendix II.
6. State reserves the right to withhold part or all of the contract funds if State does not receive timely documentation of the successful completion of contract deliverables outlined in Attachment A and Appendix II. Any deliverables deemed unacceptable by State will be rejected and subject to revision by Contractor based upon a mutually agreed remediation plan.
7. Contractor will not be reimbursed for other expenses, including travel, supplies, benefits, or insurance, with the exception of cyber liability insurance, technology professional liability insurance, and software expenses explicitly specified in the below Budget Table of this Attachment B as payable on the basis of "documented, actual costs". Upon providing proof of payment and certifications of insurance, Contractor may invoice State up to the amount(s)

specified in the Budget Table of this Attachment B for actual costs incurred to secure these items specified as reimbursable.

8. Notwithstanding anything to the contrary in this Attachment B, and subject to the limitations described in this paragraph, the Blueprint Executive Director shall be entitled to increase or reduce any Budget Maximum specified in the Budget Table of this Attachment B with respect to any service or item for which either an hourly rate is specified or for which documented cost-based reimbursement applies; provided however, that (i) such permitted Budget Maximum adjustments may only be made within a particular SFY (not from one SFY to another), (ii) Total State Fiscal Year Budget amounts (as specified in the Budget Table) may not be increased, (iii) aggregate permitted Budget Maximum adjustments shall not exceed \$20,000 in SFY 2018, \$40,000 in SFY 2019 and \$20,000 in SFY 2020, and (iv) the Blueprint Executive Director must provide to the State Fiscal Manager and the contact person for the Contractor (identified in Attachment A) written notice describing the adjustments at least 30 days prior to the month in which the adjustments are proposed to become effective. The Blueprint Executive Director (or designee) shall maintain an updated Budget Table reflecting any adjustments made under this paragraph, which updated Budget Table shall be deemed incorporated into this Attachment B immediately and without and further action.
9. State shall pay Contractor at the following rates:

Task 1: Blueprint Data Quality Program Management

a: Contractor may invoice State \$10,000 per month up to the amount(s) specified in the Budget Table of this Attachment B for Data Quality Program Management.

b: Contractor may invoice State, up to the amount(s) specified in the Budget Table of this Attachment B, for expert consultation from Dr. Craig Jones related to Data Quality, at a rate of \$200 per hour.

Task 2: Project Management of Statewide Blueprint Data Quality Initiatives

Contractor may invoice State \$4,000 per month up to the amount(s) specified in the Budget Table of this Attachment B for project management of statewide Blueprint data quality initiatives, including Sprints and data optimization projects.

Task 3: Recruitment and Onboarding of New Blueprint Data Quality Initiatives

Contractor may invoice State \$5,000 per month up to the amount(s) specified in the Budget Table of this Attachment B for recruitment and onboarding of new Blueprint data quality initiatives, including Sprints and data optimization projects.

Task 4: Involvement in Projects Supporting Data Quality Work

Contractor may invoice State \$6,000 per month up to the amount(s) specified in the Budget Table of this Attachment B for active engagement in projects supporting data quality work.

Task 5: VCR Program, Project and Vendor Management

a: Contractor may invoice State \$13,833.33 per month, up to the amount(s) specified in the Budget Table of this Attachment B, for VCR Program, Project, and Vendor Management activities. Those activities include, but are not limited to, State required project management

(documentation deliverables for management of the VCR, including management of Contractor's subcontractors for this work.

b: Contractor may invoice State, up to the amount(s) specified in the Budget Table of this Attachment B, for expert consultation from Dr. Craig Jones related to Data Utilization, at a rate of \$200 per hour.

Task 6: Hosting Management Services and General Operational Support for the VCR

a: Contractor may invoice State \$2,475.00 per month, up to the amount(s) specified in the Budget Table of this Attachment B, for provision and management of hardware, software, and personnel resources required to maintain and operate the VCR, including hosting management and maintenance of fully functional versions of the VCR software in both a test and a production environment.

b: Contractor may invoice State for the documented, actual costs of license fees, upon proof of purchase and license, for the software required for successful operation of the VCR, up to the amount(s) specified in the Budget Table of this Attachment B. Such required software may include:

- SQL Server Enterprise (14 licenses).
- DocSite-specific third-party software, including:
 - Telerik
 - Active Reports Professional
 - MediSpan
 - Nevron Chart for .NET
 - EVO PDF
 - Others as required

Task 7: Ongoing Security Assessments, Vulnerability Scans, and Remediation

a: Contractor may invoice State up to a maximum of \$6,795.25 per quarterly scan for ongoing security assessments and vulnerability scans, up to the amount(s) specified in the Budget Table of this Attachment B.

b: The Contractor may invoice State, up to the amount(s) specified in the Budget Table of this Attachment B, for assessment support and remediation of findings from security assessments and vulnerability scans of the VCR, at a rate of \$150 per hour.

Task 8: Ongoing Hosting of VCR

Contractor may invoice State for hosting for the test and production environments of the VCR at a rate of \$11,669.94 per month, up to the amount(s) specified in the Budget Table of this Attachment.

Task 9: Technical Support of VCR

Contractor may invoice State up to the amount(s) specified in the Budget Table of this Attachment B for technical support of the VCR, including but not limited to maintenance and

operations, enhancement requests, and database optimization, for the test and production environments, at a rate of \$150 per hour.

Task 10: Vermont Clinical Registry User Support

Contractor may invoice State \$3,300.00 per month, up to the amount(s) specified in the Budget Table of this Attachment B, for the maintenance of a Help Desk and provision of Tier 1-3 level user support for the VCR.

Task 11: Delivery of Clinical Data Extracts from the VCR

Contractor may invoice State up to the amount(s) specified in the Budget Table of this Attachment B for development and secure delivery of clinical data extracts, at a rate of \$150 per hour.

Secure File Transfer Protocol (SFTP) Services

Contractor may invoice State \$125 per month, up to the amount(s) specified in the Budget Table of this Attachment B, for the provision of Secure File Transfer Protocol ("SFTP") services in support of the VCR.

Data Dictionary Analysis Tool

Contractor may invoice State for the documented, actual costs of Data Dictionary Analysis Tool(s) for the VCR, up to the amount(s) specified in the Budget Table of this Attachment B.

ICD-10 Clinical Mapping

Contractor may invoice State for the documented, actual costs of ICD-10 Clinical Mapping for the VCR, up to the amount(s) specified in the Budget Table of this Attachment B.

Practice Support for Flat File Extracts

Contractor may invoice State up to the amount(s) specified in the Budget Table of this Attachment B for Practice support for flat file extracts for the VCR, at a rate of \$150 per hour.

Cyber Liability and Related Professional Liability Insurance

Upon providing proof of payment and certifications of insurance, Contractor may invoice State up to the amount(s) specified in the Budget Table of this Attachment B, for actual costs incurred to secure Cyber Liability and related Professional Liability Insurance in relation to the VCR.

10. Payments contingent on Blueprint-accepted data extracts. Expanded and full clinical data extracts from the VCR, which meet the specifications of Attachment A, Task 11, Deliverable 1 (Prime Deliverable), constitute the primary and ultimate deliverables for this contract. Payments for Tasks 5.a, 5.b, 6.a, 9, 10, and 11 of Attachment A of this contract will be contingent upon Contractor having delivered to State and/or its State-authorized designees a Prime Deliverable (accepted in writing by State) within 6 months prior to the invoice date, except in the case of invoices for the final month of the contract. In the case of invoices for the final month of the contract, payments for Tasks 5.a, 5.b, 6.a, 9, 10, and 11 will be contingent upon Contractor having delivered to State and/or its State-authorized designees a Prime Deliverable (accepted in writing by State) in the final month of the contract or later. Contractor agrees that failure to deliver the products and services under this specific task (Task 11) will constitute a material breach of the contract.

Budget Maximums for certain line items below are subject to adjustment from time to time in the discretion of the Blueprint Executive Director pursuant to paragraph 8 of this Attachment B.

Budget Table

Task	Description	Unit Amount January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Budget Maximum For Services Provided January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Unit Amount July 1, 2018 - June 30, 2019 (SFY 2019)	Budget Maximum For Services Provided July 1, 2018 - June 30, 2019 (SFY 2019)	Unit Amount July 1, 2019 - December 31, 2019 (First Half of SFY 2020)	Budget Maximum For Services Provided July 1, 2019 - December 31, 2019 (First Half of SFY 2020)
	Number of Months	6		12		6	
1.a	Data Quality Program Management	\$10,000 per month	\$60,000.00	\$10,000 per month	\$120,000.00	\$10,000 per month	\$60,000.00
1.b	Dr. Jones Expert Consultation on Data Quality	\$200 per hour	\$12,000.00	\$200 per hour	\$24,000.00	\$200 per hour	\$12,000.00
2	Project Management of Statewide Blueprint Data Quality Initiatives	\$4,000 per month	\$24,000.00	\$4,000 per month	\$48,000.00	\$4,000 per month	\$24,000.00
3	Recruitment and Onboarding of New Blueprint Data Quality Initiatives	\$5,000 per month	\$30,000.00	\$5,000 per month	\$60,000.00	\$5,000 per month	\$30,000.00
4	Involvement in Projects Supporting Data Quality Work	\$6,000 per month	\$36,000.00	\$6,000 per month	\$72,000.00	\$6,000 per month	\$36,000.00
5.a	VCR Program, Project, and Vendor Management	\$13,833.33 per month	\$83,000.00	\$13,833.33 per month	\$166,000.00	\$13,833.33 per month	\$83,000.00

STATE OF VERMONT, DEPARTMENT OF VERMONT HEALTH ACCESS
STANDARD CONTRACT FOR TECHNOLOGY SERVICES
CAPITOL HEALTH ASSOCIATES, LLC

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Task	Description	Unit Amount January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Budget Maximum For Services Provided January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Unit Amount July 1, 2018 - June 30, 2019 (SFY 2019)	Budget Maximum For Services Provided July 1, 2018 - June 30, 2019 (SFY 2019)	Unit Amount July 1, 2019 - December 31, 2019 (First Half of SFY 2020)	Budget Maximum For Services Provided July 1, 2019 - December 31, 2019 (First Half of SFY 2020)
	Number of Months	6		12		6	
5.b	Dr. Jones Expert Consultation on Data Utilization	\$200 per hour	\$12,000.00	\$200 per hour	\$24,000.00	\$200 per hour	\$12,000.00
6.a	Hosting Management Services and General Operational Support for the VCR	\$2,475.00 per month	\$14,850.00	\$2,475.00 per month	\$29,700.00	\$2,475.00 per month	\$14,850.00
6.b	Software licenses to operate VCR	documented, actual costs	\$1,990.00				
7.a	Ongoing Security Assessments, Vulnerability Scans, and Remediation	\$6,795.25 per quarterly scan	\$13,590.50	\$6,931.25 per quarterly scan	\$27,725.00	\$7,067.25 per quarterly scan	\$14,134.50
7.b	Assessment Support and Remediation	\$150 per hour	\$13,200.00	\$150 per hour	\$26,400.00	\$150 per hour	\$13,200.00
8	Ongoing Hosting of VCR	\$11,669.94 per month	\$70,019.64	\$11,669.94 per month	\$140,039.28	\$11,669.94 per month	\$70,019.64
9	Technical Support of VCR	\$150 per hour	\$89,100.00	\$150 per hour	\$178,200.00	\$150 per hour	\$89,100.00

STATE OF VERMONT, DEPARTMENT OF VERMONT HEALTH ACCESS
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Task	Description	Unit Amount January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Budget Maximum For Services Provided January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Unit Amount July 1, 2018 - June 30, 2019 (SFY 2019)	Budget Maximum For Services Provided July 1, 2018 - June 30, 2019 (SFY 2019)	Unit Amount July 1, 2019 - December 31, 2019 (First Half of SFY 2020)	Budget Maximum For Services Provided July 1, 2019 - December 31, 2019 (First Half of SFY 2020)
	Number of Months	6		12		6	
10	VCR User Support	monthly \$3,300.00 for support	\$19,800.00	monthly \$3,300.00 for support	\$39,600.00	monthly \$3,300.00 for support	\$19,800.00
11	Delivery of Clinical Data Extracts from the VCR	\$150 per hour	\$19,800.00	\$150 per hour	\$39,600.00	\$150 per hour	\$19,800.00
N/A	SFTP Services	\$125 per month	\$750.00	\$125 per month	\$1,500.00	\$125 per month	\$750.00
N/A	Data Dictionary Analysis Tool	documented, actual costs	\$3,000.00				
N/A	ICD10 Clinical Mapping	documented, actual costs	\$6,000.00				
N/A	Practice Support for Flat File Extracts	\$150 per hour	\$7,500.00	\$150 per hour	\$15,000.00	\$150 per hour	\$7,500.00
N/A	Cyber Liability and Related Professional Liability Insurance	Documented, actual costs	\$20,000.00	Documented, actual costs	\$40,000.00	Documented, actual costs	\$20,000.00
Total State Fiscal Year Budget		\$536,600.14		\$1,051,764.28		\$526,154.14	

STATE OF VERMONT, DEPARTMENT OF VERMONT HEALTH ACCESS
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Task	Description	Unit Amount January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Budget Maximum For Services Provided January 1, 2018 - June 30, 2018 (Second Half of SFY 2018)	Unit Amount July 1, 2018 - June 30, 2019 (SFY 2019)	Budget Maximum For Services Provided July 1, 2018 - June 30, 2019 (SFY 2019)	Unit Amount July 1, 2019 - December 31, 2019 (First Half of SFY 2020)	Budget Maximum For Services Provided July 1, 2019 - December 31, 2019 (First Half of SFY 2020)
	Number of Months	6	6	12	6		
Total Contract Budget		\$2,114,518.56					

**ATTACHMENT C:
STANDARD STATE PROVISIONS
FOR CONTRACTS AND GRANTS
REVISED JULY 1, 2016**

1. Definitions: For purposes of this Attachment, "Party" shall mean the Contractor, Grantee or Subrecipient, with whom the State of Vermont is executing this Agreement and consistent with the form of the Agreement. "Agreement" shall mean the specific contract or grant to which this form is attached.

2. Entire Agreement: This Agreement, whether in the form of a Contract, State Funded Grant, or Federally Funded Grant, represents the entire agreement between the parties on the subject matter. All prior agreements, representations, statements, negotiations, and understandings shall have no effect.

3. Governing Law, Jurisdiction and Venue; No Waiver of Jury Trial: This Agreement will be governed by the laws of the State of Vermont. Any action or proceeding brought by either the State or the Party in connection with this Agreement shall be brought and enforced in the Superior Court of the State of Vermont, Civil Division, Washington Unit. The Party irrevocably submits to the jurisdiction of this court for any action or proceeding regarding this Agreement. The Party agrees that it must first exhaust any applicable administrative remedies with respect to any cause of action that it may have against the State with regard to its performance under the Agreement.

Party agrees that the State shall not be required to submit to binding arbitration or waive its right to a jury trial.

4. Sovereign Immunity: The State reserves all immunities, defenses, rights or actions arising out of the State's sovereign status or under the Eleventh Amendment to the United States Constitution. No waiver of the State's immunities, defenses, rights or actions shall be implied or otherwise deemed to exist by reason of the State's entry into this Agreement.

5. No Employee Benefits For Party: The Party understands that the State will not provide any individual retirement benefits, group life insurance, group health and dental insurance, vacation or sick leave, workers compensation or other benefits or services available to State employees, nor will the state withhold any state or federal taxes except as required under applicable tax laws, which shall be determined in advance of execution of the Agreement. The Party understands that all tax returns required by the Internal Revenue Code and the State of Vermont, including but not limited to income, withholding, sales and use, and rooms and meals, must be filed by the Party, and information as to Agreement income will be provided by the State of Vermont to the Internal Revenue Service and the Vermont Department of Taxes.

6. Independence: The Party will act in an independent capacity and not as officers or employees of the State.

7. Defense and Indemnity: The Party shall defend the State and its officers and employees against all third party claims or suits arising in whole or in part from any act or omission of the Party or of any agent of the Party in connection with the performance of this Agreement. The State shall notify the Party in the event of any such claim or suit, and the Party shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit. The State retains the right to participate at its own expense in the defense of any claim. The State shall have the right to approve all proposed settlements of such claims or suits. In the event the State withholds approval to settle any such claim,

then the Party shall proceed with the defense of the claim but under those circumstances, the Party's indemnification obligations shall be limited to the amount of the proposed settlement initially rejected by the State.

After a final judgment or settlement the Party may request recoupment of specific defense costs and may file suit in Washington Superior Court requesting recoupment. The Party shall be entitled to recoup costs only upon a showing that such costs were entirely unrelated to the defense of any claim arising from an act or omission of the Party in connection with the performance of this Agreement.

The Party shall indemnify the State and its officers and employees in the event that the State, its officers or employees become legally obligated to pay any damages or losses arising from any act or omission of the Party or an agent of the Party in connection with the performance of this Agreement.

The Party agrees that in no event shall the terms of this Agreement nor any document required by the Party in connection with its performance under this Agreement obligate the State to defend or indemnify the Party or otherwise be liable for the expenses or reimbursement, including attorneys' fees, collection costs or other costs of the Party except to the extent awarded by a court of competent jurisdiction.

8. Insurance: Before commencing work on this Agreement the Party must provide certificates of insurance to show that the following minimum coverages are in effect. It is the responsibility of the Party to maintain current certificates of insurance on file with the State through the term of the Agreement. No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Party for the Party's operations. These are solely minimums that have been established to protect the interests of the State.

Workers Compensation: With respect to all operations performed, the Party shall carry workers' compensation insurance in accordance with the laws of the State of Vermont. Vermont will accept an out-of-state employer's workers' compensation coverage while operating in Vermont provided that the insurance carrier is licensed to write insurance in Vermont and an amendatory endorsement is added to the policy adding Vermont for coverage purposes. Otherwise, the party shall secure a Vermont workers' compensation policy, if necessary to comply with Vermont law.

General Liability and Property Damage: With respect to all operations performed under this Agreement, the Party shall carry general liability insurance having all major divisions of coverage including, but not limited to:

Premises - Operations

Products and Completed Operations

Personal Injury Liability

Contractual Liability

The policy shall be on an occurrence form and limits shall not be less than:

\$1,000,000 Each Occurrence

\$2,000,000 General Aggregate

\$1,000,000 Products/Completed Operations Aggregate

\$1,000,000 Personal & Advertising Injury

Automotive Liability: The Party shall carry automotive liability insurance covering all motor vehicles, including hired and non-owned coverage, used in connection with the Agreement. Limits of coverage

shall not be less than \$500,000 combined single limit. If performance of this Agreement involves construction, or the transport of persons or hazardous materials, limits of coverage shall not be less than \$1,000,000 combined single limit.

Additional Insured. The General Liability and Property Damage coverages required for performance of this Agreement shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. If performance of this Agreement involves construction, or the transport of persons or hazardous materials, then the required Automotive Liability coverage shall include the State of Vermont and its agencies, departments, officers and employees as Additional Insureds. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

Notice of Cancellation or Change. There shall be no cancellation, change, potential exhaustion of aggregate limits or non-renewal of insurance coverage(s) without thirty (30) days written prior written notice to the State.

9. Reliance by the State on Representations: All payments by the State under this Agreement will be made in reliance upon the accuracy of all representations made by the Party in accordance with the Contract, including but not limited to bills, invoices, progress reports and other proofs of work.

10. False Claims Act: The Party acknowledges that it is subject to the Vermont False Claims Act as set forth in 32 V.S.A. § 630 *et seq.* If the Party violates the Vermont False Claims Act it shall be liable to the State for civil penalties, treble damages and the costs of the investigation and prosecution of such violation, including attorney's fees, except as the same may be reduced by a court of competent jurisdiction. The Party's liability to the State under the False Claims Act shall not be limited notwithstanding any agreement of the State to otherwise limit Party's liability.

11. Whistleblower Protections: The Party shall not discriminate or retaliate against one of its employees or agents for disclosing information concerning a violation of law, fraud, waste, abuse of authority or acts threatening health or safety, including but not limited to allegations concerning the False Claims Act. Further, the Party shall not require such employees or agents to forego monetary awards as a result of such disclosures, nor should they be required to report misconduct to the Party or its agents prior to reporting to any governmental entity and/or the public.

12. Federal Requirements Pertaining to Grants and Subrecipient Agreements:

A. Requirement to Have a Single Audit: In the case that this Agreement is a Grant that is funded in whole or in part by federal funds, the Subrecipient will complete the Subrecipient Annual Report annually within 45 days after its fiscal year end, informing the State of Vermont whether or not a Single Audit is required for the prior fiscal year. If a Single Audit is required, the Subrecipient will submit a copy of the audit report to the granting Party within 9 months. If a single audit is not required, only the Subrecipient Annual Report is required.

For fiscal years ending before December 25, 2015, a Single Audit is required if the subrecipient expends \$500,000 or more in federal assistance during its fiscal year and must be conducted in accordance with OMB Circular A-133. For fiscal years ending on or after December 25, 2015, a Single Audit is required if the subrecipient expends \$750,000 or more in federal assistance during its fiscal year and must be conducted in accordance with 2 CFR Chapter I, Chapter II, Part 200, Subpart F. The Subrecipient Annual Report is required to be submitted within 45 days, whether or not a Single Audit is required.

- B. Internal Controls:** In the case that this Agreement is a Grant that is funded in whole or in part by Federal funds, in accordance with 2 CFR Part II, §200.303, the Party must establish and maintain effective internal control over the Federal award to provide reasonable assurance that the Party is managing the Federal award in compliance with Federal statutes, regulations, and the terms and conditions of the award. These internal controls should be in compliance with guidance in "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States and the "Internal Control Integrated Framework", issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).
- C. Mandatory Disclosures:** In the case that this Agreement is a Grant funded in whole or in part by Federal funds, in accordance with 2CFR Part II, §200.113, Party must disclose, in a timely manner, in writing to the State, all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Failure to make required disclosures may result in the imposition of sanctions which may include disallowance of costs incurred, withholding of payments, termination of the Agreement, suspension/debarment, etc.

13. Records Available for Audit: The Party shall maintain all records pertaining to performance under this agreement. "Records" means any written or recorded information, regardless of physical form or characteristics, which is produced or acquired by the Party in the performance of this agreement. Records produced or acquired in a machine readable electronic format shall be maintained in that format. The records described shall be made available at reasonable times during the period of the Agreement and for three years thereafter or for any period required by law for inspection by any authorized representatives of the State or Federal Government. If any litigation, claim, or audit is started before the expiration of the three-year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved.

14. Fair Employment Practices and Americans with Disabilities Act: Party agrees to comply with the requirement of 21 V.S.A. Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. Party shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990, as amended, that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Party under this Agreement.

15. Set Off: The State may set off any sums which the Party owes the State against any sums due the Party under this Agreement; provided, however, that any set off of amounts due the State of Vermont as taxes shall be in accordance with the procedures more specifically provided hereinafter.

16. Taxes Due to the State:

- A.** Party understands and acknowledges responsibility, if applicable, for compliance with State tax laws, including income tax withholding for employees performing services within the State, payment of use tax on property used within the State, corporate and/or personal income tax on income earned within the State.
- B.** Party certifies under the pains and penalties of perjury that, as of the date the Agreement is signed, the Party is in good standing with respect to, or in full compliance with, a plan to pay any and all taxes due the State of Vermont.
- C.** Party understands that final payment under this Agreement may be withheld if the Commissioner of Taxes determines that the Party is not in good standing with respect to or in full compliance with a plan to pay any and all taxes due to the State of Vermont.

- D. Party also understands the State may set off taxes (and related penalties, interest and fees) due to the State of Vermont, but only if the Party has failed to make an appeal within the time allowed by law, or an appeal has been taken and finally determined and the Party has no further legal recourse to contest the amounts due.

17. Taxation of Purchases: All State purchases must be invoiced tax free. An exemption certificate will be furnished upon request with respect to otherwise taxable items.

18. Child Support: (Only applicable if the Party is a natural person, not a corporation or partnership.) Party states that, as of the date the Agreement is signed, he/she:

- A. is not under any obligation to pay child support; or
- B. is under such an obligation and is in good standing with respect to that obligation; or
- C. has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan.

Party makes this statement with regard to support owed to any and all children residing in Vermont. In addition, if the Party is a resident of Vermont, Party makes this statement with regard to support owed to any and all children residing in any other state or territory of the United States.

19. Sub-Agreements: Party shall not assign, subcontract or subgrant the performance of this Agreement or any portion thereof to any other Party without the prior written approval of the State. Party shall be responsible and liable to the State for all acts or omissions of subcontractors and any other person performing work under this Agreement pursuant to an agreement with Party or any subcontractor.

In the case this Agreement is a contract with a total cost in excess of \$250,000, the Party shall provide to the State a list of all proposed subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers, and additional required or requested information, as applicable, in accordance with Section 32 of The Vermont Recovery and Reinvestment Act of 2009 (Act No. 54).

Party shall include the following provisions of this Attachment C in all subcontracts for work performed solely for the State of Vermont and subcontracts for work performed in the State of Vermont: Section 10 ("False Claims Act"); Section 11 ("Whistleblower Protections"); Section 14 ("Fair Employment Practices and Americans with Disabilities Act"); Section 16 ("Taxes Due the State"); Section 18 ("Child Support"); Section 20 ("No Gifts or Gratuities"); Section 22 ("Certification Regarding Debarment"); Section 23 ("Certification Regarding Use of State Funds"); Section 31 ("State Facilities"); and Section 32 ("Location of State Data").

20. No Gifts or Gratuities: Party shall not give title or possession of anything of substantial value (including property, currency, travel and/or education programs) to any officer or employee of the State during the term of this Agreement.

21. Copies: Party shall use reasonable best efforts to ensure that all written reports prepared under this Agreement are printed using both sides of the paper.

22. Certification Regarding Debarment: Party certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, neither Party nor Party's principals (officers, directors, owners,

or partners) are presently debarred, suspended, proposed for debarment, declared ineligible or excluded from participation in federal programs, or programs supported in whole or in part by federal funds.

Party further certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, Party is not presently debarred, suspended, nor named on the State's debarment list at: <http://bgs.vermont.gov/purchasing/debarment>

23. Certification Regarding Use of State Funds: In the case that Party is an employer and this Agreement is a State Funded Grant in excess of \$1,001, Party certifies that none of these State funds will be used to interfere with or restrain the exercise of Party's employee's rights with respect to unionization.

24. Conflict of Interest: Party shall fully disclose, in writing, any conflicts of interest or potential conflicts of interest.

25. Confidentiality: Party acknowledges and agrees that this Agreement and any and all information obtained by the State from the Party in connection with this Agreement are subject to the State of Vermont Access to Public Records Act, 1 V.S.A. § 315 et seq.

26. Force Majeure: Neither the State nor the Party shall be liable to the other for any failure or delay of performance of any obligations under this Agreement to the extent such failure or delay shall have been wholly or principally caused by acts or events beyond its reasonable control rendering performance illegal or impossible (excluding strikes or lock-outs) ("Force Majeure"). Where Force Majeure is asserted, the nonperforming party must prove that it made all reasonable efforts to remove, eliminate or minimize such cause of delay or damages, diligently pursued performance of its obligations under this Agreement, substantially fulfilled all non-excused obligations, and timely notified the other party of the likelihood or actual occurrence of an event described in this paragraph.

27. Marketing: Party shall not refer to the State in any publicity materials, information pamphlets, press releases, research reports, advertising, sales promotions, trade shows, or marketing materials or similar communications to third parties except with the prior written consent of the State.

28. Termination: In addition to any right of the State to terminate for convenience, the State may terminate this Agreement as follows:

- A. Non-Appropriation:** If this Agreement extends into more than one fiscal year of the State (July 1 to June 30), and if appropriations are insufficient to support this Agreement, the State may cancel at the end of the fiscal year, or otherwise upon the expiration of existing appropriation authority. In the case that this Agreement is a Grant that is funded in whole or in part by federal funds, and in the event federal funds become unavailable or reduced, the State may suspend or cancel this Grant immediately, and the State shall have no obligation to pay Subrecipient from State revenues.
- B. Termination for Cause:** Either party may terminate this Agreement if a party materially breaches its obligations under this Agreement, and such breach is not cured within thirty (30) days after delivery of the non-breaching party's notice or such longer time as the non-breaching party may specify in the notice.
- C. No Implied Waiver of Remedies:** A party's delay or failure to exercise any right, power or remedy under this Agreement shall not impair any such right, power or remedy, or be construed as a waiver of any such right, power or remedy. All waivers must be in writing.

29. Continuity of Performance: In the event of a dispute between the Party and the State, each party will continue to perform its obligations under this Agreement during the resolution of the dispute until this Agreement is terminated in accordance with its terms.

30. Termination Assistance: Upon nearing the end of the final term or termination of this Agreement, without respect to cause, the Party shall take all reasonable and prudent measures to facilitate any transition required by the State. All State property, tangible and intangible, shall be returned to the State upon demand at no additional cost to the State in a format acceptable to the State.

31. State Facilities: If the State makes space available to the Party in any State facility during the term of this Agreement for purposes of the Party's performance under this Agreement, the Party shall only use the space in accordance with all policies and procedures governing access to and use of State facilities which shall be made available upon request. State facilities will be made available to Party on an "AS IS, WHERE IS" basis, with no warranties whatsoever.

32. Location of State Data: No State data received, obtained, or generated by the Party in connection with performance under this Agreement shall be processed, transmitted, stored, or transferred by any means outside continental United States, except with the express written permission of the State.

(Revised 7/1/16 - End of Standard Provisions)

ATTACHMENT D

INFORMATION TECHNOLOGY SYSTEM IMPLEMENTATION TERMS AND
CONDITIONS (rev. 4/27/17; modified) AND OTHER CONDITIONS

1. MODIFICATIONS TO CONTRACTOR DOCUMENTS

The parties specifically agree that the Contractor Documents are hereby modified and superseded by Attachment C and this Attachment D.

"Contractor Documents" shall mean one or more document, agreement or other instrument required by Contractor in connection with the performance of the products and services being purchased by the State, regardless of format, including the license agreement, end user license agreement or similar document, any hyperlinks to documents contained in the Contractor Documents, agreement or other instrument and any other paper or "shrinkwrap," "clickwrap," "browsewrap" or other electronic version thereof.

2. NO SUBSEQUENT, UNILATERAL MODIFICATION OF TERMS BY CONTRACTOR

Notwithstanding any other provision or other unilateral license terms which may be issued by Contractor during the Term of this Contract, and irrespective of whether any such provisions have been proposed prior to or after the issuance of an order for the products and services being purchased by the State, as applicable, the components of which are licensed under the Contractor Documents, or the fact that such other agreement may be affixed to or accompany the products and services being purchased by the State, as applicable, upon delivery, the terms and conditions set forth herein shall supersede and govern licensing and delivery of all products and services hereunder.

3. TERM OF CONTRACTOR'S DOCUMENTS; PAYMENT TERMS

Contractor acknowledges and agrees that, to the extent a Contractor Document provides for alternate term or termination provisions, including automatic renewals, such sections shall be waived and shall have no force and effect. All Contractor Documents shall run concurrently with the term of this Contract; provided, however, to the extent the State has purchased a perpetual license to use the Contractor's software, hardware or other services, such license shall remain in place unless expressly terminated in accordance with the terms of this Contract. Contractor acknowledges and agrees that, to the extent a Contractor Document provides for payment terms which differ from the payment terms set forth in Attachment B, such sections shall be waived and shall have no force and effect and the terms in Attachment B shall govern.

4. OWNERSHIP AND LICENSE IN DELIVERABLES

- 4.1 Contractor Intellectual Property.** Contractor shall retain all right, title and interest in and to any work, ideas, inventions, discoveries, tools, methodology, computer programs, processes and improvements and any other intellectual property, tangible or intangible, that has been created or was owned by Contractor prior to entering into this Contract ("Contractor Intellectual Property"). Should the State require a license for the use of Contractor Intellectual Property in connection with the development or use of the items that Contractor is required to deliver to the State under this Contract, including Work Product ("Deliverables"), the Contractor shall grant the State a royalty-free license for such development and use. For the avoidance of doubt, Work Product shall not be deemed to include Contractor Intellectual Property, provided the State shall be granted an irrevocable, perpetual, non-exclusive royalty-free license to use any such Contractor Intellectual Property that is incorporated into Work Product.

4.2 State Intellectual Property. The State shall retain all right, title and interest in and to (i) all content and all property, data and information furnished by or on behalf of the State or any agency, commission or board thereof, and to all information that is created under this Contract, including, but not limited to, all data that is generated under this Contract as a result of the use by Contractor, the State or any third party of any technology systems or knowledge bases that are developed for the State and used by Contractor hereunder, and all other rights, tangible or intangible; and (ii) all State trademarks, trade names, logos and other State identifiers, Internet uniform resource locators, State user name or names, Internet addresses and e-mail addresses obtained or developed pursuant to this Contract (collectively, "State Intellectual Property").

Contractor may not use State Intellectual Property for any purpose other than as specified in this Contract. Upon expiration or termination of this Contract, Contractor shall return or destroy all State Intellectual Property and all copies thereof, and Contractor shall have no further right or license to such State Intellectual Property.

Contractor acquires no rights or licenses, including, without limitation, intellectual property rights or licenses, to use State Intellectual Property for its own purposes. In no event shall the Contractor claim any security interest in State Intellectual Property.

4.3 Work Product. All Work Product shall belong exclusively to the State, with the State having the sole and exclusive right to apply for, obtain, register, hold and renew, in its own name and/or for its own benefit, all patents and copyrights, and all applications and registrations, renewals and continuations thereof and/or any and all other appropriate protection. To the extent exclusive title and/or complete and exclusive ownership rights in and to any Work Product may not originally vest in the State by operation of law or otherwise as contemplated hereunder, Contractor shall immediately upon request, unconditionally and irrevocably assign, transfer and convey to the State all right, title and interest therein.

"Work Product" means any tangible or intangible ideas, inventions, improvements, modifications, discoveries, development, customization, configuration, methodologies or processes, designs, models, drawings, photographs, reports, formulas, algorithms, patterns, devices, compilations, databases, computer programs, work of authorship, specifications, operating instructions, procedures manuals or other documentation, technique, know-how, secret, or intellectual property right whatsoever or any interest therein (whether patentable or not patentable or registerable under copyright or similar statutes or subject to analogous protection), that is specifically made, conceived, discovered or reduced to practice by Contractor, either solely or jointly with others, pursuant to this Contract. Work Product does not include Contractor Intellectual Property or third party intellectual property.

To the extent delivered under this Contract, upon full payment to Contractor in accordance with Attachment B, and subject to the terms and conditions contained herein, Contractor hereby (i) assigns to State all rights in and to all Deliverables, except to the extent they include any Contractor Intellectual Property; and (ii) grants to State a perpetual, non-exclusive, irrevocable, royalty-free license to use for State's internal business purposes, any Contractor Intellectual Property included in the Deliverables in connection with its use of the Deliverables and, subject to the State's obligations with respect to Confidential Information, authorize others to do the same on the State's behalf. Except for the foregoing license grant, Contractor or its licensors retain all rights in and to all Contractor Intellectual Property.

The Contractor shall not sell or copyright a Deliverable without explicit permission from the State.

If the Contractor is operating a system or application on behalf of the State of Vermont, then the Contractor shall not make information entered into the system or application available for uses by any other party than the State of Vermont, without prior authorization by the State. Nothing herein shall entitle the State to pre-existing Contractor Intellectual Property or Contractor Intellectual Property developed outside of this Contract with no assistance from State.

5. CONFIDENTIALITY AND NON-DISCLOSURE; SECURITY BREACH REPORTING

5.1 For purposes of this Contract, confidential information will not include information or material which (a) enters the public domain (other than as a result of a breach of this Contract); (b) was in the receiving party's possession prior to its receipt from the disclosing party; (c) is independently developed by the receiving party without the use of confidential information; (d) is obtained by the receiving party from a third party under no obligation of confidentiality to the disclosing party; or (e) is not exempt from disclosure under applicable State law.

5.2 Confidentiality of Contractor Information. The Contractor acknowledges and agrees that this Contract and any and all Contractor information obtained by the State in connection with this Contract are subject to the State of Vermont Access to Public Records Act, 1 V.S.A. § 315 et seq. The State will not disclose information for which a reasonable claim of exemption can be made pursuant to 1 V.S.A. § 317(c), including, but not limited to, trade secrets, proprietary information or financial information, including any formulae, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to the Contractor, and which gives the Contractor an opportunity to obtain business advantage over competitors who do not know it or use it.

The State shall immediately notify Contractor of any request made under the Access to Public Records Act, or any request or demand by any court, governmental agency or other person asserting a demand or request for Contractor information. Contractor may, in its discretion, seek an appropriate protective order, or otherwise defend any right it may have to maintain the confidentiality of such information under applicable State law within three business days of the State's receipt of any such request. Contractor agrees that it will not make any claim against the State if the State makes available to the public any information in accordance with the Access to Public Records Act or in response to a binding order from a court or governmental body or agency compelling its production. Contractor shall indemnify the State for any costs or expenses incurred by the State, including, but not limited to, attorneys' fees awarded in accordance with 1 V.S.A. § 320, in connection with any action brought in connection with Contractor's attempts to prevent or unreasonably delay public disclosure of Contractor's information if a final decision of a court of competent jurisdiction determines that the State improperly withheld such information and that the improper withholding was based on Contractor's attempts to prevent public disclosure of Contractor's information.

The State agrees that (a) it will use the Contractor information only as may be necessary in the course of performing duties, receiving services or exercising rights under this Contract; (b) it will provide at a minimum the same care to avoid disclosure or unauthorized use of Contractor information as it provides to protect its own similar confidential and proprietary information; (c) except as required by the Access to Records Act, it will not disclose such information orally or in writing to any third party unless that third party is subject to a written confidentiality agreement that contains restrictions and safeguards at least as restrictive as those contained in this Contract; (d) it will take all reasonable precautions to protect the Contractor's information; and (e) it will not otherwise appropriate such information to its own use or to the use of any other person or entity.

Contractor may affix an appropriate legend to Contractor information that is provided under this Contract to reflect the Contractor's determination that any such information is a trade secret, proprietary information or financial information at time of delivery or disclosure.

5.3 Confidentiality of State Information. In performance of this Contract, and any exhibit or schedule hereunder, the Contractor acknowledges that certain State Data (as defined below), to which the Contractor may have access may contain individual federal tax information, personal protected health information and other individually identifiable information protected by State or federal law or otherwise exempt from disclosure under the State of Vermont Access to Public Records Act, 1 V.S.A. § 315 et seq. ("State Data"). In addition to the provisions of this Section, the Contractor shall comply with the requirements set forth in the State's HIPAA Business Associate Agreement attached to this Contract as Attachment E.

State Data shall not be stored, accessed from, or transferred to any location outside the United States.

Unless otherwise instructed by the State, Contractor agrees to keep confidential all State Data. The Contractor agrees that (a) it will use the State Data only as may be necessary in the course of performing duties or exercising rights under this Contract; (b) it will provide at a minimum the same care to avoid disclosure or unauthorized use of State Data as it provides to protect its own similar confidential and proprietary information; (c) it will not publish, reproduce, or otherwise divulge any State Data in whole or in part, in any manner or form orally or in writing to any third party unless it has received written approval from the State and that third party is subject to a written confidentiality agreement that contains restrictions and safeguards at least as restrictive as those contained in this Contract; (d) it will take all reasonable precautions to protect the State's information; and (e) it will not otherwise appropriate such information to its own use or to the use of any other person or entity. Contractor will take reasonable measures as are necessary to restrict access to State Data in the Contractor's possession to only those employees on its staff who must have the information on a "need to know" basis. The Contractor shall not retain any State Data except to the extent required to perform the services under this Contract.

Contractor shall not access State user accounts or State Data, except in the course of data center operations, response to service or technical issues, as required by the express terms of this Contract, or at State's written request.

Contractor may not share State Data with its parent company or other affiliate without State's express written consent.

The Contractor shall promptly notify the State of any request or demand by any court, governmental agency or other person asserting a demand or request for State Data to which the Contractor or any third-party hosting service of the Contractor may have access, so that the State may seek an appropriate protective order.

6. SECURITY OF STATE INFORMATION

6.1 Security Standards. To the extent the Contractor or its subcontractors, affiliates or agents handles, collects, stores, disseminates or otherwise deals with State Data, the Contractor represents and warrants that it has implemented and it shall maintain during the term of this Contract the highest industry standard administrative, technical, and physical safeguards and controls consistent with NIST *Special Publication 800-53* (version 4 or higher) and *Federal Information Processing Standards Publication 200* and designed to (i) ensure the security and confidentiality of State Data; (ii) protect against any anticipated security threats or hazards to the security or integrity of the State Data; and (iii) protect against unauthorized access to or use of State Data. Such measures shall

include at a minimum: (1) access controls on information systems, including controls to authenticate and permit access to State Data only to authorized individuals and controls to prevent the Contractor employees from providing State Data to unauthorized individuals who may seek to obtain this information (whether through fraudulent means or otherwise); (2) industry-standard firewall protection; (3) encryption of electronic State Data while in transit from the Contractor networks to external networks; (4) measures to store in a secure fashion all State Data which shall include, but not be limited to, encryption at rest and multiple levels of authentication; (5) dual control procedures, segregation of duties, and pre-employment criminal background checks for employees with responsibilities for or access to State Data; (6) measures to ensure that the State Data shall not be altered or corrupted without the prior written consent of the State; (7) measures to protect against destruction, loss or damage of State Data due to potential environmental hazards, such as fire and water damage; (8) staff training to implement the information security measures; and (9) monitoring of the security of any portions of the Contractor systems that are used in the provision of the services against intrusion on a twenty-four (24) hour a day basis.

6.2 Security Breach Notice and Reporting. The Contractor shall have policies and procedures in place for the effective management of Security Breaches, as defined below, which shall be made available to the State upon request.

In addition to the requirements set forth in any applicable Business Associate Agreement as may be attached to this Contract, in the event of any actual security breach or reasonable belief of an actual security breach the Contractor either suffers or learns of that either compromises or could compromise State Data (a "Security Breach"), the Contractor shall notify the State within 24 hours of its discovery. Contractor shall immediately determine the nature and extent of the Security Breach, contain the incident by stopping the unauthorized practice, recover records, shut down the system that was breached, revoke access and/or correct weaknesses in physical security. Contractor shall report to the State: (i) the nature of the Security Breach; (ii) the State Data used or disclosed; (iii) who made the unauthorized use or received the unauthorized disclosure; (iv) what the Contractor has done or shall do to mitigate any deleterious effect of the unauthorized use or disclosure; and (v) what corrective action the Contractor has taken or shall take to prevent future similar unauthorized use or disclosure. The Contractor shall provide such other information, including a written report, as reasonably requested by the State. Contractor shall analyze and document the incident and provide all notices required by applicable law.

In accordance with Section 9 V.S.A. §2435(b)(3), the Contractor shall notify the Office of the Attorney General, or, if applicable, Vermont Department of Financial Regulation ("DFR"), within fourteen (14) business days of the Contractor's discovery of the Security Breach. The notice shall provide a preliminary description of the breach. The foregoing notice requirement shall be included in the subcontracts of any of Contractor's subcontractors, affiliates or agents which may be "data collectors" hereunder.

The Contractor agrees to fully cooperate with the State and assume responsibility at its own expense for the following, to be determined in the sole discretion of the State: (i) notice to affected consumers if the State determines it to be appropriate under the circumstances of any particular Security Breach, in a form recommended by the AGO; and (ii) investigation and remediation associated with a Security Breach, including but not limited to, outside investigation, forensics, counsel, crisis management and credit monitoring, in the sole determination of the State.

The Contractor agrees to comply with all applicable laws, as such laws may be amended from time to time (including, but not limited to, Chapter 62 of Title 9 of the Vermont Statutes and all applicable

State and federal laws, rules or regulations) that require notification in the event of unauthorized release of personally-identifiable information or other event requiring notification.

In addition to any other indemnification obligations in this Contract, the Contractor shall fully indemnify and save harmless the State from any costs, loss or damage to the State resulting from a Security Breach or the unauthorized disclosure of State Data by the Contractor, its officers, agents, employees, and subcontractors.

6.3 Security Policies. To the extent the Contractor or its subcontractors, affiliates or agents handles, collects, stores, disseminates or otherwise deals with State Data, the Contractor will have an information security policy that protects its systems and processes and media that may contain State Data from internal and external security threats and State Data from unauthorized disclosure, and will have provided a copy of such policy to the State. The Contractor shall provide the State with not less than thirty (30) days advance written notice of any material amendment or modification of such policies.

6.4 Operations Security. To the extent the Contractor or its subcontractors, affiliates or agents handles, collects, stores, disseminates or otherwise deals with State Data as a hosting provider, the Contractor shall cause an SSAE 18 SOC 2 Type 2 audit report to be conducted annually regarding the hosting provider(s). The audit results and the Contractor's plan for addressing or resolution of the audit results shall be shared with the State within sixty (60) days of the Contractor's receipt of the audit results.

7. CONTRACTOR'S REPRESENTATIONS AND WARRANTIES

7.1 General Representations and Warranties. The Contractor represents, warrants and covenants that:

- (i) The Contractor has all requisite power and authority to execute, deliver and perform its obligations under this Contract and the execution, delivery and performance of this Contract by the Contractor has been duly authorized by the Contractor.
- (ii) There is no outstanding litigation, arbitrated matter or other dispute to which the Contractor is a party which, if decided unfavorably to the Contractor, would reasonably be expected to have a material adverse effect on the Contractor's ability to fulfill its obligations under this Contract.
- (iii) The Contractor will comply with all laws applicable to its performance of the services and otherwise to the Contractor in connection with its obligations under this Contract.
- (iv) The Contractor (a) owns, or has the right to use under valid and enforceable agreements, all intellectual property rights reasonably necessary for and related to delivery of the services and provision of the Deliverables as set forth in this Contract; (b) shall be responsible for and have full authority to license all proprietary and/or third party software modules, including algorithms and protocols, that Contractor incorporates into its product; and (c) none of the Deliverables or other materials or technology provided by the Contractor to the State will infringe upon or misappropriate the intellectual property rights of any third party.
- (v) The Contractor has adequate resources to fulfill its obligations under this Contract.

- (vi) Neither Contractor nor Contractor's subcontractors has past state or federal violations, convictions or suspensions relating to miscoding of employees in NCCI job codes for purposes of differentiating between independent contractors and employees.

7.2 Contractor's Performance Warranties. Contractor represents and warrants to the State that:

- (i) All Deliverables will be free from material errors and shall perform in accordance with the specifications therefor for a period of at least one year.
- (ii) Contractor will provide to the State commercially reasonable continuous and uninterrupted access to the VCR, and will not interfere with the State's access to and use of the VCR during the term of this Contract;
- (iii) The VCR is compatible with and will operate successfully with any environment (including web browser and operating system) specified by the Contractor in its documentation;
- (iv) Each and all of the services shall be performed in a timely, diligent, professional and skillful manner, in accordance with the highest professional or technical standards applicable to such services, by qualified persons with the technical skills, training and experience to perform such services in the planned environment.
- (v) All Deliverables supplied by the Contractor to the State shall be transferred free and clear of any and all restrictions on the conditions of transfer, modification, licensing, sublicensing and free and clear of any and all liens, claims, mortgages, security interests, liabilities and encumbrances or any kind.
- (vi) Any time software is delivered to the State, whether delivered via electronic media or the internet, no portion of such software or the media upon which it is stored or delivered will have any type of software routine or other element which is designed to facilitate unauthorized access to or intrusion upon; or unrequested disabling or erasure of; or unauthorized interference with the operation of any hardware, software, data or peripheral equipment of or utilized by the State. Without limiting the generality of the foregoing, if the State believes that harmful code may be present in any software delivered hereunder, Contractor will, upon State's request, provide a new or clean install of the software. Notwithstanding the foregoing, Contractor assumes no responsibility for the State's negligence or failure to protect data from viruses, or any unintended modification, destruction or disclosure.
- (vii) To the extent Contractor resells commercial hardware or software it purchased from a third party, Contractor will, to the extent it is legally able to do so, pass through any such third-party warranties to the State and will reasonably cooperate in enforcing them. Such warranty pass-through will not relieve the Contractor from Contractor's warranty obligations set forth herein.

7.3 Limitation on Disclaimer. The express warranties set forth in this Contract shall be in lieu of all other warranties, express or implied.

7.4 Effect of Breach of Warranty. If, at any time during the term of this Contract, software or the results of Contractor's work fail to perform according to any warranty of Contractor under this Contract, the State shall promptly notify Contractor in writing of such alleged nonconformance, and Contractor shall, at its own expense and without limiting any other rights or remedies of the State hereunder, re-perform or replace any services that the State has determined to be unsatisfactory in

its reasonable discretion. Alternatively, with State consent, the Contractor may refund of all amounts paid by State for the nonconforming deliverable or service

8. PROFESSIONAL LIABILITY AND CYBER LIABILITY INSURANCE COVERAGE

In addition to the insurance required in Attachment C to this Contract, before commencing work on this Contract and throughout the term of this Contract, Contractor agrees to procure and maintain (a) Technology Professional Liability insurance for any and all services performed under this Contract, with minimum third-party coverage of \$2,000,000 per claim, \$4,000,000 aggregate; and (b) first party Breach Notification Coverage of not less than \$5,000,000.

Before commencing work on this Contract the Contractor must provide certificates of insurance to show that the foregoing minimum coverages are in effect.

With respect to the first party Breach Notification Coverage, Contractor shall name the State of Vermont and its officers and employees as additional insureds for liability arising out of this Contract.

9. LIMITATION OF LIABILITY.

CONTRACTOR'S LIABILITY FOR DAMAGES TO THE STATE ARISING OUT OF THE SUBJECT MATTER OF THIS CONTRACT SHALL NOT EXCEED THREE TIMES THE MAXIMUM AMOUNT PAYABLE UNDER THIS CONTRACT. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY INDIRECT, INCIDENTAL OR SPECIAL DAMAGES, DAMAGES WHICH ARE UNFORESEEABLE TO THE PARTIES AT THE TIME OF CONTRACTING, DAMAGES WHICH ARE NOT PROXIMATELY CAUSED BY A PARTY, SUCH AS LOSS OF ANTICIPATED BUSINESS, OR LOST PROFITS, INCOME, GOODWILL, OR REVENUE IN CONNECTION WITH OR ARISING OUT OF THE SUBJECT MATTER OF THIS CONTRACT. LIMITS OF LIABILITY FOR STATE CLAIMS SHALL NOT APPLY TO STATE CLAIMS ARISING OUT OF: (A) CONTRACTOR'S OBLIGATION TO INDEMNIFY THE STATE; (B) CONTRACTOR'S CONFIDENTIALITY OBLIGATIONS TO THE STATE; (C) PERSONAL INJURY OR DAMAGE TO REAL OR PERSONAL PROPERTY; (D) CONTRACTOR'S GROSS NEGLIGENCE, FRAUD OR INTENTIONAL MISCONDUCT; OR (E) VIOLATIONS OF THE STATE OF VERMONT FRAUDULENT CLAIMS ACT. IN NO EVENT SHALL THIS LIMIT OF LIABILITY BE CONSTRUED TO LIMIT CONTRACTOR'S LIABILITY FOR THIRD PARTY CLAIMS AGAINST THE CONTRACTOR WHICH MAY ARISE OUT OF CONTRACTOR'S ACTS OR OMISSIONS IN THE PERFORMANCE OF THIS CONTRACT.

The provisions of this Section shall apply notwithstanding any other provisions of this Contract or any other agreement.

10. TRADE SECRET, PATENT AND COPYRIGHT INFRINGEMENT

The State shall not be deemed to waive any of its rights or remedies at law or in equity in the event of Contractor's trade secret, patent and/or copyright infringement.

11. REMEDIES FOR DEFAULT; NO WAIVER OF REMEDIES

In the event either party is in default under this Contract, the non-defaulting party may, at its option, pursue any or all of the remedies available to it under this Contract, including termination for cause, and at law or in equity.

No delay or failure to exercise any right, power or remedy accruing to either party upon breach or default by the other under this Contract shall impair any such right, power or remedy, or shall be construed as a waiver of any such right, power or remedy, nor shall any waiver of a single breach or default be deemed a waiver of any subsequent breach or default. All waivers must be in writing.

12. NO ASSUMPTION OF COSTS

Any requirement that the State defend or indemnify Contractor or otherwise be liable for the expenses or reimbursement, including attorneys' fees, collection costs or license verification costs of Contractor, is hereby deleted from the Contractor Documents.

13. TERMINATION

Upon termination of this Contract for any reason whatsoever, Contractor shall immediately deliver to the State all State information, State Intellectual Property or State Data (including without limitation any Deliverables for which State has made payment in whole or in part) ("State Materials"), that are in the possession or under the control of Contractor in whatever stage of development and form of recordation such State property is expressed or embodied at that time.

In the event the Contractor ceases conducting business in the normal course, becomes insolvent, makes a general assignment for the benefit of creditors, suffers or permits the appointment of a receiver for its business or assets or avails itself of or becomes subject to any proceeding under the Federal Bankruptcy Act or any statute of any state relating to insolvency or the protection of rights of creditors, the Contractor shall immediately return all State Materials to State control; including, but not limited to, making all necessary access to applicable remote systems available to the State for purposes of downloading all State Materials.

Contractor shall reasonably cooperate with other parties in connection with all services to be delivered under this Contract, including without limitation any successor provider to whom State Materials are to be transferred in connection with termination. Contractor shall assist the State in exporting and extracting the State Materials, in a format usable without the use of the Services and as agreed to by State, at no additional cost.

Any transition services requested by State involving additional knowledge transfer and support may be subject to a contract amendment for a fixed fee or at rates to be mutually agreed upon by the parties.

If the State determines in its sole discretion that a documented transition plan is necessary, then no later than sixty (60) days prior to termination, Contractor and the State shall mutually prepare a Transition Plan identifying transition services to be provided.

14. CONTRACTOR BANKRUPTCY.

Contractor acknowledges that if Contractor, as a debtor in possession, or a trustee in bankruptcy in a case under Section 365(n) of Title 11, United States Code (the "Bankruptcy Code"), rejects this Contract, the State may elect to retain its rights under this Contract as provided in Section 365(n) of the Bankruptcy Code. Upon written request of the State to Contractor or the Bankruptcy Trustee, Contractor or such Bankruptcy Trustee shall not interfere with the rights of the State as provided in this Contract, including the right to obtain the State Intellectual Property.

15. SOFTWARE LICENSEE COMPLIANCE REPORT.

In lieu of any requirement that may be in a Contractor Document that the State provide the Contractor with access to its System for the purpose of determining State compliance with the terms of the

Contractor Document, upon request and not more frequently than annually, the State will provide Contractor with a certified report concerning the State's use of any software licensed for State use pursuant this Contract. The parties agree that any non-compliance indicated by the report shall not constitute infringement of the licensor's intellectual property rights, and that settlement payment mutually agreeable to the parties shall be the exclusive remedy for any such non-compliance.

16. OTHER CONDITIONS

16.1 Back-Up Policies. Documentation of the Contractor's back-up policies shall be provided to the State within 30 days of execution of this Contract. The Contractor shall provide the State with not less than thirty (30) days advance written notice of any material amendment or modification of such policies.

16.2 Subcontractors. Contractor shall be responsible for directing and supervising each of its subcontractors and any other person performing any of the Work under an agreement with Contractor. Contractor has provided to the State a list of all subcontractors and subcontractors' subcontractors, together with the identity of those subcontractors' workers compensation insurance providers. Contractor shall be responsible and liable to the State for all acts or omissions of subcontractors and any other person performing any of the Services under an agreement with Contractor or any subcontractor.

16.3 Further Limitation of Contractor Liability. The Contractor shall not be liable for defects in or the accuracy, completeness, merchantable quality or fitness for any purpose of the DocSite source code as delivered by Covisint. Further, Contractor shall not be liable to the State for any liability, damages, loss and/or cost or expense incurred in respect of any claim, damage, action, suit, or proceeding to the extent arising out of or related to the acts or omissions of Covisint.

16.4 Sovereign Immunity. The Contractor acknowledges that the State reserves all immunities, defenses, rights or actions arising out of the State's sovereign status or under the Eleventh Amendment to the United States Constitution. No waiver of any such immunities, defenses, rights or actions shall be implied or otherwise deemed to exist by reason of the State's entry into this Contract.

16.5 Dispute Resolution.

16.5.1 Governing Law; Jurisdiction. The Contractor agrees that this Contract shall be governed by and construed in accordance with the laws of the State of Vermont and that any action or proceeding brought by either the State or the Contractor in connection with this Contract shall be brought and enforced in the Superior Court of the State of Vermont, Civil Division, Washington Unit. The Contractor irrevocably submits to the jurisdiction of such court in respect of any such action or proceeding. The State shall not be liable for attorneys' fees in any proceeding.

16.5.2 Contractor Default. The Contractor shall be in default under this Contract if Contractor commits any material breach of any covenant, warranty, obligation or certification under this Contract, fails to perform the Services in conformance with the specifications and warranties provided in this Contract, or clearly manifests an intent not to perform future obligations under this Contract, and such breach or default is not cured, or such manifestation of an intent not to perform is not corrected by reasonable written assurances of performance within thirty (30) days

after delivery of the State's notice period, or such longer period as the State may specify in such notice.

16.5.3 State Default. State shall be in default under this Contract if State commits any material breach or default of any covenant, warranty, or obligation under this Contract and State fails to cure such failure within thirty (30) business days after delivery of Contractor's notice or such longer period as Contractor may specify in such notice.

16.5.4 Trial by Jury. The Contractor acknowledges and agrees that public policy prohibits the State from agreeing to arbitration and/or from waiving any right to a trial by jury. Therefore, Contractor further acknowledges and agrees that, to the extent a Contractor Document expressly provides for arbitration or waiver of the State's right to a jury trial of the Contractor and/or other third parties by the State, such sections shall be waived and shall have no force and effect with respect to the State.

16.5.5 Continuity of Performance. In the event of a dispute between the Contractor and the State, each party will continue to perform its obligations under this Contract during the resolution of such dispute unless and until this Contract is terminated in accordance with its terms.

16.6 Access to State Data. Within ten (10) business days of a request by State, and immediately upon termination, the Contractor will make available to State a complete and secure (i.e. encrypted and appropriately authenticated) download file of State Intellectual Property and State Data in a format acceptable to State including all schema and transformation definitions and/or delimited text files with documented, detailed schema definitions along with attachments in their native format which are in the possession or under the control of the Contractor in whatever stage of development and form of recordation such State property is expressed or embodied at that time. Provided, however, in the event the Contractor ceases conducting business in the normal course, becomes insolvent, makes a general assignment for the benefit of creditors, suffers or permits the appointment of a receiver for its business or assets or avails itself of or becomes subject to any proceeding under the Federal Bankruptcy Act or any statute of any state relating to insolvency or the protection of rights of creditors, the Contractor shall immediately return all State Intellectual Property and State Data to State control; including, but not limited to, making all necessary access to applicable remote systems available to the State for purposes of downloading all State Data.

The Contractor's policies regarding the retrieval of data upon the termination of services have been made available to the State upon execution of this Contract under separate cover. The Contractor shall provide the State with not less than thirty (30) days advance written notice of any material amendment or modification of such policies.

16.7 State Facilities. During the term of this Contract, the State may make available to Contractor space in any State facility applicable to the Services, subject to the conditions that Contractor: (i) shall ~~only use such space solely and exclusively for and in support of the Services;~~ (ii) shall not use State facilities to provide goods or services to or for the benefit of any third party; (iii) shall comply with the leases, security, use and rules and agreements applicable to the State facilities; (iv) shall not use State facilities for any unlawful purpose; (v) shall comply with all policies and procedures governing access to and use of State facilities that are provided to Contractor in writing; (vi) instruct Contractor personnel not to photograph or record, duplicate, disclose, transmit or communicate any State information, materials, data or other items, tangible or intangible, obtained or available as a result of permitted use of

State facilities; and (vii) return such space to the State in the same condition it was in at the commencement of this Contract, ordinary wear and tear excepted. State facilities will be made available to Contractor on an "AS IS, WHERE IS" basis, with no warranties whatsoever.

16.8 Conflicts of Interest. Contractor agrees that during the term of this Contract, its performance shall be solely in the best interest of the State. Contractor will not perform services for any person or entity which has also contracted with the State of Vermont in connection with the same project, without express written consent of the State. Contractor shall fully disclose, in writing, any such conflicts of interest, including the nature and extent of the work to be performed for any other person or entity so that the State may be fully informed prior to giving any consent. Contractor agrees that the failure to disclose any such conflicts shall be deemed an event of default under this Contract, and this Contract shall be terminable immediately.

16.9 Miscellaneous.

16.9.1 Taxes. Most State purchases are not subject to federal or state sales or excise taxes and must be invoiced tax free. An exemption certificate will be furnished upon request covering taxable items. The Contractor agrees to pay all Vermont taxes which may be due as a result of this Contract.

16.9.2 Force Majeure. Neither the State nor the Contractor shall be liable to the other for any failure or delay of performance of any obligations hereunder to the extent such failure or delay shall have been wholly or principally caused by acts or events beyond its reasonable control making it illegal or impossible to perform their obligations under this Contract, including without limitation, acts of God, acts of civil or military authority, fires, floods, earthquakes or other natural disasters, war or riots. If a party asserts Force Majeure as an excuse for failure to perform the party's obligation, then the nonperforming party must prove that it made all reasonable efforts to remove, eliminate or minimize such cause of delay or damages, diligently pursued performance of its obligations under this Contract, substantially fulfilled all non-excused obligations, and timely notified the other party of the likelihood or actual occurrence of an event described in this paragraph.

16.9.3 Marketing. Neither party to this Contract shall refer to the other party in any publicity materials, information pamphlets, press releases, research reports, advertising, sales promotions, trade shows, or marketing materials or similar communications to third parties except with the prior written consent of such party prior to release.

16.10 Audit. Contractor will maintain and cause its permitted contractors to maintain a complete audit trail of all transactions and activities, financial and non-financial, in connection with this Contract. Contractor will provide to the State, its internal or external auditors, clients, inspectors, regulators and other designated representatives, at reasonable times (and in the case of State or federal regulators, at any time required by such regulators) access to Contractor personnel and to any and all Contractor facilities or where the required information, data and records are maintained, for the purpose of performing audits and inspections (including unannounced and random audits) of Contractor and/or Contractor personnel and/or any or all of the records, data and information applicable to this Contract. At a minimum, such audits, inspections and access shall be conducted to the extent permitted or required by any laws applicable to the State or Contractor (or such higher or more rigorous standards, if any, as State or Contractor applies to its own similar businesses, operations or activities), to (i) verify the

accuracy of charges and invoices; (ii) verify the integrity of State Data and examine the systems that process, store, maintain, support and transmit that data; (iii) examine and verify Contractor's and/or its permitted contractors' operations and security procedures and controls; (iv) examine and verify Contractor's and/or its permitted contractors' disaster recovery planning and testing, business resumption and continuity planning and testing, contingency arrangements and insurance coverage; and (v) examine Contractor's and/or its permitted contractors' performance of the Services including audits of: (1) practices and procedures; (2) systems, communications and information technology; (3) general controls and physical and data/information security practices and procedures; (4) quality initiatives and quality assurance, (5) contingency and continuity planning, disaster recovery and back-up procedures for processes, resources and data; (6) Contractor's and/or its permitted contractors' efficiency and costs in performing Services; (7) compliance with the terms of this Contract and applicable laws, and (9) any other matters reasonably requested by the State. Contractor shall provide and cause its permitted contractors to provide full cooperation to such auditors, inspectors, regulators and representatives in connection with audit functions and with regard to examinations by regulatory authorities, including the installation and operation of audit software.

16.11 Vulnerability Testing. The Contractor shall run quarterly vulnerability assessments and promptly report results to the State. Contractor shall remediate all critical issues within 90 days of the assessment, all medium issues within 120 days of the assessment and low issues within 180 days of the assessment. Contractor shall obtain written State pre-approval for any exceptions. Once remediation is complete, Contractor shall re-perform the assessment.

APPROVAL:

e-Signed by Anna Cykon
on 2017-12-20 21:00:56 GMT

ASSISTANT ATTORNEY GENERAL

DATE: December 20, 2017

State of Vermont

**ATTACHMENT E
BUSINESS ASSOCIATE AGREEMENT (JULY 7, 2017)**

This Business Associate Agreement ("Agreement") is entered into by and between the State of Vermont Agency of Human Services, operating by and through its Department of Vermont Health Access ("Covered Entity") and Capitol Health Associates, LLC ("Business Associate") as of January 1, 2018 ("Effective Date"). This Agreement supplements and is made a part of the contract/grant to which it is attached.

Covered Entity and Business Associate enter into this Agreement to comply with standards promulgated under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), including the Standards for the Privacy of Individually Identifiable Health Information, at 45 CFR Parts 160 and 164 ("Privacy Rule"), and the Security Standards, at 45 CFR Parts 160 and 164 ("Security Rule"), as amended by Subtitle D of the Health Information Technology for Economic and Clinical Health Act (HITECH), and any associated federal rules and regulations.

The parties agree as follows:

1. Definitions. All capitalized terms used but not otherwise defined in this Agreement have the meanings set forth in 45 CFR Parts 160 and 164 as amended by HITECH and associated federal rules and regulations.

"Agent" means those person(s) who are agents(s) of the Business Associate, in accordance with the Federal common law of agency, as referenced in 45 CFR § 160.402(c).

"Breach" means the acquisition, access, use or disclosure of protected health information (PHI) which compromises the security or privacy of the PHI, except as excluded in the definition of Breach in 45 CFR § 164.402.

"Business Associate" shall have the meaning given in 45 CFR § 160.103.

"Individual" includes a person who qualifies as a personal representative in accordance with 45 CFR § 164.502(g).

"Protected Health Information" or PHI shall have the meaning given in 45 CFR § 160.103, limited to the information created or received by Business Associate from or on behalf of Agency.

"Security Incident" means any known successful or unsuccessful attempt by an authorized or unauthorized individual to inappropriately use, disclose, modify, access, or destroy any information or interference with system operations in an information system.

"Services" includes all work performed by the Business Associate for or on behalf of Covered Entity that requires the use and/or disclosure of protected health information to perform a business associate function described in 45 CFR § 160.103 under the definition of Business Associate.

"Subcontractor" means a person or organization to whom a Business Associate delegates a function, activity or service, other than in the capacity of a member of the workforce of the Business Associate. For purposes of this Agreement, the term Subcontractor includes Subgrantees.

2. Identification and Disclosure of Privacy and Security Offices. Business Associate and Subcontractors shall provide, within ten (10) days of the execution of this agreement, written notice to the Covered Entity's contract/grant manager the names and contact information of both the HIPAA

Privacy Officer and HIPAA Security Officer. This information must be updated any time either of these contacts changes.

3. Permitted and Required Uses/Disclosures of PHI.

3.1 Except as limited in this Agreement, Business Associate may use or disclose PHI to perform Services, as specified in the underlying grant or contract with Covered Entity. The uses and disclosures of Business Associate are limited to the minimum necessary, to complete the tasks or to provide the services associated with the terms of the underlying agreement. Business Associate shall not use or disclose PHI in any manner that would constitute a violation of the Privacy Rule if used or disclosed by Covered Entity in that manner. Business Associate may not use or disclose PHI other than as permitted or required by this Agreement or as Required by Law.

3.2 Business Associate may make PHI available to its employees who need access to perform Services provided that Business Associate makes such employees aware of the use and disclosure restrictions in this Agreement and binds them to comply with such restrictions. Business Associate may only disclose PHI for the purposes authorized by this Agreement: (a) to its agents and Subcontractors in accordance with Sections 9 and 18 or, (b) as otherwise permitted by Section 3.

3.3 Business Associate shall be directly liable under HIPAA for impermissible uses and disclosures of the PHI it handles on behalf of Covered Entity, and for impermissible uses and disclosures, by Business Associate's Subcontractor(s), of the PHI that Business Associate handles on behalf of Covered Entity and that it passes on to Subcontractors.

4. Business Activities. Business Associate may use PHI received in its capacity as a Business Associate to Covered Entity if necessary for Business Associate's proper management and administration or to carry out its legal responsibilities. Business Associate may disclose PHI received in its capacity as Business Associate to Covered Entity for Business Associate's proper management and administration or to carry out its legal responsibilities if a disclosure is Required by Law or if Business Associate obtains reasonable written assurances via a written agreement from the person to whom the information is to be disclosed that the PHI shall remain confidential and be used or further disclosed only as Required by Law or for the purpose for which it was disclosed to the person, and the Agreement requires the person or entity to notify Business Associate, within two (2) business days (who in turn will notify Covered Entity within two (2) business days after receiving notice of a Breach as specified in Section 6.1), in writing of any Breach of Unsecured PHI of which it is aware. Uses and disclosures of PHI for the purposes identified in Section 3 must be of the minimum amount of PHI necessary to accomplish such purposes.

5. Safeguards. Business Associate, its Agent(s) and Subcontractor(s) shall implement and use appropriate safeguards to prevent the use or disclosure of PHI other than as provided for by this Agreement. With respect to any PHI that is maintained in or transmitted by electronic media, Business Associate or its Subcontractor(s) shall comply with 45 CFR sections 164.308 (administrative safeguards), 164.310 (physical safeguards), 164.312 (technical safeguards) and 164.316 (policies and procedures and documentation requirements). Business Associate or its Agent(s) and Subcontractor(s) shall identify in writing upon request from Covered Entity all of the safeguards that it uses to prevent impermissible uses or disclosures of PHI.

6. Documenting and Reporting Breaches.

6.1 Business Associate shall report to Covered Entity any Breach of Unsecured PHI, including Breaches reported to it by a Subcontractor, as soon as it (or any of its employees or agents) becomes aware of any such Breach, and in no case later than two (2) business days after it (or any of its employees or agents) becomes aware of the Breach, except when a law enforcement official determines that a notification would impede a criminal investigation or cause damage to national security.

6.2 Business Associate shall provide Covered Entity with the names of the individuals whose Unsecured PHI has been, or is reasonably believed to have been, the subject of the Breach and any other available information that is required to be given to the affected individuals, as set forth in 45 CFR § 164.404(c), and, if requested by Covered Entity, information necessary for Covered Entity to investigate the impermissible use or disclosure. Business Associate shall continue to provide to Covered Entity information concerning the Breach as it becomes available to it. Business Associate shall require its Subcontractor(s) to agree to these same terms and conditions.

6.3 When Business Associate determines that an impermissible acquisition, use or disclosure of PHI by a member of its workforce is not a Breach, as that term is defined in 45 CFR § 164.402, and therefore does not necessitate notice to the impacted individual(s), it shall document its assessment of risk, conducted as set forth in 45 CFR § 402(2). When requested by Covered Entity, Business Associate shall make its risk assessments available to Covered Entity. It shall also provide Covered Entity with 1) the name of the person(s) making the assessment, 2) a brief summary of the facts, and 3) a brief statement of the reasons supporting the determination of low probability that the PHI had been compromised. When a breach is the responsibility of a member of its Subcontractor's workforce, Business Associate shall either 1) conduct its own risk assessment and draft a summary of the event and assessment or 2) require its Subcontractor to conduct the assessment and draft a summary of the event. In either case, Business Associate shall make these assessments and reports available to Covered Entity.

6.4 Business Associate shall require, by contract, a Subcontractor to report to Business Associate and Covered Entity any Breach of which the Subcontractor becomes aware, no later than two (2) business days after becomes aware of the Breach.

7. Mitigation and Corrective Action. Business Associate shall mitigate, to the extent practicable, any harmful effect that is known to it of an impermissible use or disclosure of PHI, even if the impermissible use or disclosure does not constitute a Breach. Business Associate shall draft and carry out a plan of corrective action to address any incident of impermissible use or disclosure of PHI. If requested by Covered Entity, Business Associate shall make its mitigation and corrective action plans available to Covered Entity. Business Associate shall require a Subcontractor to agree to these same terms and conditions.

8. Providing Notice of Breaches.

8.1 If Covered Entity determines that an impermissible acquisition, access, use or disclosure of PHI for which one of Business Associate's employees or agents was responsible constitutes a Breach as defined in 45 CFR § 164.402, and if requested by Covered Entity, Business Associate shall provide notice to the individual(s) whose PHI has been the subject of the Breach. When

requested to provide notice, Business Associate shall consult with Covered Entity about the timeliness, content and method of notice, and shall receive Covered Entity's approval concerning these elements. The cost of notice and related remedies shall be borne by Business Associate.

8.2 If Covered Entity or Business Associate determines that an impermissible acquisition, access, use or disclosure of PHI by a Subcontractor of Business Associate constitutes a Breach as defined in 45 CFR § 164.402, and if requested by Covered Entity or Business Associate, Subcontractor shall provide notice to the individual(s) whose PHI has been the subject of the Breach. When Covered Entity requests that Business Associate or its Subcontractor provide notice, Business Associate shall either 1) consult with Covered Entity about the specifics of the notice as set forth in section 8.1, above, or 2) require, by contract, its Subcontractor to consult with Covered Entity about the specifics of the notice as set forth in section 8.1

8.3 The notice to affected individuals shall be provided as soon as reasonably possible and in no case later than 60 calendar days after Business Associate reported the Breach to Covered Entity.

8.4 The notice to affected individuals shall be written in plain language and shall include, to the extent possible, 1) a brief description of what happened, 2) a description of the types of Unsecured PHI that were involved in the Breach, 3) any steps individuals can take to protect themselves from potential harm resulting from the Breach, 4) a brief description of what the Business Associate is doing to investigate the Breach, to mitigate harm to individuals and to protect against further Breaches, and 5) contact procedures for individuals to ask questions or obtain additional information, as set forth in 45 CFR § 164.404(c).

8.5 Business Associate shall notify individuals of Breaches as specified in 45 CFR § 164.404(d) (methods of individual notice). In addition, when a Breach involves more than 500 residents of Vermont, Business Associate shall, if requested by Covered Entity, notify prominent media outlets serving Vermont, following the requirements set forth in 45 CFR § 164.406.

9. **Agreements with Subcontractors.** Business Associate shall enter into a Business Associate Agreement with any Subcontractor to whom it provides PHI received from Covered Entity or created or received by Business Associate on behalf of Covered Entity in which the Subcontractor agrees to the same restrictions and conditions that apply through this Agreement to Business Associate with respect to such PHI. Business Associate must enter into this Business Associate Agreement before any use by or disclosure of PHI to such agent. The written agreement must identify Covered Entity as a direct and intended third party beneficiary with the right to enforce any breach of the agreement concerning the use or disclosure of PHI. Business Associate shall provide a copy of the Business Associate Agreement it enters into with a subcontractor to Covered Entity upon request. Business associate may not make any disclosure of PHI to any Subcontractor without prior written consent of Covered Entity.

10. **Access to PHI.** Business Associate shall provide access to PHI in a Designated Record Set to Covered Entity or as directed by Covered Entity to an Individual to meet the requirements under 45 CFR § 164.524. Business Associate shall provide such access in the time and manner reasonably designated by Covered Entity. Within three (3) business days, Business Associate shall forward to Covered Entity for handling any request for access to PHI that Business Associate directly receives from an Individual.

11. Amendment of PHI. Business Associate shall make any amendments to PHI in a Designated Record Set that Covered Entity directs or agrees to pursuant to 45 CFR § 164.526, whether at the request of Covered Entity or an Individual. Business Associate shall make such amendments in the time and manner reasonably designated by Covered Entity. Within three (3) business days, Business Associate shall forward to Covered Entity for handling any request for amendment to PHI that Business Associate directly receives from an Individual.

12. Accounting of Disclosures. Business Associate shall document disclosures of PHI and all information related to such disclosures as would be required for Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 CFR § 164.528. Business Associate shall provide such information to Covered Entity or as directed by Covered Entity to an Individual, to permit Covered Entity to respond to an accounting request. Business Associate shall provide such information in the time and manner reasonably designated by Covered Entity. Within three (3) business days, Business Associate shall forward to Covered Entity for handling any accounting request that Business Associate directly receives from an Individual.

13. Books and Records. Subject to the attorney-client and other applicable legal privileges, Business Associate shall make its internal practices, books, and records (including policies and procedures and PHI) relating to the use and disclosure of PHI received from Covered Entity or created or received by Business Associate on behalf of Covered Entity available to the Secretary of HHS in the time and manner designated by the Secretary. Business Associate shall make the same information available to Covered Entity, upon Covered Entity's request, in the time and manner reasonably designated by Covered Entity so that Covered Entity may determine whether Business Associate is in compliance with this Agreement.

14. Termination.

14.1 This Agreement commences on the Effective Date and shall remain in effect until terminated by Covered Entity or until all of the PHI provided by Covered Entity to Business Associate or created or received by Business Associate on behalf of Covered Entity is destroyed or returned to Covered Entity subject to Section 19.8.

14.2 If Business Associate breaches any material term of this Agreement, Covered Entity may either: (a) provide an opportunity for Business Associate to cure the breach and Covered Entity may terminate the contract or grant without liability or penalty if Business Associate does not cure the breach within the time specified by Covered Entity; or (b) immediately terminate the contract or grant without liability or penalty if Covered Entity believes that cure is not reasonably possible; or (c) if neither termination nor cure are feasible, Covered Entity shall report the breach to the Secretary. Covered Entity has the right to seek to cure any breach by Business Associate and this right, regardless of whether Covered Entity cures such breach, does not lessen any right or remedy available to Covered Entity at law, in equity, or under the contract or grant, nor does it lessen Business Associate's responsibility for such breach or its duty to cure such breach.

15. Return/Destruction of PHI.

15.1 Business Associate in connection with the expiration or termination of the contract or grant shall return or destroy, at the discretion of the Covered Entity, all PHI received from Covered Entity or created or received by Business Associate on behalf of Covered Entity

pursuant to this contract or grant that Business Associate still maintains in any form or medium (including electronic) within thirty (30) days after such expiration or termination. Business Associate shall not retain any copies of the PHI. Business Associate shall certify in writing for Covered Entity (1) when all PHI has been returned or destroyed and (2) that Business Associate does not continue to maintain any PHI. Business Associate is to provide this certification during this thirty (30) day period.

15.2 Business Associate shall provide to Covered Entity notification of any conditions that Business Associate believes make the return or destruction of PHI infeasible. If Covered Entity agrees that return or destruction is infeasible, Business Associate shall extend the protections of this Agreement to such PHI and limit further uses and disclosures of such PHI to those purposes that make the return or destruction infeasible for so long as Business Associate maintains such PHI. This shall also apply to all Agents and Subcontractors of Business Associate.

16. **Penalties.** Business Associate understands that: (a) there may be civil or criminal penalties for misuse or misappropriation of PHI and (b) violations of this Agreement may result in notification by Covered Entity to law enforcement officials and regulatory, accreditation, and licensure organizations.

17. **Training.** Business Associate understands that it is its obligation to comply with the law and shall provide appropriate training and education to ensure compliance with this Agreement. If requested by Covered Entity, Business Associate shall participate in AHS training regarding the use, confidentiality, and security of PHI, however, participation in such training shall not supplant nor relieve Business Associate of its obligations under this Agreement to independently assure compliance with the law and this Agreement.

18. **Security Rule Obligations.** The following provisions of this section apply to the extent that Business Associate creates, receives, maintains or transmits Electronic PHI on behalf of Covered Entity.

18.1 Business Associate shall implement and use administrative, physical, and technical safeguards in compliance with 45 CFR sections 164.308, 164.310, and 164.312 with respect to the Electronic PHI that it creates, receives, maintains or transmits on behalf of Covered Entity. Business Associate shall identify in writing upon request from Covered Entity all of the safeguards that it uses to protect such Electronic PHI.

18.2 Business Associate shall ensure that any Agent and Subcontractor to whom it provides Electronic PHI agrees in a written agreement to implement and use administrative, physical, and technical safeguards that reasonably and appropriately protect the Confidentiality, Integrity and Availability of the Electronic PHI. Business Associate must enter into this written agreement before any use or disclosure of Electronic PHI by such Agent or Subcontractor. The written agreement must identify Covered Entity as a direct and intended third party beneficiary with the right to enforce any breach of the agreement concerning the use or disclosure of Electronic PHI. Business Associate shall provide a copy of the written agreement to Covered Entity upon request. Business Associate may not make any disclosure of Electronic PHI to any Agent or Subcontractor without the prior written consent of Covered Entity.

18.3 Business Associate shall report in writing to Covered Entity any Security Incident pertaining to such Electronic PHI (whether involving Business Associate or an Agent or Subcontractor). Business Associate shall provide this written report as soon as it becomes aware

of any such Security Incident, and in no case later than two (2) business days after it becomes aware of the incident. Business Associate shall provide Covered Entity with the information necessary for Covered Entity to investigate any such Security Incident.

18.4 Business Associate shall comply with any reasonable policies and procedures Covered Entity implements to obtain compliance under the Security Rule.

19. Miscellaneous.

19.1 In the event of any conflict or inconsistency between the terms of this Agreement and the terms of the contract/grant, the terms of this Agreement shall govern with respect to its subject matter. Otherwise, the terms of the contract/grant continue in effect.

19.2 Business Associate shall cooperate with Covered Entity to amend this Agreement from time to time as is necessary for Covered Entity to comply with the Privacy Rule, the Security Rule, or any other standards promulgated under HIPAA.

19.3 Any ambiguity in this Agreement shall be resolved to permit Covered Entity to comply with the Privacy Rule, Security Rule, or any other standards promulgated under HIPAA.

19.4 In addition to applicable Vermont law, the parties shall rely on applicable federal law (e.g., HIPAA, the Privacy Rule and Security Rule, and the HIPAA omnibus final rule) in construing the meaning and effect of this Agreement.

19.5 As between Business Associate and Covered Entity, Covered Entity owns all PHI provided by Covered Entity to Business Associate or created or received by Business Associate on behalf of Covered Entity.

19.6 Business Associate shall abide by the terms and conditions of this Agreement with respect to all PHI it receives from Covered Entity or creates or receives on behalf of Covered Entity even if some of that information relates to specific services for which Business Associate may not be a "Business Associate" of Covered Entity under the Privacy Rule.

19.7 Business Associate is prohibited from directly or indirectly receiving any remuneration in exchange for an individual's PHI. Business Associate will refrain from marketing activities that would violate HIPAA, including specifically Section 13406 of the HITECH Act. Reports or data containing the PHI may not be sold without Agency's or the affected individual's written consent.

19.8 The provisions of this Agreement that by their terms encompass continuing rights or responsibilities shall survive the expiration or termination of this Agreement. For example: (a) ~~the provisions of this Agreement shall continue to apply if Covered Entity determines that it~~ would be infeasible for Business Associate to return or destroy PHI as provided in Section 14.2 and (b) the obligation of Business Associate to provide an accounting of disclosures as set forth in Section 12 survives the expiration or termination of this Agreement with respect to accounting requests, if any, made after such expiration or termination.

ATTACHMENT F
AGENCY OF HUMAN SERVICES' CUSTOMARY CONTRACT PROVISIONS
(DECEMBER 31, 2016)

1. **Definitions:** For purposes of this Attachment F, the term "Agreement" shall mean the form of the contract or grant, with all of its parts, into which this Attachment F is incorporated. The meaning of the term "Party" when used in this Attachment F shall mean any named party to this Agreement *other than* the State of Vermont, the Agency of Human Services (AHS) and any of the departments, boards, offices and business units named in this Agreement. As such, the term "Party" shall mean, when used in this Attachment F, the Contractor or Grantee with whom the State of Vermont is executing this Agreement. If Party, when permitted to do so under this Agreement, seeks by way of any subcontract, sub-grant or other form of provider agreement to employ any other person or entity to perform any of the obligations of Party under this Agreement, Party shall be obligated to ensure that all terms of this Attachment F are followed. As such, the term "Party" as used herein shall also be construed as applicable to, and describing the obligations of, any subcontractor, sub-recipient or sub-grantee of this Agreement. Any such use or construction of the term "Party" shall not, however, give any subcontractor, sub-recipient or sub-grantee any substantive right in this Agreement without an express written agreement to that effect by the State of Vermont.
2. **Agency of Human Services:** The Agency of Human Services is responsible for overseeing all contracts and grants entered by any of its departments, boards, offices and business units, however denominated. The Agency of Human Services, through the business office of the Office of the Secretary, and through its Field Services Directors, will share with any named AHS-associated party to this Agreement oversight, monitoring and enforcement responsibilities. Party agrees to cooperate with both the named AHS-associated party to this contract and with the Agency of Human Services itself with respect to the resolution of any issues relating to the performance and interpretation of this Agreement, payment matters and legal compliance.
3. **Medicaid Program Parties** (*applicable to any Party providing services and supports paid for under Vermont's Medicaid program and Vermont's Global Commitment to Health Waiver*):

Inspection and Retention of Records: In addition to any other requirement under this Agreement or at law, Party must fulfill all state and federal legal requirements, and will comply with all requests appropriate to enable the Agency of Human Services, the U.S. Department of Health and Human Services (along with its Inspector General and the Centers for Medicare and Medicaid Services), the Comptroller General, the Government Accounting Office, or any of their designees: (i) to evaluate through inspection or other means the quality, appropriateness, and timeliness of services performed under this Agreement; and (ii) to inspect and audit any records, financial data, contracts, computer or other electronic systems of Party relating to the performance of services under Vermont's Medicaid program and Vermont's Global Commitment to Health Waiver. Party will retain for ten years all documents required to be retained pursuant to 42 CFR 438.3(u).

Subcontracting for Medicaid Services: Notwithstanding any permitted subcontracting of services to be performed under this Agreement, Party shall remain responsible for ensuring that this Agreement is fully performed according to its terms, that subcontractor remains in compliance with the terms hereof, and that subcontractor complies with all state and federal laws and regulations relating to the Medicaid program in Vermont. Subcontracts, and any service provider agreements entered into by Party in connection with the performance of this Agreement, must clearly specify in

writing the responsibilities of the subcontractor or other service provider and Party must retain the authority to revoke its subcontract or service provider agreement or to impose other sanctions if the performance of the subcontractor or service provider is inadequate or if its performance deviates from any requirement of this Agreement. Party shall make available on request all contracts, subcontracts and service provider agreements between the Party, subcontractors and other service providers to the Agency of Human Services and any of its departments as well as to the Center for Medicare and Medicaid Services.

Medicaid Notification of Termination Requirements: Party shall follow the Department of Vermont Health Access Managed-Care-Organization enrollee-notification requirements, to include the requirement that Party provide timely notice of any termination of its practice.

Encounter Data: Party shall provide encounter data to the Agency of Human Services and/or its departments and ensure further that the data and services provided can be linked to and supported by enrollee eligibility files maintained by the State.

Federal Medicaid System Security Requirements Compliance: Party shall provide a security plan, risk assessment, and security controls review document within three months of the start date of this Agreement (and update it annually thereafter) in order to support audit compliance with 45 CFR 95.621 subpart F, *ADP System Security Requirements and Review Process*.

4. **Workplace Violence Prevention and Crisis Response** (*applicable to any Party and any subcontractors and sub-grantees whose employees or other service providers deliver social or mental health services directly to individual recipients of such services*):

Party shall establish a written workplace violence prevention and crisis response policy meeting the requirements of Act 109 (2016), 33 VSA §8201(b), for the benefit of employees delivering direct social or mental health services. Party shall, in preparing its policy, consult with the guidelines promulgated by the U.S. Occupational Safety and Health Administration for *Preventing Workplace Violence for Healthcare and Social Services Workers*, as those guidelines may from time to time be amended.

Party, through its violence protection and crisis response committee, shall evaluate the efficacy of its policy, and update the policy as appropriate, at least annually. The policy and any written evaluations thereof shall be provided to employees delivering direct social or mental health services.

Party will ensure that any subcontractor and sub-grantee who hires employees (or contracts with service providers) who deliver social or mental health services directly to individual recipients of such services, complies with all requirements of this Section.

5. **Non-Discrimination:**

Party shall not discriminate, and will prohibit its employees, agents, subcontractors, sub-grantees and other service providers from discrimination, on the basis of age under the Age Discrimination Act of 1975, on the basis of handicap under section 504 of the Rehabilitation Act of 1973, on the basis of sex under Title IX of the Education Amendments of 1972, and on the basis of race, color or national origin under Title VI of the Civil Rights Act of 1964. Party shall not refuse, withhold from or deny to any person the benefit of services, facilities, goods, privileges, advantages, or benefits of public

accommodation on the basis of disability, race, creed, color, national origin, marital status, sex, sexual orientation or gender identity as provided by Title 9 V.S.A. Chapter 139.

No person shall on the grounds of religion or on the grounds of sex (including, on the grounds that a woman is pregnant), be excluded from participation in, be denied the benefits of, or be subjected to discrimination, to include sexual harassment, under any program or activity supported by State of Vermont and/or federal funds.

Party further shall comply with the non-discrimination requirements of Title VI of the Civil Rights Act of 1964, 42 USC Section 2000d, et seq., and with the federal guidelines promulgated pursuant to Executive Order 13166 of 2000, requiring that contractors and subcontractors receiving federal funds assure that persons with limited English proficiency can meaningfully access services. To the extent Party provides assistance to individuals with limited English proficiency through the use of oral or written translation or interpretive services, such individuals cannot be required to pay for such services.

6. **Employees and Independent Contractors:**

Party agrees that it shall comply with the laws of the State of Vermont with respect to the appropriate classification of its workers and service providers as “employees” and “independent contractors” for all purposes, to include for purposes related to unemployment compensation insurance and workers compensation coverage, and proper payment and reporting of wages. Party agrees to ensure that all of its subcontractors or sub-grantees also remain in legal compliance as to the appropriate classification of “workers” and “independent contractors” relating to unemployment compensation insurance and workers compensation coverage, and proper payment and reporting of wages. Party will on request provide to the Agency of Human Services information pertaining to the classification of its employees to include the basis for the classification. Failure to comply with these obligations may result in termination of this Agreement.

7. **Data Protection and Privacy:**

Protected Health Information: Party shall maintain the privacy and security of all individually identifiable health information acquired by or provided to it as a part of the performance of this Agreement. Party shall follow federal and state law relating to privacy and security of individually identifiable health information as applicable, including the Health Insurance Portability and Accountability Act (HIPAA) and its federal regulations.

Substance Abuse Treatment Information: Substance abuse treatment information shall be maintained in compliance with 42 C.F.R. Part 2 if the Party or subcontractor(s) are Part 2 covered programs, or if substance abuse treatment information is received from a Part 2 covered program by the Party or subcontractor(s).

Protection of Personal Information: Party agrees to comply with all applicable state and federal statutes to assure protection and security of personal information, or of any personally identifiable information (PII), including the Security Breach Notice Act, 9 V.S.A. § 2435, the Social Security Number Protection Act, 9 V.S.A. § 2440, the Document Safe Destruction Act, 9 V.S.A. § 2445 and 45 CFR 155.260. As used here, PII shall include any information, in any medium, including electronic, which can be used to distinguish or trace an individual’s identity, such as his/her name, social security number, biometric records, etc., either alone or when combined with any other

personal or identifiable information that is linked or linkable to a specific person, such as date and place or birth, mother's maiden name, etc.

Other Confidential Consumer Information: Party agrees to comply with the requirements of AHS Rule No. 08-048 concerning access to and uses of personal information relating to any beneficiary or recipient of goods, services or other forms of support. Party further agrees to comply with any applicable Vermont State Statute and other regulations respecting the right to individual privacy. Party shall ensure that all of its employees, subcontractors and other service providers performing services under this agreement understand and preserve the sensitive, confidential and non-public nature of information to which they may have access.

Data Breaches: Party shall report to AHS, through its Chief Information Officer (CIO), any impermissible use or disclosure that compromises the security, confidentiality or privacy of any form of protected personal information identified above within 24 hours of the discovery of the breach. Party shall in addition comply with any other data breach notification requirements required under federal or state law.

8. Abuse and Neglect of Children and Vulnerable Adults:

Abuse Registry. Party agrees not to employ any individual, to use any volunteer or other service provider, or to otherwise provide reimbursement to any individual who in the performance of services connected with this agreement provides care, custody, treatment, transportation, or supervision to children or to vulnerable adults if there has been a substantiation of abuse or neglect or exploitation involving that individual. Party is responsible for confirming as to each individual having such contact with children or vulnerable adults the non-existence of a substantiated allegation of abuse, neglect or exploitation by verifying that fact through (a) as to vulnerable adults, the Adult Abuse Registry maintained by the Department of Disabilities, Aging and Independent Living and (b) as to children, the Central Child Protection Registry (unless the Party holds a valid child care license or registration from the Division of Child Development, Department for Children and Families). See 33 V.S.A. §4919(a)(3) and 33 V.S.A. §6911(c)(3).

Reporting of Abuse, Neglect, or Exploitation. Consistent with provisions of 33 V.S.A. §4913(a) and §6903, Party and any of its agents or employees who, in the performance of services connected with this agreement, (a) is a caregiver or has any other contact with clients and (b) has reasonable cause to believe that a child or vulnerable adult has been abused or neglected as defined in Chapter 49 or abused, neglected, or exploited as defined in Chapter 69 of Title 33 V.S.A. shall: as to children, make a report containing the information required by 33 V.S.A. §4914 to the Commissioner of the Department for Children and Families within 24 hours; or, as to a vulnerable adult, make a report containing the information required by 33 V.S.A. §6904 to the Division of Licensing and Protection at the Department of Disabilities, Aging, and Independent Living within 48 hours. Party will ensure that its agents or employees receive training on the reporting of abuse or neglect to children and abuse, neglect or exploitation of vulnerable adults.

9. Information Technology Systems:

Computing and Communication: Party shall select, in consultation with the Agency of Human Services' Information Technology unit, one of the approved methods for secure access to the State's systems and data, if required. Approved methods are based on the type of work performed by the Party as part of this agreement. Options include, but are not limited to:

1. Party's provision of certified computing equipment, peripherals and mobile devices, on a separate Party's network with separate internet access. The Agency of Human Services' accounts may or may not be provided.
2. State supplied and managed equipment and accounts to access state applications and data, including State issued active directory accounts and application specific accounts, which follow the National Institutes of Standards and Technology (NIST) security and the Health Insurance Portability & Accountability Act (HIPAA) standards.

Intellectual Property/Work Product Ownership: All data, technical information, materials first gathered, originated, developed, prepared, or obtained as a condition of this agreement and used in the performance of this agreement -- including, but not limited to all reports, surveys, plans, charts, literature, brochures, mailings, recordings (video or audio), pictures, drawings, analyses, graphic representations, software computer programs and accompanying documentation and printouts, notes and memoranda, written procedures and documents, which are prepared for or obtained specifically for this agreement, or are a result of the services required under this grant -- shall be considered "work for hire" and remain the property of the State of Vermont, regardless of the state of completion unless otherwise specified in this agreement. Such items shall be delivered to the State of Vermont upon 30-days notice by the State. With respect to software computer programs and / or source codes first developed for the State, all the work shall be considered "work for hire," i.e., the State, not the Party (or subcontractor or sub-grantee); shall have full and complete ownership of all software computer programs, documentation and/or source codes developed.

Party shall not sell or copyright a work product or item produced under this agreement without explicit permission from the State of Vermont.

If Party is operating a system or application on behalf of the State of Vermont, Party shall not make information entered into the system or application available for uses by any other party than the State of Vermont, without prior authorization by the State. Nothing herein shall entitle the State to pre-existing Party's materials.

Party acknowledges and agrees that should this agreement be in support of the State's implementation of the Patient Protection and Affordable Care Act of 2010, Party is subject to the certain property rights provisions of the Code of Federal Regulations and a Grant from the Department of Health and Human Services, Centers for Medicare & Medicaid Services. Such agreement will be subject to, and incorporates here by reference, 45 CFR 74.36, 45 CFR 92.34 and 45 CFR 95.617 governing rights to intangible property.

Security and Data Transfers: Party shall comply with all applicable State and Agency of Human Services' policies and standards, especially those related to privacy and security. The State will advise the Party of any new policies, procedures, or protocols developed during the term of this agreement as they are issued and will work with the Party to implement any required.

Party will ensure the physical and data security associated with computer equipment, including desktops, notebooks, and other portable devices, used in connection with this Agreement. Party will also assure that any media or mechanism used to store or transfer data to or from the State includes industry standard security mechanisms such as continually up-to-date malware protection and

encryption. Party will make every reasonable effort to ensure media or data files transferred to the State are virus and spyware free. At the conclusion of this agreement and after successful delivery of the data to the State, Party shall securely delete data (including archival backups) from Party's equipment that contains individually identifiable records, in accordance with standards adopted by the Agency of Human Services.

Party, in the event of a data breach, shall comply with the terms of Section 6 above.

10. **Other Provisions:**

Environmental Tobacco Smoke. Public Law 103-227 (also known as the Pro-Children Act of 1994) and Vermont's Act 135 (2014) (An act relating to smoking in lodging establishments, hospitals, and child care facilities, and on State lands) restrict the use of tobacco products in certain settings. Party shall ensure that no person is permitted: (i) to use tobacco products or tobacco substitutes as defined in 7 V.S.A. § 1001 on the premises, both indoor and outdoor, of any licensed child care center or afterschool program at any time; (ii) to use tobacco products or tobacco substitutes on the premises, both indoor and in any outdoor area designated for child care, health or day care services, kindergarten, pre-kindergarten, elementary, or secondary education or library services; and (iii) to use tobacco products or tobacco substitutes on the premises of a licensed or registered family child care home while children are present and in care. Party will refrain from promoting the use of tobacco products for all clients and from making tobacco products available to minors.

Failure to comply with the provisions of the federal law may result in the imposition of a civil monetary penalty of up to \$1,000 for each violation and/or the imposition of an administrative compliance order on the responsible entity. The federal Pro-Children Act of 1994, however, does not apply to portions of facilities used for inpatient drug or alcohol treatment; service providers whose sole source of applicable federal funds is Medicare or Medicaid; or facilities where Women, Infants, & Children (WIC) coupons are redeemed.

2-1-1 Database: If Party provides health or human services within Vermont, or if Party provides such services near the Vermont border readily accessible to residents of Vermont, Party shall adhere to the "Inclusion/Exclusion" policy of Vermont's United Way/Vermont 211 (Vermont 211), and will provide to Vermont 211 relevant descriptive information regarding its agency, programs and/or contact information as well as accurate and up to date information to its database as requested. The "Inclusion/Exclusion" policy can be found at www.vermont211.org.

Voter Registration: When designated by the Secretary of State, Party agrees to become a voter registration agency as defined by 17 V.S.A. §2103 (41), and to comply with the requirements of state and federal law pertaining to such agencies.

Drug Free Workplace Act: Party will assure a drug-free workplace in accordance with 45 CFR Part 76.

Lobbying: No federal funds under this agreement may be used to influence or attempt to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, continuation, renewal, amendments other than federal appropriated funds.

AHS ATT. F 12.31.16

STATE OF VERMONT, DEPARTMENT OF VERMONT HEALTH ACCESS
STANDARD CONTRACT FOR TECHNOLOGY SERVICES
CAPITOL HEALTH ASSOCIATES, LLC

CONTRACT #35403
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Appendix I: Required Forms – Financial Reporting Form

All required forms will be provided to Contractor in an electronic format by State upon execution of this agreement.

Department of Vermont Health Access
Financial Report Form

Contractor Name:	Capitol Health Associates, LLC	Grant/Contract Number: 35403											
Grantee's/Contractor's Contact Person:	Hans Kastensmith	Reporting Period: January 1, 2018 - June 30, 2018											
Grantee's/Contractor's Email Address:	hck@capitolhealthdc.com												
	TOTAL CONTRACT BUDGET	Jan	Feb	March	April	May	June	TOTAL EXPENDITURES TO DATE	BALANCE				
Phase & Description													
Task 1a: Data Quality Program Management	\$ 60,000.00							\$ -	\$ 60,000.00				
Task 1b: Dr. Jones Expert Consultation on Data Quality	\$ 12,000.00							\$ -	\$ 12,000.00				
Task 2: Project Management of Statewide Blueprint Data Quality Initiatives	\$ 24,000.00							\$ -	\$ 24,000.00				
Task 3: Recruitment and Onboarding of New Blueprint Data Quality Initiatives	\$ 30,000.00							\$ -	\$ 30,000.00				
Task 4: Involvement in Projects Supporting Data Quality Work	\$ 36,000.00							\$ -	\$ 36,000.00				
Task 5a: Vermont Clinical Registry Program, Project, and Vendor Management	\$ 83,000.00							\$ -	\$ 83,000.00				
Task 5b: Dr. Jones Expert Consultation on Data Utilization	\$ 12,000.00							\$ -	\$ 12,000.00				
Task 6a: Hosting Management Services and General Operational Support for the Vermont Clinical Registry	\$ 14,850.00							\$ -	\$ 14,850.00				
Task 6b: Software Licenses to operate Vermont Clinical Registry	\$ 1,990.00							\$ -	\$ 1,990.00				
Task 7a: Ongoing Security Assessments, Vulnerability Scans, and Remediation	\$ 13,590.50							\$ -	\$ 13,590.50				
Task 7b: Assessment Support and Remediation	\$ 13,200.00							\$ -	\$ 13,200.00				
Task 8: Ongoing Hosting of Vermont Clinical Registry	\$ 70,019.64							\$ -	\$ 70,019.64				
Task 9: Technical Support of Vermont Clinical Registry	\$ 89,100.00							\$ -	\$ 89,100.00				
Task 10: Vermont Clinical Registry User Support	\$ 19,800.00							\$ -	\$ 19,800.00				
Task 11: Delivery of Clinical Data Extracts from the Vermont Clinical Registry	\$ 19,800.00							\$ -	\$ 19,800.00				
SFTP Services	\$ 750.00							\$ -	\$ 750.00				
Data Dictionary Analysis Tool	\$ 3,000.00							\$ -	\$ 3,000.00				
ICD 10 Clinical Mapping	\$ 6,000.00							\$ -	\$ 6,000.00				
Practice Support for Flat File Extracts	\$ 7,500.00							\$ -	\$ 7,500.00				
Cyber Liability and Related Professional Liability Insurance	\$ 20,000.00							\$ -	\$ 20,000.00				
TOTAL CONTRACT AMOUNT	\$ 536,600.14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 536,600.14				
SIGNATURE OF AUTHORIZING OFFICIAL:													
Program code: 41692	\$ 536,600.14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 536,600.14				

State Only:

CONTRACT #35403
PAGE 69 OF 97

**Department of Vermont Health Access
Financial Report Form**

[illegible]

Financial Reporting Form
Financial Reporting Form (cont)
Department of Vermont Health Access
Financial Report Form

Contractor Name:	Capitol Health Associates, LLC	Grant/Contract Number: 35403											
Grantee's/Contractor's Contact Person:	Hans Kastensmith	Reporting Period: July 1, 2019 - December 31, 2019											
Grantee's/Contractor's Email Address:	hck@capitolhealthdc.com												
	TOTAL CONTRACT BUDGET	July	Aug	Sept	Oct	Nov	Dec	TOTAL EXPENDITURES TO DATE	BALANCE				
Phase & Description													
Task 1a: Data Quality Program Management	\$ 60,000.00							\$ -	\$ 60,000.00				
Task 1b: Dr. Jones Expert Consultation on Data Quality	\$ 12,000.00							\$ -	\$ 12,000.00				
Task 2: Project Management of Statewide Blueprint Data Quality Initiatives	\$ 24,000.00							\$ -	\$ 24,000.00				
Task 3: Recruitment and Onboarding of New Blueprint Data Quality Initiatives	\$ 30,000.00							\$ -	\$ 30,000.00				
Task 4: Involvement in Projects Supporting Data Quality Work	\$ 36,000.00							\$ -	\$ 36,000.00				
Task 5a: Vermont Clinical Registry Program, Project, and Vendor Management	\$ 83,000.00							\$ -	\$ 83,000.00				
Task 5b: Dr. Jones Expert Consultation on Data Utilization	\$ 12,000.00							\$ -	\$ 12,000.00				
Task 6a: Hosting Management Services and General Operational Support for the Vermont Clinical Registry	\$ 14,850.00							\$ -	\$ 14,850.00				
Task 6b: Software licenses to operate Vermont Clinical Registry								\$ -	\$ -				
Task 7a: Ongoing Security Assessments, Vulnerability Scans, and Remediation	\$ 14,134.50							\$ -	\$ 14,134.50				
Task 7b: Assessment Support and Remediation	\$ 13,200.00							\$ -	\$ 13,200.00				
Task 8: Ongoing Hosting of Vermont Clinical Registry	\$ 70,019.64							\$ -	\$ 70,019.64				
Task 9: Technical Support of Vermont Clinical Registry	\$ 89,100.00							\$ -	\$ 89,100.00				
Task 10: Vermont Clinical Registry User Support	\$ 19,800.00							\$ -	\$ 19,800.00				
Task 11: Delivery of Clinical Data Extracts from the Vermont Clinical Registry	\$ 19,800.00							\$ -	\$ 19,800.00				
SFTP Services	\$ 750.00							\$ -	\$ 750.00				
Data Dictionary Analysis Tool								\$ -	\$ -				
ICD 10 Clinical Mapping								\$ -	\$ -				
Practice Support for Flat File Extracts	\$ 7,500.00							\$ -	\$ 7,500.00				
Cyber Liability and Related Professional Liability Insurance	\$ 20,000.00							\$ -	\$ 20,000.00				
TOTAL CONTRACT AMOUNT	\$ 626,154.14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 626,154.14				
SIGNATURE OF AUTHORIZING OFFICIAL:													
Program code: 41692	\$ 526,154.14	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 526,154.14				
State Only:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				

Request for Approval to Subcontract Form

Date: _____

Original Vendor Name: _____ Contract #: _____

Subcontractor Name: _____

Scope of Subcontracted Services:

Is any portion of the work being outsourced outside of the United States?

☐ YES

☐ NO

(If yes, do not proceed)

All vendors under contract, grant, or agreement with the State of Vermont, are responsible for the performance and compliance of their subcontractors with the Standard State Terms and Conditions in Attachment C. This document certifies that the Vendor is aware of and in agreement with the State expectation and has confirmed the subcontractor is in full compliance (or has a compliance plan on file) in relation to the following:

- ☐ Subcontractor does not owe, is in good standing, or is in compliance with a plan for payment of any taxes due to the State of Vermont
- ☐ Subcontractor (if an individual) does not owe, is in good standing, or is in compliance with a plan for payment of Child Support due to the State of Vermont.
- ☐ Subcontractor is not on the State's disbarment list.

In accordance with State Standard Contract Provisions (Attachment C), the State may set off any sums which the subcontractor owes the State against any sums due the Vendor under this Agreement; provided, however, that any set off of amounts due the State of Vermont as taxes shall be in accordance with the procedures more specifically provided in Attachment C.

Signature of Subcontractor

Date

Signature of Vendor

Date

Received by DVHA Business Office

Date

Required: Contractor cannot subcontract until this form has been returned to DVHA Contracts & Grants Unit.

Language to be included from State of Vermont Bulletin 3.5 in all subcontract agreements:

Fair Employment Practices and Americans with Disabilities Act: Party agrees to comply with the requirement of 21 V.S.A. Chapter 5, Subchapter 6, relating to fair employment practices, to the full extent applicable. Party shall also ensure, to the full extent required by the Americans with Disabilities Act of 1990, as amended, that qualified individuals with disabilities receive equitable access to the services, programs, and activities provided by the Party under this Agreement.

False Claims Act: The Party acknowledges that it is subject to the Vermont False Claims Act as set forth in 32 V.S.A. § 630 *et seq.* If the Party violates the Vermont False Claims Act it shall be liable to the State for civil penalties, treble damages and the costs of the investigation and prosecution of such violation, including attorney's fees, except as the same may be reduced by a court of competent jurisdiction. The Party's liability to the State under the False Claims Act shall not be limited notwithstanding any agreement of the State to otherwise limit Party's liability.

Whistleblower Protections: The Party shall not discriminate or retaliate against one of its employees or agents for disclosing information concerning a violation of law, fraud, waste, abuse of authority or acts threatening health or safety, including but not limited to allegations concerning the False Claims Act. Further, the Party shall not require such employees or agents to forego monetary awards as a result of such disclosures, nor should they be required to report misconduct to the Party or its agents prior to reporting to any governmental entity and/or the public.

Taxes Due to the State:

- A. Party understands and acknowledges responsibility, if applicable, for compliance with State tax laws, including income tax withholding for employees performing services within the State, payment of use tax on property used within the State, corporate and/or personal income tax on income earned within the State.
- B. Party certifies under the pains and penalties of perjury that, as of the date the Agreement is signed, the Party is in good standing with respect to, or in full compliance with, a plan to pay any and all taxes due the State of Vermont.
- C. Party understands that final payment under this Agreement may be withheld if the Commissioner of Taxes determines that the Party is not in good standing with respect to or in full compliance with a plan to pay any and all taxes due to the State of Vermont.
- D. Party also understands the State may set off taxes (and related penalties, interest and fees) due to the State of Vermont, but only if the Party has failed to make an appeal within the time allowed by law, or an appeal has been taken and finally determined and the Party has no further legal recourse to contest the amounts due.

Party also understands the State may set off taxes (and related penalties, interest and fees) due to the State of Vermont, but only if the Party has failed to make an appeal within the time allowed by law, or an appeal has been taken and finally determined and the Party has no further legal recourse to contest the amounts due.

Child Support: (Only applicable if the Party is a natural person, not a corporation or partnership.) Party states that, as of the date the Agreement is signed, he/she:

- A. is not under any obligation to pay child support; or
- B. is under such an obligation and is in good standing with respect to that obligation; or
- C. has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan.

Party makes this statement with regard to support owed to any and all children residing in Vermont. In addition, if the Party is a resident of Vermont, Party makes this statement with regard to support owed to any and all children residing in any other state or territory of the United States.

No Gifts or Gratuities: Party shall not give title or possession of anything of substantial value (including property, currency, travel and/or education programs) to any officer or employee of the State during the term of this Agreement.

Certification Regarding Debarment: Party certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, neither Party nor Party's principals (officers, directors, owners, or partners) are presently debarred, suspended, proposed for debarment, declared ineligible or excluded from participation in federal programs, or programs supported in whole or in part by federal funds.

Party further certifies under pains and penalties of perjury that, as of the date that this Agreement is signed, Party is not presently debarred, suspended, nor named on the State's debarment list at: <http://bgs.vermont.gov/purchasing/debarment>

Certification Regarding Use of State Funds: In the case that Party is an employer and this Agreement is a State Funded Grant in excess of \$1,001, Party certifies that none of these State funds will be used to interfere with or restrain the exercise of Party's employee's rights with respect to unionization.

State Facilities: If the State makes space available to the Party in any State facility during the term of this Agreement for purposes of the Party's performance under this Agreement, the Party shall only use the space in accordance with all policies and procedures governing access to and use of State facilities which shall be made available upon request. State facilities will be made available to Party on an "AS IS, WHERE IS" basis, with no warranties whatsoever.

Location of State Data: No State data received, obtained, or generated by the Party in connection with performance under this Agreement shall be processed, transmitted, stored, or transferred by any means outside continental United States, except with the express written permission of the State.

Appendix II:

Performance Requirements and Service Level Requirements

Contractor shall monitor the performance of the System's applications and rapidly respond to, and address, performance issues across the entire System. The term System, as used in this Appendix II, means VCR. Contractor will capture web page response times from the client end point down to the backend database calls.

All Service Level Requirements ("SLRs") and performance metrics will be demonstrated during the operational readiness testing.

Performance Requirements

Security and software updates will be regularly scheduled to ensure that the System remains secure, and compatible with the latest browsers that are supported by the System. Regular system updates will be communicated and scheduled in advance and will not be performed during peak usage times.

Contractor will monitor the performance of both the storage and virtual infrastructures. Contractor will provide monitoring to address performance issues.

Performance Monitoring and Management

Contractor's performance monitoring and management will include the methods for managing system resources such as servers, backup, archiving, databases and applications.

System Availability

The System shall be hosted in Tier 3 or higher data centers, and will be equipped with multipath burstable bandwidth from the hosting facilities. Tier 3 is the highest level of support in the three-tiered technical support model, responsible for handling the most difficult or advanced problems.

Contractor will identify software bottlenecks, excessive calls to the database, and system responses falling outside acceptable standards. Contractor will fix found issues to ensure issues do not make it into the production environment. Contractor will monitor the production environment to identify and resolve issues not detected during the stand-up of the DocSite System.

IT Component Capacity Planning

Contractor will plan, size and control the system as information technology (IT) component capacity needs change. Contractor's plan will address, but not be limited to the following system areas:

- i. Database storage capacity
- ii. Audit log storage

Contractor will actively analyze the health of the storage systems at both the hardware and software layer. Contractor will provision to grow logical drives for the databases, document repository or integrated knowledge bases.

All storage area networks will be full fiber channel with redundant fiber channel switches.

System Administration and Support

Account Administration

The System shall include both authentication and authorization mechanisms. Authentication will follow industry best practices for password strength and reset frequency. The System shall also automatically log a user out if a period of inactivity is exceeded. Any given user's access will be limited to exactly what their role or responsibility entails. Each user's security profile will include roles. Given permission can be "denied" to exclude it from a given user's role.

System Administration

Contractor will provide ongoing support and maintenance, including customization of the System computing ecosystem. Contractor's overall management framework will include:

1. Application management and monitoring
2. Web services management
3. Systems management and monitoring
4. Identity and access management
5. Network management and monitoring
6. Performance monitoring

The System shall capture web page response times from the user end point down to the backend database calls to ensure web pages meet acceptable standards.

Contractor will provide active and passive monitoring of items such as central processing unit ("CPU"), disk and memory utilization, device up time and custom monitors for production related services such as structured query language ("SQL") processes and anti-virus.

Contractor will monitor health, availability and status of all network and system devices in the infrastructure via simple network management protocol ("SNMP") traps and Syslogs. Contractor will give each account access levels that are in direct relation to job functions consistent with least privilege principles.

Contractor will use bandwidth monitoring on all firewall interfaces which includes virtual private network ("VPN") tunnels. Contractor will monitor performance of both storage and virtual infrastructures analytics based IT management software solution designed to isolate and optimize performance and utilization of virtual machines, physical servers and storage resources. Contractor will manage the performance of the virtual infrastructure. Performance data will be abstracted to health, risk and efficiency measures based off key performance indicators and will be displayed in a roles-based access dashboard.

Audit Trail

Contractor shall track infrastructure and applications across all tiers and capture all transactions, end-to-end, from a user click, to the database record and back. Contractor will provide accurate and timely reporting as requested,

Data Backup

Contractor will use offsite storage. Data backup must be stored offsite in the event of a physical disaster. Full online scheduled file level backups are snapped locally and replicated

to disparate disaster recovery ("DR") data center. Database and application backup procedures must be updated to include backups for the System. Full online data backups must occur, as well as offline backups using disconnected storage.

Data Archival

Contractor's following data retention policies will dictate the timeframe at which operational databases will be truncated and archived:

1. Contractor will maintain seven (7) years of manually entered program data at the highest performing tier of storage and archive the expiring longitudinal dataset on a bi-annual basis to lower tiers.
2. Contractor's archived data will remain retrievable upon demand via a database management system. This data can be restored to the production tier of storage by archiving utilities if necessary.

Disaster Recovery

Contractor will develop a disaster recovery plan for the System. Contractor will have a tested disaster recovery plan and business continuity plan on file that can be executed in the event of an unforeseen emergency/disaster.

Contractor will conduct annual testing of the above-mentioned plans to determine their validity, and determine any need for revision to meet the current situation of IT resources and personnel. Contractor will ensure that data is protected and operations will resume as soon as possible.

Technical Documentation

Contractor will place into State's SharePoint archive all updated versions of system documentation for the System. Contractor will provide updates to existing technical documentation consisting of functionality, architecture, and code sections for any new business function added by Contractor. The functionality section will describe the intent of the module to be added. The architecture section will document the overall structure of the software including components and application interfaces where applicable. The code section will list file names and the database schema structure.

Each iterative production release will include the associated technical documentation along with the release notes.

MAINTENANCE REQUIREMENTS

Production Support and Transition

Contractor shall provide support for the System. These activities will include:

a. *Integrated Support Model*

Contractor's services will include ticket logging, management, monitoring, and maintenance.

Inherent components are:

- i. Tiered Support
- ii. Service performance at each tier base-lined, monitored, measured and reported

The support to be provided by Contractor is indicated by the table below:

Tiers of Support	Highlights of each tier
Tier 1	<ul style="list-style-type: none">▶ Shall provide coverage during normal business hours (8 a.m. through 10 p.m., Monday through Friday) and perform repetitive Standards of Practice (SOP)-based activities, resolution of known errors [leveraging Knowledge Base (KB) - Database (DB)], and standard request fulfillment. For more complex requests, the Tier 1 teams shall defer to Tier 2/Tier 3 teams
Tier 2	<ul style="list-style-type: none">▶ Service restoration through temporary fixes/workarounds, root cause analysis, KBs /SOP creation for repetitive incidents and enhancement of Knowledge Management artifacts▶ Staffed with specialists with knowledge of applications and associated business processes
Tier 3	<ul style="list-style-type: none">▶ Staffed with application developers and technical analysts▶ Permanent fixes

Service Level Requirements

The parties hereby agree that State shall pay a varied service charge based upon different levels of performance by Contractor, as set forth in the table below. These SLRs will go into effect with the start of the contract, and Contractor will be responsible to meet all SLRs set forth below. Under no circumstances shall the payment of a service credit hereunder relieve Contractor of its obligation to address and fix system defects or other performance issues pertaining to a service level requirement or any other obligations under this contract.

SLR Number and Name	Service Level Requirement (SLR) Contractor shall monitor and report monthly on the following SLRs	Contractor Remediation Action Required
SLR 1 Online Availability	<p>The components of the solution under Contractor control as delivered into production shall be available online to receive data inputs at least 99% of the time, with no single downtime exceeding 14 consecutive days.</p>	<p>Contractor shall report failures to State and its users. Contractor shall provide initial analysis of issues within 1 day, provide work plan for resolution within 3 days, provide daily updates to Blueprint, and provide user updates as determined by the Blueprint. Once system functionality is restored, Contractor shall obtain and load all available data input files that were lost, blocked, or missed during system downtimes.</p>
SLR 2 Data Storage and Data Aggregation Functionality	<p>The System shall securely and reliably store and aggregate data inputs at industry-standard levels of performance for enterprise relational database systems.</p>	<p>Contractor shall report failures to State and its users. Contractor shall provide initial analysis of issues within 1 day, provide work plan for resolution within 3 days, provide daily updates to Blueprint, and provide user updates as determined by the Blueprint. Additional layers of backup data storage shall be developed and implemented as deemed necessary to eliminate any issues of data loss, in particular due to software design deficiencies.</p>
SLR 3 Dashboard Report Availability	<p>The System shall make available any previously-developed VCR program-based dashboards with drilldown capability.</p>	<p>Contractor shall identify missing dashboard and or drilldown features; prioritize with Blueprint; identify key super users; provide work plan and timeline to Blueprint and super users; and provide updates as determined by Blueprint.</p>

<p>SLR 4a</p> <p>Data Extracts</p>	<p>Contractor shall provide a minimum of 4 data extracts per year, as requested by the Blueprint Executive Director, on roughly a calendar-quarter schedule. Extracts shall be based on the criteria defined by the Blueprint Executive Director.</p>	<p>Contractor shall report failures and/or delays to Blueprint immediately; provide initial analysis within 1 day; provide work plan for resolution within 3 days; provide daily updates to Blueprint.</p>
<p>SLR 4b</p> <p>Send Data Extracts to Vendor</p>	<p>Contractor shall encrypt and send data extracts to the Blueprint's analytic provider as requested by the Blueprint Executive Director.</p>	<p>Contractor shall report failures and/or delays to Blueprint immediately; provide initial analysis within 1 day; coordinate with analytics vendor; provide work plan for resolution within 3 days; provide daily updates to Blueprint.</p>
<p>SLR 5</p> <p>Parameter- Based Reports</p>	<p>The System shall make available any previously-developed VCR Filter Wizard reporting capabilities to all Programs. The results of these reports can be exported to Microsoft Excel and/or .csv files.</p>	<p>Contractor shall identify missing Filter Wizard reporting capabilities; prioritize with Blueprint; identify key super users; provide work plan and timeline to Blueprint and super users; and provide updates as determined by Blueprint.</p>
<p>SLR 6</p> <p>Disaster Recovery RTO</p>	<p>The System's Recovery Time Objective (RTO) for hosting services shall be within 30 days.</p> <p>In case of a disaster that affects the integrity of the application code or data of the VCR, the entire service shall be restored within 60 days.</p>	<p>A copy of all relevant hosting Service Level Agreements (SLAs) with subcontractors shall be provided to State. All relevant Service Credits (SCs) received from subcontractors shall be credited to State on Contractor's monthly invoices to State. Contractor shall report RTO failures to State and its users. Contractor shall provide initial analysis of issues within 1 day, provide work plan for resolution within 3 days, provide daily updates to Blueprint, and provide user updates as determined by the Blueprint. Once system functionality is restored, Contractor shall obtain and load all available data input files that were lost, blocked, or missed during system downtimes.</p>

<p>SLR 7</p> <p>Disaster Recovery RPO</p>	<p>The System's Recovery Point Objective (RPO) for hosting services shall be no more than 1 day of data loss. In case of a disaster that affects the VCR operations, the System's Recovery Point Objective (RPO) shall be no more than 1 week of data loss.</p>	<p>A copy of all relevant hosting Service Level Agreements (SLAs) with subcontractors shall be provided to State. All relevant Service Credits (SCs) received from subcontractors shall be credited to State on Contractor's monthly invoices to State. Contractor shall report RPO failures to State and its users. Contractor shall provide initial analysis of issues within 1 day, provide work plan for resolution within 3 days, provide daily updates to Blueprint, and provide user updates as determined by the Blueprint. Once system functionality is restored, Contractor shall obtain and load all available data input files that were lost, blocked, or missed during system downtimes.</p>
<p>SLR 8</p> <p>Quality of Code Delivered to UAT</p>	<p>All Severity 3 or higher defects (testing defects) resulting from software development activities for newly added features post go-live shall be resolved by Contractor prior to the software being delivered for User Acceptance Testing (UAT) and prior to deployment to production.</p>	<p>Contractor remediation actions required by other SLRs as a result of failure to resolve such testing defects prior to UAT and/or prior to deployment to production will be provided by Contractor at no additional cost to State.</p>
<p>SLR 9a</p> <p>Software Maintenance Request Resolution Times:</p> <p>*Severity 1 - Emergency</p>	<p>For pre-existing VCR functionality: See specific SLR Remediation Actions for SLRs 1 through 8.</p> <p>For new business functions added by Contractor at the request of Blueprint Executive Director: the Contractor must resolve Severity 1 Maintenance requests within 3 days.</p>	<p>Contractor shall report resolution deadline failures to State and its users. Contractor shall provide initial analysis of issues within 1 day, provide work plan for new resolution within 3 days, provide daily updates to Blueprint, and provide user updates as determined by the Blueprint. Once system functionality is restored, Contractor will obtain and load all available data input files that were lost, blocked, or missed during system downtimes.</p>

<p>SLR 9b</p> <p>Software Maintenance Request Resolution Times:</p> <p>*Severity 2 - Urgent</p>	<p>For pre-existing VCR functionality: See specific SLR Remediation Actions for SLRs 1 through 8.</p> <p>For new business functions added by Contractor at the request of Blueprint Executive Director: Contractor must resolve Severity 2 Maintenance requests within 2 weeks.</p>	<p>Contractor shall report resolution deadline failures to State and its users. Contractor shall provide initial analysis of issues within 1 day, provide work plan for new resolution within 3 days, provide daily updates to Blueprint, and provide user updates as determined by the Blueprint. Once system functionality is restored, Contractor will obtain and load all available data input files that were lost, blocked, or missed during system downtimes.</p>
<p>SLR 9c</p> <p>Software Maintenance Request Resolution Times:</p> <p>*Severity 3 - Important</p>	<p>For pre-existing VCR: See specific SLR Remediation Actions for SLRs 1 through 8.</p> <p>For new business functions added by Contractor at the request of Blueprint Executive Director: Contractor must resolve Severity 3 Maintenance requests within 4 weeks as directed by the Blueprint Executive Director.</p>	<p>Contractor shall report resolution deadline failures to State and its users. Contractor shall provide status reports as directed by the Blueprint Executive Director.</p>

Defects uncovered during UAT will be categorized due to priority. Defects encountered during the production phase will be distinguished by severity. Severity is determined by the relative importance and response time requirements for the type of defect encountered.

Production Defect Severity Response Requirements for new Functional Elements

Severity 1	3 days
Severity 2	2 weeks
Severity 3	4 weeks

Defect Severity Definitions:

- i. Severity 1 – The System no longer functions at all, or a System component is unavailable to more than 20% of active production Users.
- ii. Severity 2 – Any defect that affects less than 20% of the System functionality or less than 20% of active production Users.
- iii. Severity 3 – The System is able to function with a temporary work-around.

Warranty Requirements for new Functional Elements

State has purchased a System that is currently in production. Contractor will manage any migration of the System and the successful System maintenance and operations.

Contractor shall be responsible for fixing any errors that occur as a result of new business functions added to the System by Contractor or its subcontractors, at no additional cost. The application warranty period applies to all "corrective" maintenance / reactive modification of the of the System performed after completion of deployment to correct discovered faults with any functionality within the scope of the new business functions requested by the Blueprint Executive Director. All such fixes are required to occur in a reasonable timeframe (depending on severity as defined above in Section I Subsection 2 SLR) and shall be produced at no additional cost to State.

Contractor shall provide one (1) year of application warranty following deployment of each release of new business functions requested by the Blueprint Executive Director at no additional Cost. Contractor shall be responsible for the root cause analysis activities to demonstrate whether a defect is related to the scope of functionality added by Contractor.

Contractor will meet SLRs after the 6-month performance review has been completed and will review performance indicators on a regular basis, and taking corrective action when an indicator is not in compliance based on the priorities set forth by the Blueprint Executive Director.

Maintenance & Operations

Contractor must provide software maintenance throughout the term of this contract. Contractor shall communicate and document all software faults. For all Contractor System enhancements that are not part of the pre-existing system, Contractor shall analyze the changes and provide cost estimates for performing those changes to the Blueprint Executive Director.

a. Production Support Staff

Contractor must provide:

Ongoing maintenance and support services, including a flexible approach to providing the various types of personnel, including:

1. Architect
2. Business Analyst/Functional Lead
3. Communication/Network Specialist
4. Database Administrator
5. Database Designer
6. Help Desk Specialist
7. Hardware Specialist
8. Project Director
9. Project Manager
10. Programmer
11. Security Systems Engineer
12. Systems Administrator
13. Technical Writer

- 14. Tester
- 15. Training Specialist

The System's operations support, include the levels of support offered and the process for requesting support. In addition, Contractor will provide a summary of the proposed strategy for maintaining and repairing the System:

- i. Base software maintenance period.
- ii. Incident and maintenance request reporting.

Contractor's PM in coordination with the end-user is responsible for identifying the training needed to improve an end-user's skills as required by the program.

Contractor will provide termination assistance activities that will mitigate the transfer risk as much as possible while accomplishing the very important task of knowledge transfer.

b. System Administration

The System shall collect events logs and store the information in a centralized database for a fixed period of days, at which time they are purged from the system. After the logs files are collected, Contractor will perform event correlation and analysis for security related events and will alert the project team when certain thresholds are met.

Contractor will keep a history of changes made to the System over time, and will rapidly respond to and address performance issues across System software portfolio.

The System shall, at a minimum, utilize public key/private key encryption Secure Socket Layer ("SSL") certificates, a 4096 bit key length with 256 bit encryption strength issued by a trusted Certificate Authority, for website security. All SSL certificates shall be renewed proactively at least 7 days prior to expiration.

Contractor's server, network and database maintenance will be performed on a monthly basis. A four hour maintenance window will be prearranged.

Contractor's public facing servers will be located in a network "demilitarized zone" ("DMZ"). The DMZ network will be configured with limited connectivity to the internal resources. The use of access rules for the servers in the DMZ will only allow traffic configured for specific IP address and port number to segregate traffic from the internal network. Remote access will be handled by VPNs. The firewall will perform deep packet inspections on VPN traffic with the use of gateway anti-virus, anti-malware and anti-spyware protection.

The System's security module will provide a user's restriction to specific member populations. Security administrator will grant access to one or more "groups" that are named entities with an overall client. Users will then be assigned specific roles. A particular user may have one role assigned in a given group and a very different role in another depending on things like resource needs, credentials, working privileges etc. Roles may include permissions such as delete, add, make determination, edit/view, and search functionalities and many more.

c. *Data and Document Retention*

Contractor will implement and comply with industry standard backup procedures. The System data will reside on the latest technology which provides data safeguarding, backup time, recovery and operational efficiencies. All data will be backed up near at determined intervals and will be capable of any required RTO or RPO) to be defined by the Executive Director of the Blueprint.

Contractor will maintain an effective records management program that will meet all State requirements for record security, retention, privacy protection, and disposition as applicable for a clinical registry.

The System includes features and functionality pertaining to required privacy and security regulations to enable users to access and use System data in a HIPAA compliant manner. Contractor will comply with all HIPAA requirements, specifically the administrative simplification provisions of the law and the associated rules published by Health and Human Services, the Department of Defense Health Information Privacy Regulation (DoD 6025.19-R), the HIPAA Security Compliance Memorandum (HA Policy 60-010), and the Security Standards for the Protection of Electronic Protected Health Information. Contractor's policy must cover paper security, access to data processing resources, passwords and security incident reporting, software licensing, remote computer usage, virus, e-mail and application development security considerations. In addition to policies and procedures for data system access, Contractor will have also developed and implemented policies and procedures for maintaining security and confidentiality of patient medical information, review data, and any other data identified as individually identifiable. Each employee is required to review and sign confidentiality protocol upon employment and receives annual documented training to maintain security awareness and policy.

d. *System Management*

i. Application Monitoring

One of Contractor's goals will be to reduce down-time through monitoring and management at first tier (Tier 1) as outlined in our Integrated Tiered Support Model.

Contractor shall:

1. Reduce downtime through monitoring availability and performance of applications.
2. Provide insights through trend analysis of ticket.
3. Detect unauthorized changes and ensures organizational compliance.

ii. Activities

Contractor will:

1. Monitor the availability of applications, related interfaces and infrastructure at Tier 1.
2. Monitor the availability of related databases at Tier 1.
3. Ensure application performance is within acceptable levels as defined in SLRs.
4. Monitor various application events and logs.

5. Resolve incidents where there is a KB match and escalate unresolved incidents / issues to Tier 2 /Tier 3 as per the SLR time frames via escalation procedures.
6. Provide hand-offs with the Tier 2, Tier 3 application and infrastructure teams.

iii. System Operations Support Services

Contractor's help desk will provide support through direct customer and internal stakeholder interaction email and help desk software. The help desk will be a one-stop-shop for all software change requests, user assistance, system issues and data corrections.

Contractor's staff will be trained and be comprised of certified professionals with real-world experience using the System and will know how to resolve issues quickly and efficiently.

The help desk will have a customer service oriented directive with a focus on customer satisfaction and SLRs. Communication will be prompt and accurate with customers. Customers will have the ability to engage the help desk through email, or web-based entry. All requests for service will be logged in the corporate help desk management system to enable measurement and easy transition between support staff.

1. Helpdesk Management System

Contractor's help desk will allow users to report, view, and update incidents.

The requestor will be notified by email once the ticket has been resolved. If the requestor has additional questions after the incident has been closed, the ticket can be reopened.

Tickets for incidents will include record of the requester, requester's contact information and the details of the incident.

Contractor will maintain help desk functionality.

2. System Incident Reports

This shall contain summary-level incident statistics and shall be included in the regular project status report. Statistics provided will include:

1. Incidents reported by category verses SLRs
2. Pass, fail, and in progress defect resolution counts
3. Defect categorization and aging

3. Maintenance Reports and System Enhancement Reports

Contractor's support team shall propose releases according to the agreed maintenance cycle and the availability of fixes for release. Fixes for high-severity defects can be released on an accelerated schedule with State's approval.

e. Defect Resolution and Solution Acceptance

Contractor's defect tracking and resolution management will assess and prioritize defects.

1. Scope Severity

The following table provides guidelines for ranking of the scope of a defect:

Value Guidelines

5	Affects most or all users and/or a very larger range of system functionality
4	Affects a large set of users and/or large range of system functionality
3	Affects a moderate set of users and/or moderate range of system functionality
2	Affects a small set of users and/or a small range of system functionality
1	Affects a minimal set of users and/or a very small range of system functionality

The following table provides guidance for the ranking of the severity of a defect:

Value Guidelines

5	Data loss, data corruption or system unavailable
4	Important functionality is unavailable with no workaround
3	Important functionality is unavailable but has a reasonable workaround
2	Secondary functionality is unavailable but has a reasonable workaround
1	Cosmetic issues or some functionality unavailable but has a simple workaround

i. Priority

Priority is the product of scope and severity.

Scope	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		Severity				

ii. Actions

Contractor will have an established set of action requirements for each range of calculated priority value.

Contractor will follow a process for defect resolution and acceptance:

Defect Discovery – Identification and reporting of potential defects. The information captured here will be enough to reproduce the defect and allow development to determine root cause and impact.

Defect Analysis & Prioritization – The development team will determine if the defect report corresponds to an actual defect, if the defect has already been reported, and what the impact and priority of the defect is. Prioritization using the previously described scoring approach and scheduling of the defect resolution will then managed by the overall change management process for the software development organization.

Defect Resolution –Contractor’s development team will determine the root cause, implement the changes needed to fix the defect, and document the details of the resolution in the Team Foundation Server defect management software, and will include suggestions on how to verify the defect is fixed.

Defect Verification – The build containing the resolution to the defect will be identified, and testing of the build is performed to ensure the defect truly has been resolved, and that the

resolution has not introduced side effects or regressions. Once all affected branches of development have been verified as resolved, the defect can be closed.

Defect Communication – This encompasses automatic generation of defect metrics for management reporting and process improvement purposes, as well as visibility into the presence and status of defects across all disciplines of the software development team. The defect log captures and reports all attributes of a defect for transparency to all stakeholders.

System Acceptance –The defect is thoroughly validated. This is first facilitated by a revised/improved test that encompasses the identified defect and passes as well as a subsequent successful user acceptance test. Any related documentation is updated and the item is then released to production.

Deliverables: Contractor will be responsible for maintaining and updating the following deliverables:

Deliverable Appendix II-1 – Requirements Analysis and System Design

Deliverable Appendix II-1A–Interface Design Document

Contractor will maintain, update, and newly develop as necessary, Interface Design Documents for each identified integration point. Contractor will create a diagram or conceptual model for each integration detailing the source and target systems.

Building on pre-existing system documentation this document will detail the requirements outlined by the Blueprint. The Interface Design Document must include updated documents including the following components:

- i. Data Flow Diagrams
- ii. Data Dictionary
- iii. Data Test plans
- iv. Interconnection Security Agreement

Contractor's Responsibilities	<ul style="list-style-type: none">• Contractor will develop a Design Document to include data flow diagrams, data dictionary, and data test plans
Blueprint's Responsibilities	Review and approve the document
Location	N/A

Deliverable Appendix II-1B – System Architecture

With all relevant system changes, Contractor will update the delivered VCR System architecture document, which includes a conceptual model or diagram that is a representation of the components that make up the System. This deliverable will be maintained throughout the project as system components are added or changed to reflect the most current state.

Contractor shall provide the System architecture deliverable for all components that are part of the Solution. This System architecture document shall define and document:

- i. A conceptual architecture

- ii. A detailed list of all the proposed production environment platforms, including Hardware, OS, Networking, and all COTS and third-party systems/tools/ utilities, etc.
- iii. The details of Security, Privacy and Consent Management Plan (“Security Plan”) for the System.
- iv. The Security Plan will provide the technical approach to satisfy the following where applicable:
 - a. Network segmentation
 - b. Perimeter security
 - c. Contractor’s System security and data sensitivity classification
 - d. Intrusion management
 - e. Monitoring and reporting
 - f. Remote access
 - g. Encryption
 - h. State -wide active directory services for authentication
 - i. Interface security
 - j. Security test procedures
 - k. Managing network security devices
 - l. Security patch management
 - m. Secure communications over the Internet
- v. Detailed diagrams depicting all security-related devices and subsystems and their relationships with other systems for which they provide controls will be within the Security Plan.

Contractor’s Responsibilities	System Architecture document will include: <ul style="list-style-type: none">• Conceptual architecture• Logical architecture layers• Environment definitions• Security, privacy and consent management plan
Blueprint’s Responsibilities	Review, comment and provide feedback
Location	N/A

Deliverable Appendix II-2 – System Maintenance and Support

The System’s Maintenance and Support Plan deliverable will include the processes, policies and responsibilities of the product support services team.

Contractor shall provide an updated written plan for the Maintenance and Operations Support of the System prior to any new functionality being added to the system. The following documentation shall be prepared by Contractor and included in the System Maintenance and Support Plan provided to State:

- i. Development of the System's support structure and organization, including estimates of manpower requirements to support operation and maintenance of the System.
- ii. Completed Code, where applicable.
- iii. Maintenance and repair policies and procedures.
- iv. Updated system architecture diagrams and inventory (systems, servers, etc.)
- v. Data Dictionary/VT measure sets.

Contractor shall provide a System Maintenance and Support Plan to include the elements defined above.

Contractor's Responsibilities	<ul style="list-style-type: none">• Development of system support structure and organization• Operating procedures manual• Maintenance manual
Blueprint's Responsibilities	Review and comment
Location	N/A

Deliverable Appendix II-3 – TESTING

Deliverable Appendix II-3A – Test Plan

Contractor's Test Plan ("Test Plan") will detail the approach to thoroughly testing all additional business functions to be added to the system by Contractor. The three major components of the plan include:

- i. Test coverage
- ii. Test methods
- iii. Test responsibilities

Contractor will be responsible for the development of a Test Plan for all new functionality to be added to the system by Contractor, which includes the following testing events:

- a. *Unit and Integration Testing* – Contractor shall perform unit and integration testing as necessary.
- b. *System Testing* – The System testing is aimed at proving that the System meets the stated requirements by validating the total system in a real-world scenario. The System's testing will be combined into a single test phase to provide streamlined testing without compromising the testing objectives.
- c. *System Test Execution* – The System's test shall utilize "real" data, and shall be performed by Contractor. The System's test shall be intended to demonstrate the critical business functions that is being added to the system at the request of the Blueprint Executive Director. Contractor shall provide and the Blueprint Executive Director shall accept the System Test Plan before it is executed. Contractor shall incorporate the following activities during System testing:
 - i. Demonstrate Critical Business Function Scenarios (as defined by and approved by State).

- ii. End-to-end business process testing (as defined and approved by State).
- iii. Interface Testing (if applicable).
- iv. Performance Testing (stress, load testing if applicable).
- v. Security Testing.
- vi. Regression Testing.
- d. *User Acceptance Testing* – The purpose of UAT is to confirm that the System enhancements are developed according to industry standard business development best practices and that it is ready for enterprise deployment and operational use. During UAT, selected end-users will compare the System’s functionality, features, and performance to the requirements documents and design documents.
- e. *Performance Testing* –Contractor shall perform performance testing as deemed applicable by the Blueprint Executive Director. Performance testing shall include both stress and load testing to verify Contractor’s System performance in accordance with the SLRs.
- f. *System Regression Testing* –Contractor shall perform regression testing on any new functionality added to the system post go-live to verify the System’s integrity after functional improvements or fixes have been made as a result of the System’s Integration and UAT activities. Regression testing shall be designed to confirm that fixes have not created any new problems and that the results are as planned. Contractor team shall document all tests performed. Contractor shall provide a Test Plan that includes the elements outlined above and a detailed schedule for each of the activities to be completed within the test phase, including the individuals (named and role) responsible for the completion and/or approval of each activity.

Contractor’s Responsibilities	<ul style="list-style-type: none"> • Unit and integration testing • System testing • UAT protocols • Evaluation of UAT test results • Regression testing • Performance testing • Release test schedule
Blueprint’s Responsibilities	<ul style="list-style-type: none"> • Identify end user to do UAT • Sign-off on release to production
Location	UAT testing will be conducted online in System’s provided test environment.

Deliverable Appendix II-3B – Documented System Results

Contractor will capture all testing results via a tracking system. Complete traceability from the requirement to the development and eventual test result is available real-time electronically.

Contractor’s Responsibilities	<ul style="list-style-type: none"> • System results document • Reporting (defects and corrective actions)
Blueprint’s Responsibilities	Review
Location	N/A

Deliverable AII-4 – DEPLOYMENT

Deliverable Appendix II-4A – Deployment Plan

Contractor shall update, or newly develop as needed, a “Deployment Plan” that defines all tasks required to release System changes to each environment. Each plan includes the steps and required tools to “roll out” a specific change set. In addition, each deployment plan includes a “roll back” plan to entirely reverse any deployment that was unsuccessful. An Implementation Plan will also be created for each major release focusing on just the tasks associated with the release scope. Post-implementation performance monitoring will be conducted to determine if each implementation is successful.

Contractor shall produce a deployment plan of new functionality. Moreover, Contractor shall provide a deployment plan that documents the activities that need to be accomplished to successfully migrate new components of the System solution from the testing environment to the production environment. The deployment plan shall provide a detailed schedule of activities with key “go” / “no-go” decision points identified throughout the deployment process. In addition, the plan shall detail a back out and recovery process to be triggered in the event the turnover to production fails.

Contractor's Responsibilities	<ul style="list-style-type: none">• Deployment schedule• Deployment environment and configuration• Release notes• Rollback plan
Blueprint's Responsibilities	<ul style="list-style-type: none">• Verify, validate and sign-off post deployment
Location	Target environment <ul style="list-style-type: none">• Development• Test• Production

Deliverable Appendix II-4B – Completed Detailed Functional and Technical Specifications

Contractor will maintain and update, or newly develop as needed, a document detailing the System's requirements for any new functionality added by Contractor, with columns representing the functional and technical specifications completeness.

After completion of each release, Contractor shall update, and provide an updated System design, requirements, and specifications document for the component of the System that was modified. The document components shall include:

- i. Updated functional requirements
- ii. Updated technical specifications

Contractor's Responsibilities	<ul style="list-style-type: none"> • Updated functional requirements with each release • Updated technical specifications with each release
Blueprint's Responsibilities	N/A
Location	N/A

Deliverable Appendix II-4C – System Source Code and Documentation

Contractor shall manage all aspects of the System development process including web-based source code and documentation repositories. The System source code repository provides historical versioning and merge capabilities. The documentation repository can be accessed from the web for those approved by the Blueprint Executive Director.

The following shall be updated and provided to the Blueprint Executive Director upon request:

- i. Artifacts of the System technical and System documentation
- ii. Specifications for newly added features
- iii. System architecture updates
- iv. Technical design documentation updates
- v. Final versions of the System software files

Contractor shall also transfer all finalized required documentation to State. The format and the medium of transfer will be at the discretion of State.

Contractor's Responsibilities	<p>Update all artifacts associated with VCR system throughout Contractor's engagement:</p> <ul style="list-style-type: none"> • Functional specification and design • System architecture • Technical design documentation • Training manual, user guides and materials • Final versions of the system software files (code)
State's Responsibilities	N/A
Location	State hosting environment

Deliverable Appendix II-5 – System Maintenance & Operations (M&O)

Deliverable Appendix II-5A – System Incident Reports – M&O

Contractor will deliver System incident reports throughout the project as requested by the Blueprint Executive Director. This will be accomplished in part via web-based help desk ticketing system. Ad-hoc query functionality shall be available to authorized users to answer specific questions related to incidents.

Contractor's Responsibilities	<ul style="list-style-type: none">• Prepare ongoing System's incident reports• Incident resolution status
Blueprint's Responsibilities	Review and comment
Location	N/A

Deliverable Appendix II-5B – Operations and System Administration Procedures Manual
Contractor is responsible for updating an Operations and System Administration Procedures Manual that includes the following components. This manual may contain:

- i. Diagnostic procedures, backup and restore procedures, and disaster recovery procedures.
- ii. Information to aid in analyzing and debugging the software.
- iii. Maintenance and repair policies and procedures.
- iv. Updated System's architecture diagrams and inventory (systems, servers, etc.).

Deliverable Appendix II-5C – Tier 2 Service Desk Plan

Contractor's Tier 2 service desk plan will describe the required System's processes and procedures necessary to effectively support Users of the System.

Contractor is responsible for updating or developing a Tier 2 service desk plan that indicates how support will be provided and how escalated incidents are resolved.

Contractor's Responsibilities	<ul style="list-style-type: none">• Contractor's System support structure and organization• Support tools (ticketing, voice mail etc.)• Hours of operation• Communication and escalation plan
State's Responsibilities	Review
Location	N/A

CONTRACTOR ORGANIZATION & STAFFING

1. **Staffing Plan**

Contractor shall update and maintain a staffing plan which details Contractor personnel, level, roles and responsibilities, and team reporting relationships and identifies the approach to provide reporting relationships for key staff roles. *The term "Key Personnel,"* for purposes of this contract, means Contractor personnel deemed by State as being both instrumental and essential to Contractor's satisfactory performance of all requirements contained in this contract. The Key Personnel shall be engaged throughout the term of this contract.

2. **Key Personnel**

The following table is to be completed, updated, and maintained by Contractor for Contractor Key Personnel positions, corresponding roles and responsibilities for the project, and minimum qualifications for each.

a. *Roles and Responsibilities of Contractor Key Personnel*

Title	Resource	Roles and Responsibilities	Qualifications	Reporting Relationship
Account Director	Hans Kastensmith	Program Management and Client Relations	Managing Partner CHA	Reports directly to Blueprint Executive Director.
Project Manager	Katie McGee	Project Management	Partner CHA, Extensive Project Management experience	Reports directly to Blueprint Executive Director and laterally to Account Director
Clinical Consultant	Craig Jones, M.D.	Clinical Oversight	Partner CHA. Expert clinical experience and health care reform	Reports directly to Blueprint Executive Director and laterally to Account Director
Architect and Developer	Dave McCormick	All technical and architectural design and development, system migration, and systems documentation	25 plus years extensive systems design and development	Subcontractor. Reports to CHA management team.
Hosting Services	Dave McCormack	Hosting and Support services for the BP environments	25-plus years' extensive systems design and development	Subcontractor. Reports to CHA management team.
Security Officer	Lawrence Comer	Application Security Services	15 plus years' extensive systems and security work.	Subcontractor. Reports to CHA management team.

The above table outlines the number of Contractor personnel at different levels and roles who are proposed to be staffed on the project across the different phases of the engagement.

Contractor shall also provide an organization chart for this engagement within one month following the start date of this contract, and thereafter upon request by the Blueprint Executive Director.

WORK PLAN

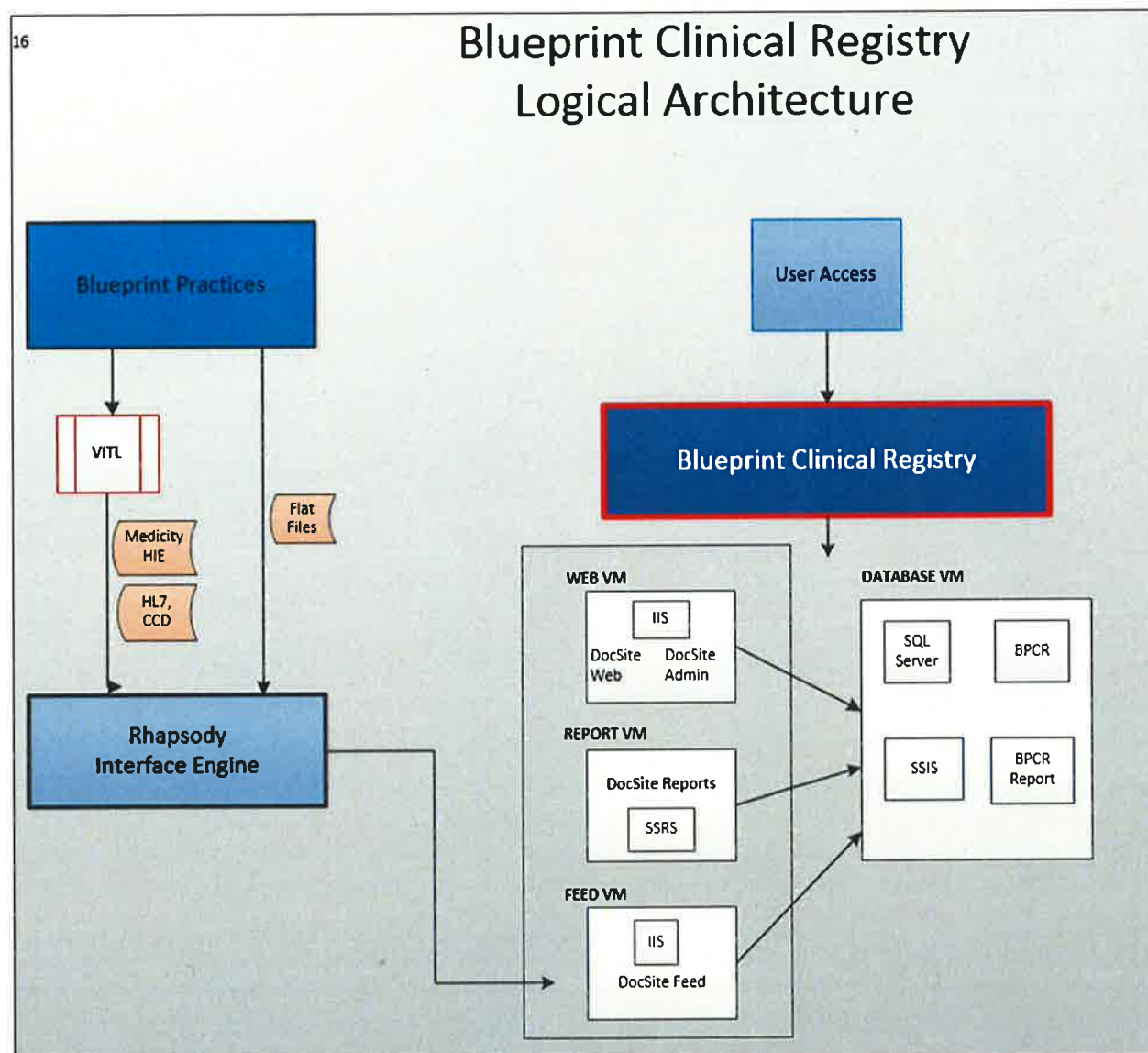
Contractor shall submit a project work plan (i.e., Project Schedule) deliverable for State approval within thirty (30) days of request by the Blueprint Executive Director.

Appendix III

TECHNOLOGY INFRASTRUCTURE SUMMARY AS OF OCTOBER 1, 2017

CONCEPTUAL & LOGICAL ARCHITECTURE

The conceptual and logical architecture for the VCR (formerly known as the Blueprint Clinical Registry, or BPCR; and formerly known as DocSite) is depicted in the graphic below.



SERVER ARCHITECTURE

Summary:

- 3 physical servers; Test running 4 VMs (Win Server 2008R2 Standard); Prod running 3 VMs (Win Server 2008R2 Standard); Prod DB (Win Server 2008 Enterprise)
- Application Server:

- Windows Server 2012 R2 Datacenter Edition (VMs Running Win Server 2008R2 Standard)
- Web Server:
- Windows Server 2012 R2 Datacenter Edition (VMs Running Win Server 2008R2 Standard)
- IIS

DATABASE

- Microsoft Windows Server 2008 Enterprise; Windows SQL Server 2008 R2

CLIENT

- Client workstation running a browser (IE, Chrome, Firefox all supported, operates best in Chrome and Firefox)

SOFTWARE DEVELOPMENT

- Windows based development environment – Team Foundation Server 2015 (TFS) source control.
 - Programming language: ASP.NET using C#
 - Architecture: Web-based application; service-oriented architecture
-