AMENDMENT

It is agreed by and between the State of Vermont, Department of Vermont Health Access (hereafter called the "State") and EQ Health Solutions, Inc. (hereafter called the "Contractor") that the contract on the subject of Enterprise Care Management Solutions, effective May 29, 2015, is hereby amended effective September 1, 2017, as follows:

1. **By deleting Attachment A (Specifications of Work to be Performed) beginning on page 3 of 211 and substituting in lieu thereof the following Attachment A beginning on page 3 of this Amendment 1.**

2. **By deleting Appendix I (Functional Requirements) beginning on page 99 of 211 of the base agreement and substituting in lieu thereof the following Appendix I beginning on page 129 of this Amendment 1.**

3. **By deleting Appendix II (Non-Functional Requirements) beginning on page 135 of 211 of the base agreement and substituting in lieu thereof the following Appendix II beginning on page 176 of this Amendment 1.**

4. **By adding to Attachment A the Appendix III (Non-Enumerated Requirements) beginning on page 215 of this Amendment 1.**

5. **By deleting Attachment B (Payment Provisions) beginning on page 165 of 211 of the base agreement and substituting in lieu thereof the following Attachment B beginning on page 229 of this Amendment 1.**

6. **By deleting Attachment C (Standard State Provisions for Contracts) on page 176 of 211 of the base agreement, and substituting in lieu thereof the following Attachment C beginning on page 243 of this Amendment 1.**

7. **By deleting Attachment D (Other Provisions) beginning on page 180 of 211 of the base agreement, and substituting in lieu thereof the following Attachment D beginning on page 251 of this Amendment 1.**

8. **By deleting Attachment E (Business Associate Agreement) on page 191 of 211 of the base agreement, and substituting in lieu thereof the following Attachment E beginning on page 263 of this Amendment 1.**

9. **By deleting Attachment F (Customary Contract Provisions of the Agency of Human Services) beginning on page 198 of 211 of the base agreement, and substituting in lieu thereof the following Attachment F beginning on page 271 of this Amendment 1.**

10. **By deleting Attachment H (Required Forms) beginning on page 209 of 211 of the base agreement, and substituting in lieu thereof the following Request for Approval to Subcontract beginning on page 278 of this Amendment 1.**

11. **Taxes Due to the State.** Contractor further certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, the Contractor is in good standing with respect to, or in full compliance with a plan to pay, all taxes due the State of Vermont.

12. **Certification Regarding Suspension or Debarment**. Contractor certifies under the pains and penalties of perjury that, as of the date this contract amendment is signed, neither the Contractor nor the Contractor'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.

    The Contractor further certifies under pains and penalties of perjury that, as of the date that this contract amendment is signed, the Contractor is not presently debarred, suspended, nor named on the State's debarment list at: http://bgs.vermont.gov/purchasing-contracting/debarment.

13. **Child Support** (Applicable to natural persons only; not applicable to corporations, partnerships or LLCs): Contractor is under no obligation to pay child support or is in good standing with respect to or in full compliance with a plan to pay any and all child support payable under a support order as of the date of this amendment.

This amendment consists of 278 pages. Except as modified by this amendment and any previous amendments, all provisions of this contract, (#28739) dated May 22, 2015 shall remain unchanged and in full force and effect.

STATE OF VERMONT

DEPARTMENT OF VERMONT HEALTH ACCESS

e-Signed by Cory Gustafson
on 2017-09-20 23:48:29 GMT

CORY GUSTAFSON, COMMISSIONER DATE
NOB 1 South, 280 State Drive
Waterbury, VT 05671-1010
Phone: 802-241-0239
Email: Cory.Gustafson@vermont.gov

CONTRACTOR

EQ Health Solutions, Inc.

e-Signed by Glen Golemi
on 2017-09-20 15:51:01 GMT

GLEN GOLEMI, PRESIDENT AND CEO DATE
8591 United Plaza Blvd., Suite 270
Baton Rouge, LA 70809
225-248-7003
GGolemi@eqhs.org

ATTACHMENT A
SPECIFICATIONS OF WORK TO BE PERFORMED

A. ACRONYM CLARIFICATION

3DES = Triple-Data Encryption Standard
A2A = Application to Application
ACO = Accountable Care Organization
AHS = Agency of Human Services
AI = Action Item
ANSI = American National Standards Issue
API = Application Programming Interface
APM = Application Performance Monitoring
ATNA = Audit Trails and Node Authentication
B2B = Business to Business
BI = Business Intelligence
BPEL = Business Process Execution Language
BPMN = Business Process Modeling Notation
CIA = Confidentiality, Integrity, Availability
CIF- Clinical Integration Framework
CMS = Centers for Medicare and Medicaid Services
COTS = Commercial Off-The-Shelf
CPU = Central Processing Unit
CR = Change Request
DAD = Deliverables Acceptance Document
DBA = Database Administration
DBMS = Database Management System
DED = Deliverables Expectation Document
DMZ = Demilitarized Zone
DOC = Department of Corrections
DOD = Department of Defense
DVHA = Department of Vermont Health Access
EDI = Electronic Data Interchange
EDIFACT = Electronic Data Interchange for Administration, Commerce, and Transportation
EMPI = Enterprise Master Patient Index
ESB = Enterprise Service Bus
ETL = Extract-Transform-Load
FR = Functional Requirement
GUI- Graphical User Interface
HHS – Health and Human Services
HIE = Health Information Exchange
HSE = Health and Human Services Enterprise
HTML= Hypertext Markup Language
HTTP = Hypertext Transfer Protocol
IAM = Identity and Access Management

IIOP = Internet Inter-ORB Protocol
IIS = Internet Information Systems
IPSec = Internet Protocol Security
IT = Information Technology
ITIL = Information Technology Infrastructure Library
ITILv3 = Information Technology Infrastructure Library, Version 3
J2EE = Java 2 Platform, Enterprise Edition
JAD = Joint Application Design
JDBC = Java Database Connectivity
KPI = Key Performance Indicators
LAN = Local Area Network
LDAP = Lightweight Directory Access Protocol
LUN = Logical Unit Numbers
MCI = Master Client Index
MITA = Medicaid Information Technology Architecture
MMIS = Medicaid Management Information System
M&O = Maintenance and Operations
MOM = Message-Oriented Middleware
MOSS = MS Office SharePoint Server
MPI = Master Provider Index
NE = Non-Enumerated
NTP = Network Time Protocol
OCM = Organizational Change Management
ODBC = Open Database Connectivity
OLAP = Online Analytical Process
OLTP = Online Transactional Processing
PDF = Portable Document Format
PHI = Protected Health Information
PII = Personally Identifiable Information
PKI = Public Key Infrastructure
PMBOK = Project Management Body of Knowledge
PMI = Project Management Institute
PMP= Project Management Plan
POC = Plan of Care
POX = Plain Old XML
R1 = Release 1 (same as R1 Final)
R1.01 = Release 1.01 (minimal viable product)
R1 Final = Release 1 Final (same as R1)
R2 = Release 2
R3 = Release 3
R4 = Release 4
RBAC = Role-Based Access Controls
RDMS = Relational Database Management Solutions
REST = Representational State Transfer
RIA = Rich Internet Application
SAN = Storage Area Network

SDLC = Software Development Life Phase
SLA = Service Level Agreement
SLR = Service Level Requirement
S/MIME = Secure/Multipurpose Internet Mail Extensions
SME = Subject Matter Expert
SNMP = Simple Network Management Protocol
SNTP = Simple Network Time Protocol
SOA = Service Oriented Architecture
SOAP = Simple Object Access Protocol
SSL = Secure Sockets Layer
SQL = Structured Query Language
TCP/IP = Transmission Control Protocol (TCP) / Internet Protocol (IP)
TLS = Transport Layer Security
UAT = User Acceptance Testing
UCS = Unified Computing System
UDDI = Universal Description, Discovery and Integration
VCCI = Vermont Chronic Care Initiative
VHC = Vermont Health Connect
VPN = Virtual Private Network
W3C = World Wide Web Consortium
WAN = Wide Area Network
WS = Web Services
WSDL = Web Services Description Language
WSFL = Web Services Flow Language
WS-I = Web Services Interoperability
XHTML = eXtensible HyperText Markup Language
XML= eXtensible Markup Language
XML = XML Process Definition Language
XSLT = Extensible Style sheet Language Transformations

B. AUTHORIZED REPRESENTATIVES OF THE STATE:

All deliverables and work products described within Attachment A of this contract are subject to review and approval by the Authorized Representative of the State or designee(s) prior to being accepted. Payment shall not be made until a deliverable or work product is formally accepted and approved.

Kelly Gordon
Project & Operations Director
Department of Vermont Health Access
NOB 1 South
280 State Drive
Waterbury, VT 05671-1010
Kelly.Gordon@vermont.gov
802-241-0146 (Waterbury)
802-879-1187 (Williston)

C. AUTHORIZED REPRESENTATIVE OF THE CONTRACTOR:

Mayur Yermaneni
EQHealth Solutions, Inc.
8591 United Plaza Blvd., Suite 270
Baton Rouge, LA 70809
myermaneni@eqhs.org
513-295-2490

All work performed under this agreement shall be done under the direction and sole discretion of the Authorized Representative of the State. No work shall be performed unless directed by the Authorized Representatives of both parties.

D. OVERVIEW

Care Management technical operations are part of the State's Medicaid Operations and are administered by the Department of Vermont Health Access (DVHA). Through this contract, the State is acquiring a Care Management Solution for the Agency of Human Services (AHS) enterprise, including predictive modeling, risk stratification, and clinical/health analytics. Contractor shall provide such technology and services (hereinafter "Contractor's System" or "Solution") in accordance with all requirements set forth in this Contract. AHS programs provide direct care management services to Vermonters, and also oversee and monitor services provided through contracted providers. The enterprise solution shall provide enterprise capabilities to best serve all care management needs of AHS. The Contractor's System shall support Vermont Chronic Care Initiative (VCCI) operations, including the high-risk pregnancy population. Ultimately, the State expects additional Care Management Programs and Initiatives to leverage this solution. The State and Contractor shall work together to develop the most efficient and cost-effective approach for the State.

E. OBJECTIVES

The project objectives are to acquire, design, and implement a Care Management Solution for the entire AHS enterprise to support individual and population based approaches to health management, beginning with the care management activities for VCCI.

The Solution will support the Vermont AHS' care management needs in the following areas:

i. Utilize clinically relevant predictive risk modeling tools and gaps in care analysis of various Member populations for early screening, case identification, and risk stratification of Medicaid Members including, but not limited to:
    a. Members who will benefit most from some form of care management intervention(s) (e.g., those with high utilization patterns, multiple providers, multiple conditions, polypharmacy, care gaps, possible readmissions and those who are at risk for complications resulting chronic disease).
    b. Members who are not currently at risk but may become at risk in the future.

c. Members whose future inpatient admissions, readmissions, and Emergency Department visits can be prevented.

ii. Proactive outreach to Members who are at risk, and to their providers, to offer information, guidance, and support to:
   a. Improve health outcomes by: closing gaps in care, increasing adherence to evidence-based care, increasing the use of preventive care, and improving self-management and provider management of chronic illnesses.
   b. Lower healthcare costs by minimizing redundancies and reducing utilization and expenses.

iii. Develop, monitor, share, and reassess an evidence-based Plan of Care to ensure clinically appropriate health care information and services are provided and communicated to improve the health outcomes of Medicaid Members.

iv. Coordinate efficient and effective delivery of health care with Medicaid Members, their providers, and community partners by removing communication barriers, bridging gaps, and exchanging relevant and timely Member information.

v. Conduct real-time care management analytics that include the ability to collect multiple sources of data as closely from the originating source as possible (including hospital census, claims data, pharmacy data, and clinical/bio-medical data from providers) to identify opportunities that a Member or provider can take to improve clinical and financial outcomes.

vi. Provide robust and User-friendly reporting capabilities and Web-based tools necessary to effectively conduct Vermont MMIS Care Management Programs' strategic planning, quality, and performance management including clinical, utilization, and financial changes among intervened populations.

vii. Provide additional Care Management capabilities including:
   a. Receive custom assessments, funding, care plans, services from provider Agencies for State review and authorization.
   b. Communicate State authorization of funding, care plans, services, and providers to provider agencies and Members.
   c. Conduct comparative analysis of provider agencies.
   d. Accept from internal and external sources (Web-based) critical incidents. Alert State staff of critical incident reports.
   e. Communicate necessary follow-up steps and actions.
   f. Perform critical incident analysis for agency and provider trends.
   g. Manage State authorized agency and provider information including Life Safety and Accessibility Inspections.
   h. Interface with other Agency Case Management solutions for State reporting and tracking.
   i. Interface with other appropriate solutions for the Agency.

Statement of Work

The Contractor must provide a Statement of Work which details the work to be performed consistent with the requirements for the Care Management project. The Statement of Work must detail the work activities and tasks required to execute the project as identified by the Project Management Strategy, Implementation Strategy, and Project Work Plan.

The Contractor will provide the following services for the Care Management Solution:

i. Collaborate and coordinate with the State to successfully implement and maintain the care management solution.
ii. Leverage PMI best practices in the areas of program integration, program management, implementation, productivity, and process improvements.
iii. Leverage Sub-Contractor's resources.
iv. Provide transparency to the State by disclosure and discussion of costs, issues, and opportunities, including early warning and identification of the same.
v. Formulate a team to coordinate and lead care management implementation to a successful completion:
    a. Determine and operate governance structures for the Contractor's project team.
    b. Interface with the State's business and program governance bodies as required.
    c. Perform the configurations and customizations required to the Contractor's product to meet the State's business requirements.
vi. Implement the Contractor's System in a series of releases.
vii. Starting with the first release date, establish a team to maintain and support the implemented system until the scope of work termination date while maintaining service levels within the targets agreed by the State.
viii. Establish the work breakdown structure for the program.
ix. Identify internal and external dependencies.
x. Evaluate and coordinate the (re)structuring of the Contractor's project teams on an ongoing basis in conjunction with the State's project manager.
xi. Publish weekly project status reports to the project stakeholders.
xii. Provide reports to the executive management.
xiii. Conduct meetings with the Contractor's steering committee on the cadence agreed to with the State.
xiv. Conduct meetings with the Department's leadership teams per the cadence agreed to with the State.
xv. Operate the Change Control Board and evaluate the financial viability of the proposed changes.
xvi. Identify and manage risks and issues for the Care Management project.

F. FUNCTIONAL REQUIREMENTS

- **Identification numbers are added to Functional Requirements (FR) outlined in this Section F if they are not already covered by existing FRs in Appendix I. These are referred to as "Non-Enumerated Requirements" (NE)**
- **See Appendix III for the Non-Enumerated (NE) Requirements Table**

1. General Requirements

a. *Document Management*

The Contractor's System shall:

i. NE1.1 Allow the end-Users to work with scanned images or PDFs at their point of origination without leaving the Contractor's workflow and User interface. (R1 FINAL)
ii. Automatically identify scanned documents by document type and index scanned documents in order for the Contractor's System to then NE1.2 notify the appropriate

case manager for that specific member that the document (and document type) has been received. (R2)

iii. NE1.3 Based on document type and other information within the artifact itself, notify the case manager (R4) and NE1.4 other appropriate Users of appropriate action. (R3, R4)

iv. NE1.5 If appropriate, schedule a follow-up based on the document type and artifact content. (R3)

v. Extract image text via optical character recognition (OCR). NE1.6 The text will be stored as a component of all uploaded images and made available as a searchable field to locate the scanned image. (R4)

vi. Ensure each pre-approved and active letter layout template contains static content that is stored in the template database as well as dynamic placeholders that render content at runtime. Standard dynamic content includes, but is not limited to, elements like member information that is automatically populated by the Contractor's System. NE1.7 Other dynamic content includes User entered data that is populated from predefined fields in the Contractor's System such as notes, comments, and letter specific text. (R1 FINAL)

vii. NE1.8 Prompt persons (State employee, Contractor) who have appropriate system access to use the system (hereinafter "User") for letter specific text during the letter creation step of the Correspondence module. These text fields will be enumerated real time for the User to fill out and (R2) NE1.9 will include a required field constraint (R2)

viii. Pre-populate letters with a current, NE1.10 future, or static date based on business rules. (R2, R3)

ix. Allow Users to NE1.11 enter freeform text in letters that can be applied to all selected or identified members. (R2)

x. Allow for Users to edit letters, NE1.12 including the pre-populated date. (R1 FINAL)

xi. Allow for scanned documents to be automatically associated with Member's Plan of Care or record.

b. ***Member, Authorized Representative, and Community Provider/Partner Portal***

The Contractor's System shall:

i. Present a step-by-step "wizard" interface with branching logic for the creation of User accounts.

ii. NE1.13 Allow User to freely navigate and allow information to be changed on any page of the wizard prior to submission. (R1 FINAL)

iii. Allow for Users to be added, NE1.14 edited (R1) or NE1.15 deactivated (R1) and NE1.16 shall also allow for password sets/resets. (R1)

iv. Grant and limit access to view and/or update information based on User role (Member, Authorized Representative, and Community Provider/Partner) and program policy.

v. Allow the administrator (including State staff) to grant individual Users access to system functionality through predefined roles and permissions. NE1.17 A role encapsulates specific User type scenarios in the Contractor's System through a predefined set of permissions. These permissions will be mutually exclusive from roles and will be assigned directly to a User in addition to a role. These permissions

can be applied at the data field level. (R1 FINAL)

c. ***Workflow Management***

The Contractor's System shall:

i. Include a configurable service-oriented workflow engine to allow the modeling of business processes and the execution and management of workflows. The workflow engine will emulate the real-world activities and policies surrounding a given artifact (referral, authorization, consent etc.) or data entry session. Activities to be modeled include, but are not limited to, review, NE1.18 assign (R1), approval and denial.
ii. NE1.19 Execute the appropriate event at each step of the workflow process, based on that step of the process. (R1)
iii. NE1.20 Provide a workflow engine that allows the User to graphically model the workflow processes and easily update them without a core release of the Contractor's System requiring no downtime. (R1)
iv. Have workflow management to allow Users and the System to electronically send referrals or other documentation through the organizational hierarchy for review, approval and/or denial.

d. ***Alerts and Notifications***

The Contractor's System shall:

i. NE1.21 Generate Alerts and Notifications based on business rules and configurable by the User as necessary. (R1 FINAL)
ii. Provide a NE1.22 library of alerts and notifications to which Users can subscribe/unsubscribe. These will be preconfigured rules that can be "attached" to a specific member or defined globally. (R3)
iii. NE1.23 Present the User, when logging in, with a pop-up box informing the User of new or unconfirmed alerts or notifications that have been generated and allow the User to navigate to the alerts sections of the Contractor's System to read and address each alert/notification. (R1 FINAL) NE1.24 Additionally, to a login prompt, as a User is actively working in the Contractor's System a dashboard indicator will appear to let the User know an alert or notification has arrived. (R1 FINAL)
iv. Prompt a User when an action has been taken for Member-specific activities.
v. NE1.25 Employ Business Rules Management, which will provide the components to author, test, deploy and maintain complex rules that leverage any data captured in the relational database. Rules will incorporate multiple conditions/constraints triggered during real-time use case scenarios. (R3, R4)
vi. Allow the User to search for alerts and notifications by Member, alert type, etc.
vii. Allow an Authorized User to indicate an expiration date and/or time of an alert/notification.

e. ***General***

The Contractor's System shall:

i. Provide links to program policies that will be available on the member's information panel and NE1.26 visible at appropriate times while navigating through a case. (R1)
ii. Provide a spell-check function for all text-based entry with multilingual support.
iii. Provide flexibility to a State approved system administrator to apply tight control

over each screen via roles and permissions as well as any associated business rules that may be related to a given process.

iv. Provide dropdown lists that can be configured to meet the business needs, process or terminology.

v. Apply constraints to all specific data entry to prevent a User from entering incorrect data and "autocorrect" that entry where feasible.

vi. Allow all collected data elements concerning each member to be directly accessed from the User case and organized to prevent Users from looking all over for the data in which they are interested.

vii. NE1.27 The Member information will allow a User to drill down from a summarized view to the detail data. (R1 FINAL)

f. *Centralized Mailing*

The Contractor's System shall:

i. NE1.28 Allow an Authorized User to view the correspondence electronically as an exact rendering of the mailed piece. (R4)

ii. Allow each correspondence template to include all necessary mailing label fields for direct printing on each piece and to be specific to each member's envelope type.

iii. Maintain a system of recording through a detailed audit trail for each item and a history of all correspondence, including but not be limited to:

a. Date mailing was returned and reason.

b. Date re-mailed.

iv. NE1.30 Use HIPAA compliant vendors to pick up mail once it is inserted into the envelopes and sealed, process it for postal compliance reducing postage rates and deliver the mail to the postal location daily. (R4)

2. Establish Case Criteria Requirements

a. *Setup Criteria*

The Contractor's System shall:

i. NE2.1 Provide step-by-step instructions to Users with appropriate access through the Business Rules Management System (BRMS) for reviewing existing rules, modifying/editing rules (R1 FINAL), and adding or deleting program-specific criteria and program-specific eligibility rules levels.

ii. NE2.2 Provide an authoring tool that contains a rules library built on State policies for Program eligibility criteria and Services eligibility criteria. (R1 FINAL)

iii. NE2.3 Provide a front-end authoring tool that will allow State staff to work on the rules on their schedule. (R1 FINAL)

iv. NE2.4 Enable the rules built with the authoring system to be tested without interrupting the production environment. (R1 FINAL)

v. NE2.5 Contain rules that are nested in a chained hierarchy or grouped as named "Rule Sets" which are groupings of individual rules allowing for the application of multiple, single, or all criteria for either eligibility or services criteria. (R1 FINAL) NE2.6 Rules will be versioned to mirror system source code and be maintained in the same repository and allow for capturing of multiple criteria sets to identify various population groups, based on program policy. (R1 FINAL)

vi. NE2.7 Allow for criteria to be selected as active or inactive by using beginning dates and end dates for each criterion. (R3, R4)

b. ***Setup Program Eligibility Rules***

The Contractor's System shall:

i. NE2.8 Use a nationally recognized grouper such as Johns Hopkins adjusted clinical groups (ACG) System® to determine program eligibility and severity levels. (R1 FINAL)

ii. Allow for capturing of multiple sets of program eligibility rules that will be executed against the same data source (s) to identify disparate targeted populations. These criteria will be based on AHS program eligibility NE2.9 and/or national practice guidelines. (R1) NE2.10 Each criterion will be used to evaluate and verify against individual claims (both medical and pharmacy) data. (R1)

iii. Provide the ability to author and manage each set of program eligibility rules or options (filter rules and calculations).

iv. NE2.11 Provide filter rules with the ability to be sequenced or chained to establish a program-specific hierarchy of program eligibility. (R3)

v. NE2.12 Incorporate the ACG toolkit in order to provide the ability to author and manage each set of program eligibility rules or options (filter rules and calculations). (R3, R4) NE2.13 The Contractor will provide training to appropriate AHS personnel on the ACG toolkit and allow for self-service management and will work closely with the state to establish an effective process for design and change management of each program's associated set of program eligibility rules.

vi. NE2.14 Allow for program eligibility rules to be selected as active or inactive by using beginning dates and end dates for each criterion. (R3, R4)

c. ***Risk Stratification and Eligibility Determination***

The Contractor's System shall:

i. NE2.15 Accept data through the Clinical Integration Framework (CIF) (R1) from multiple sources (e.g., claims, Electronic Medical Records, biometric telemetry devices, labs, etc.) to validate a candidate's program eligibility. This data will augment the claims data to provide additional predictive indicators regarding a member's risk stratification and eventual program enrollment.

   a. NE2.16 Run eligibility and risk stratification each time new claims data is obtained (R1) NE2.16-1 Run eligibility and risk stratification each time new claims and eligibility data is obtained (R1 FINAL) to review the data against eligibility and stratification criteria and ensure that any existing member is re-stratified at the appropriate level of care.

   b. NE2.17 Send a referral with an initial/updated severity level to the assigned care coordinator. (R1 FINAL)

3. Establish Case

a. ***Conduct Outreach***

The Contractor's System shall:

i. NE3.1 Route program-eligible Member contact information to appropriate User for outreach based on geography, load balance by case manager supervisors or filtered and mass-assigned by some other operational policy. (R2)

ii. NE3.2 Alert a case manager when a case is assigned through the Alerts module. This

assignment functionality will allow for multiple case management resources (case manager/internal unit) to be simultaneously assigned, listed and managed. (R2)

iii. NE3.3 Provide real-time care coordinator case mix profile visible to Authorized Users. (R1 FINAL)

iv. Provide an efficient mechanism for Users to log each contact made, method used, and respective outcome.

v. Ensure all data elements are captured related to each outreach attempt including the method used and eventual outcome. All available contact phone numbers and the member's address will be displayed on this screen.

vi. NE3.4 Provide the member with the ability to configure their preference of notification route via their portal User profile. (R3)

vii. Allow Users (Case Manager or third party) to log outcome of each contact made during outreach efforts and any other contacts during the course of managing the case.

b. ***Assign Case Manager***

i. NE3.5 The Contractor's System shall provide an assignment functionality that will allow for multiple case management resources (case manager/internal unit) to be simultaneously assigned, listed, and managed. (R3 & R4)

c. ***Assign Additional Staff to Case***

i. The Contractor's System shall allow System-assigned Case Manager to reassign case to another appropriate Case Manager. NE3.6 Case assignment changes and health edits will be validated against the resources availability functionality. (R3)

4. Perform Screening and Assessments Requirements

a. ***Member's Profile Summary***

The Contractor's System shall:

i. NE4.1 Include a Member's medication list which will include medications that have been automatically populated via the claims and pharmacy data feeds as well as those that have been manually entered (R1 FINAL)

ii. Support full medication reconciliation through the Medication Interactions (duplicate, drug-drug, drug-food, drug-allergy, and generics) module that identifies any issues.

b. ***Perform Screening and Assessments***

The Contractor's System shall:

i. NE4.2 Support the ability to apply a weighted scoring assignment to assessment and screening questions and aggregate the results to a final assessment score through the Form builder module. (R1 FINAL)

ii. Provide an extensive library of assessments that incorporate nationally recognized standards.

iii. Provide a service framework that allows authorized Users to design their own assessments or copy one from the library.

5. Manage Treatment Plan and Outcomes Requirements

a. *Create Plan of Care*

The Contractor's System shall:

i. Provide a highly configurable mapping of issues and the ability to manage the mapping from the Plan of Care management section.

ii. NE5.1 Allow a User to monitor and update the status of services as well as outcomes of referrals for end Users to view at any time from the portals or the member profile report. (R3)

iii. NE5.2 Provide a report that shows all Plan of Care items that have been resolved in addition to those that are currently being worked on by the care management staff (R1 FINAL)

b. *Develop Action Plans*

i. Action plans will be clearly individualized to the member.

c. *Provide Education Materials*

i. The Contractor's repository of accepted and nationally recognized electronic education materials will be available to both Users (e.g., coaching directives) and Members.

ii. Users shall have the ability to search for different diseases, treatments, procedures, and/or medications and will be provided with up to date, easy to understand health information.

iii. NE5.3 Members will have the ability to access specific education tools through the Education Resources. (R3)

6. Manage Case Information Requirements

a. *Case Documentation*

The Contractor's System shall:

i. NE6.1 Provide a configurable survey module that drives development of the Plan of Care problems, goals, and results/outcomes (R1 FINAL), NE6.2 which will be mapped, and will auto-generate the Plan of Care based on system configuration and evidence based standards for each assessment/survey. (R1 FINAL)

ii. NE6.3 Provide a supplemental, searchable issues library that will be available to allow manual selection of problems/goals by the User. (R1 FINAL) NE6.4 Each problem/issue will be listed in the system and have associated goals and interventions and will support structured and standardized documentation. (R1 FINAL)

a) *NE6.5 Problem attributes* will include, but not be limited to, priority, outcome type, date identified, and source of identification and reviewed by status. (R3)

b) *NE6.6 Goal attributes* will include, but not be limited to, goal type, status, target completion, and actual completion dates. (R1 FINAL)

c) *NE6.7 Interventions* will include, but not be limited to, intervention types, status, projected and actual completion dates. (R1 FINAL)

iii. Support effective monitoring and tracking of critical incidents to insure remediation actions are initiated as indicated through data collection and workflow.

iv. NE6.8 Support mandated external reporting of incidents as required by State and Federal law. (R1 FINAL)

v. NE6.9 Allow for all, multiple, or single interventions to be selected and then have any subsequent edits (such as Notes, Dates, etc.) apply to all the selected Interventions. (R3)
vi. NE6.10 Allow Users to enter freeform text to communicate supervisory review / comments that can only be viewed by Users authorized to do so. (R2)
vii. Connect a Member's case information with any and all other Members of the same household.

b. *Scheduling*

The Contractor's System shall:

i. Provide a structured and standard calendar form to create or modify meeting invitations.
ii. NE6.11 Allow authorized Users to create and modify meetings and search by attendees. (R3)
iii. Shall provide the capability to set up recurring appointments based on frequency and duration
iv. NE6.12 Allow the User to 'Block out' times unavailable. (R3)
v. Provide mapping functionality which will be available from anywhere in the Contractor's System with the ability to map a given address and provide turn by turn directions.
vi. NE6.13 Provide mapping functionality which will be available within the provider search tool and the scheduling module (R3) and NE6.14 provide printable map directions to each appointment. (R3)
vii. Provide the scheduler feature which will support calendar synchronization via service integration with the state's infrastructure.
viii. NE6.15 Create User specific bi-directional calendar integration, and can leverage experience and existing code base to meet requirements. (R3)

c. *Document Case Disposition*

The Contractor's System shall:

i. Provide standard, pre-populated disposition statuses and NE6.16 State configurable disposition status fields. (R1 FINAL)
ii. NE6.17 Allow for cases to be automatically referred/ transferred to other care management staff including a follow up Plan of Care for new staff. (R1)
iii. NE6.18 Support documentation of the disposition post hospital discharge, Plan of Care status and the final case closure status. (R1 FINAL)

d. *Case Transition*

The Contractor's System shall:

i. NE6.19 Allow provider partners to have access to an electronic member search via the provider portal to initiate referrals. (R3)
    a. NE6.20 Internal system supported 'routing' of the referral is based on workflow. (R3, R4)
    b. The 'refer to' field will allow Users to search community providers and partners populated in the provider database.
    c. Referrals are associated with the member, NE6.21 referring,

and referred entities. (R1 FINAL)

ii. Display a list of qualified Community Providers/Partners that meet search criteria for a User to send an electronic referral to on behalf of a Member.

iii. Allow a User to modify and/or withdraw a referral.

e. *Close Program Enrollment*

The Contractor's System shall:

i. NE6.22 Allow member case data to be dynamic and updated in real-time for stakeholder review on case status via the appropriate mechanism (portal, interface, etc.). (R2)

ii. Support setting reminders and follow-up flags by the User with data elements that include but are not limited to follow up required, lead time, due dates, etc.

iii. NE6.23 Allow for follow up flags to be visible reminders on the User dashboard based on follow-up criteria (R1)

iv. NE69NE6.24 Use a nationally recognized grouper, such as Johns Hopkins ACG System integration, for gap in Pharmacy metrics regarding medication/prescribed drug adherence and possession rates (R3), NE6.25) as well as a member's adherence with therapy.(R3)

v. NE6.26 Leverage a nationally recognized pharmacy data base such as First Databanks' MedKnowledge to provide drug search capabilities, medication reconciliation, and contraindication warnings. (R1 FINAL)

f. *Care Coordination*

The Contractor's System shall:

i. NE6.27 Provide an integrated web based application and portals. (R1 FINAL)

ii. NE6.28 Provide a modular, highly connected framework to allow all stakeholders to collaborate electronically to improve the population health including: provider and member portals, (R3) NE6.29 care management module (R1 FINAL), NE6.30 care coordination productivity module (R1 FINAL), NE6.31report module (R1 FINAL), NE6.32 health and wellness module (R1 FINAL), and NE6.33 evidence based care module. (R1 FINAL)

iii. NE6.34 Provide a direct link to communicate with Users through the Messaging module. Internal and external Users/partners actively working on or related to a member's case will be listed in the case assignment section of the case record. (R2)

7. Manage Population Health Outreach Requirements

The Contractor's System shall:

i. NE7.1 Produce standard reports monthly, except as otherwise defined during Joint Application Design (hereinafter called "JAD") sessions. (R1 FINAL)

ii. NE7.2 Provide ad hoc reporting capability that allows development by both Contractor and State (R3)

iii. NE7.3 Have a Data/Health Informatics Analyst on staff to develop and assist the State in developing ad hoc and routine reports. (R3)

iv. NE7.4 Automatically assign Users, based on predetermined parameters such as geographic location, to work with Clinical Leads at provider and partner sites to address issues highlighted in panel reports. (R3)

v. NE7.5 Use predictive modeling analytics tools to provide details on population health initiative (R3) and NE7.6 identify areas where population health initiatives may be indicated. (R1)
vi. NE7.7 Be configurable per State specifications including by provider practice site and/or clinical leads, with automatic member assignment based on parameters, including but not limited to geographic and facility location, condition, staff license, etc.(R3)
vii. NE7.8 Allow Users to document and log all contacts made with members, providers, practice and/or clinical leads, and other participants on a member/patient's treatment team including system pre-defined and State defined and configurable fields. (R1 FINAL)
viii. NE7.9 Be configurable to support session notes in which type of contact, method of contact, and content of contact can all be documented. (R1 FINAL)
ix. NE7.10 Provide fields that are configurable at the State level. (R1 FINAL)
x. Allow a User to select and distribute, either electronically or via hard copy, education materials based on program protocol.
xi. NE7.11 Integrate with a predictive modeling tool such as Johns Hopkins ACG and utilize claims data to analyze a population on dimensions including but not limited to chronic condition, age, gender, Primary Care Provider (PCP), program enrollment. (R1 FINAL)

a. *Program Education Materials*

The Contractor's System shall:

i. NE7.12 Integrate with a nationally recognized health care knowledgebase to provide evidence based educational materials (R1 FINAL) that can be viewed online, printed or electronically sent to a patient and/or provider and other stakeholders involved in member care.
ii. NE7.13 Track all educational correspondence and record correspondence history that is viewable to Users. (R1 FINAL)

b. *Care Coordination Program Goals*

The Contractor's System shall:

i. NE7.14 Support targeting specific chronic disease processes for a member and support management of chronic illnesses, other co-morbid health conditions, behavioral health issues, and/or psychosocial issues. (R1 FINAL)
ii. NE7.15 Support evaluation of quality, continuity, accessibility, timeliness and outcomes of care management services provided including process and quality improvement features to monitor care coordination efficiency, including but not limited to: (R1 FINAL)
    1. NE7.16 Monitoring evidence of the participant-physician-care coordinator relationship. (R1 FINAL)
    2. NE7.17 Monitoring care across all health care settings. (R1 FINAL)
    3. NE7.18 Documenting and monitoring social support needs, interventions and results of the population. (R1 FINAL)
    4. NE7.19 Development, implementation, monitoring, and evaluation of individualized care plans. (R1 FINAL)

5. NE7.20 Coaching and behavior modification activities to promote participant self-care. (R1 FINAL)
6. NE7.21 Monitoring of participant health status via administration of evidence based health risk assessments (HRA) and disease specific assessments, self-care education, coaching and behavior modification, wellness screenings, in person and telephonic on-going engagement, and resolution of barriers to care. (R1 FINAL)
7. NE7.22 Identification of participants for care coordination services based on but not limited to program eligibility criteria, predictive modeling and current utilization profiles. (R1 FINAL)
8. NE7.23 Support multidisciplinary Users engaged as members of the care management team. (R1 FINAL)
9. NE7.24 Document/trend improvement in participant clinical and financial measures and quality of life (survey tools, evidence based tools). (R1 FINAL)
10. NE7.25 Support and promote physician adherence to evidence based care standards for each disease process, via reporting and trending by provider of treatment gaps. (R1)
11. NE7.26 Support and promote physician understanding and adherence to nationally recognized practice guidelines via gap in care report. (R1)
12. NE7.27 Support reduction in treatment variation by monitoring, evaluating, and reporting on physician treatment against national and state standards, and provider peers. (R1 FINAL)
13. NE7.28 Manage and document utilization and cost savings based on integrated care coordination including but not limited to the total population vs. program eligible and intervened population(s), disease specific measures of improvement, and staff specific performance improvement. (R3)

d. ***Scope of Services***

The Contractor's System shall:

i. NE7.29 Track delivery of services that are holistic, individualized, and evidence based and track multiple modes of communication and engagement, including but not limited to: (R1 FINAL)
   1. NE7.30 In person, telephonic, electronic including via provider and patient portals, and/or mail and other written forms of communications. (R1 FINAL)
   2. NE7.31 Interventions for monitoring and tracking include: (R1)
      a. NE7.32 Predictive modeling to population identification for VCCI eligible members by the vendor including high risk/cost conditions and participants; as well as via other methods. (R1)
      b. NE7.33 Risk stratification to ensure the right interventions are being provided to the right participants. (R1 FINAL)
      c. NE7.34 Establishment and utilization of a Medical Home. (R1 FINAL)
      d. NE7.35 Health Education tools and related tracking of supports provided by member and User. (R1 FINAL)
      e. NE7.36 Health Coaching supports provided for behavior change. (R1 FINAL)
      f. NE7.37 Health and wellness promotion services and goals including

lifestyle modifications. (R1 FINAL)

g. NE7.38 Medication Adherence/medication reconciliation tracking to support evidence based care. (R3)
h. NE7.39 Smoking Cessation resources and progress toward goal achievement. (R1 FINAL)
i. NE7.40 Depression Screening and related scoring and trending of results. (R3)
j. NE7.41 Assessment of psychosocial barriers to health and progress toward resolution. (R2)
k. NE7.42 Medical and psychosocial referrals and status of results. (R1 FINAL)
l. NE7.43 Monitoring of face-to-face collaboration frequency between care coordinators and program participants and impact on results. (R1 FINAL)
m. NE7.44 On-going assessment of the participant's medical and psychosocial issues with comparisons over time. (R3)
n. NE7.45 Ability to develop and implement an individualized, collaborative plan of care among treatment/support team. (R1 FINAL)
o. NE7.46 Electronic monitoring tools and systems for Provider notification of care coordination enrollment and related engagement level by individual and panel of patients. (R3)
p. NE7.47 Tracking of on-going, frequent interactions between care coordinators and a participant's designated medical home. (R1 FINAL)
q. NE7.48 Provider profile reporting capability related to utilization patterns and adherence to condition specific standards of care (gap in care reports). (R2)
r. NE7.49 Provider education materials to support evidence-based practice guidelines. (R1 FINAL)

e. *Programs*

NE7.50 The Contractor's System shall include the following components to support care coordination integration of clinical treatment guidelines, disease prevention strategies, patient self-care education, and social support services while demonstrating a quantifiable cost savings to the payer: (R1 FINAL)

1. NE7.51 Population Identification that will be performed by the Contractor's analytic staff and include use of predictive modeling tools to identify members based on medical and pharmacy claims, data, analytics data, provider, facility, or participant self-referrals. (R1 FINAL)
2. NE7.52 Population Stratification that categorizes eligible members into severity levels based on predictive model data findings, clinical data, and/or assessment findings. Stratification will be updated regularly based on clinical data receipt, care coordinator encounter, and/or at least every six months for the entire population. (R1 FINAL)
3. NE7.53 Evidence-based care guidelines to support Plan of Care development and monitoring of treatment adherence by provider and member. (R1 FINAL)
4. NE7.54 Monitoring of member engagement and readiness to change, tracking progress toward clinical and psychosocial problem resolution/goals as outlined in

the Plan of Care goals. (R1 FINAL)

5. NE7.55 Development, implementation, sharing, and monitoring of progress on individualized plans of care goals as generated by response to evidence based health assessments, system generated triggers and case manager performance results. (R1 FINAL)
6. NE7.56 Documentation and management of Care Transitions including from inpatient to outpatient settings as well as levels of service provision. (R2)
7. NE7.57 Monitoring participant collaboration and engagement. (R2)
8. NE7.58 Monitoring provider and practice level collaboration and engagement. (R2)

8. Manage Registry Requirements

The Contractor's System shall:

i. NE8.1 Support bi-directional exchange of clinical and other data in multiple standard protocols and formats via the Clinical Integration Framework (CIF) module. Supported formats/protocols will include but not be limited to: (R1)

Data Formats	
HL7 v2.x-v3.x	CCD, CCR
CDA	XML
DICOM	EDI
X12	Raw ASCII or Binary
Protocols	
MLLP	Web Services (SOAP)
HTTPs	(s)FTP
TCP/IP	

ii. NE8.2 Have the ability to extract, transform, and transmit data within the system to an external registry, or registries, designated by the State and based on established protocols, payload specifications and support models for each channel to update the registry dataset for all members. (R4)

iii. NE8.3 Maintain performance measures at the member and other designated levels and a static "snapshot" captured at an agreed upon frequency for graphic trending analysis to include 'roll up' for population level reporting. (R1 FINAL)

iv. NE8.4 Analyze all available data**,** including the predictive modeling engine output, to generate a panel of clinical gaps (R1 FINAL).
NE8.4-1 Analyze all available data to generate a panel of clinical gaps. (R1 FINAL)

v. NE8.5 Use a nationally recognized grouper (e.g., Johns Hopkins ACG) to determine medication gaps that indicate a member's adherence with therapy, including but not limited to: the number and duration of gap, medication possession ratio (MPR), continuous medication availability ratio (CSA), and risks if untreated. (R3)

9. Authorization Determination Requirements

a. *Referral Management*

The Contractor's System shall:

i. NE9.1 Create and route referrals electronically. (R2)

ii. NE9.2 Acknowledge referrals, accept referrals, and track referral status. The

Contractor's System shall setup automated notifications related to the referral. (R2 & R3)

iii. NE9.3 Allow a User to modify or withdraw a referral. (R1 FINAL)

iv. NE9.4 Search for referrals. (R1)

b. *Prior Authorization*

The Contractor's System shall:

i. NE9.5 & NE9.6 Support functionality to receive, process, and render determinations for prior authorization, concurrent and retrospective service reviews for a multitude of service settings. (R4)

ii. NE9.7 Have the ability to document and process Service and Treatment Plan Authorization requests that are received from Providers outside of the Core MMIS. (R4)

iii. NE9.8, NE9.9, NE9.10 & NE9.11 Support receipt, processing, and rendering determinations for prior authorization, concurrent and retrospective service reviews for a multitude of service settings, including in-state and out-of-state facilities. (R4)

iv. NE9.12 Integrate with a third-party authorization entity to receive a daily census of admits (R4) and NE9.13 via the Alerts module, communicate to all Users that a member has been admitted. (R1 FINAL)

v. NE9.14 Allow providers to submit a review request to the Case Manager through the provider portal or other interface such as batch files. The request will include information to render a medical necessity decision, including but not limited to: diagnosis codes, procedure codes, HCPS and requested units (days, hours etc.). (R4) NE9.15 The Contractor's System shall support all the uploading of supporting documentation for review by Authorized Users and via their respective portals. (R2)

vi. NE9.16 Include a prior authorization module that will capture all medically necessary authorized services at the member level. Prior authorizations will include data elements such as the service codes requested, quantity, frequency units, and requesting/billing provider. The services will be authorized after full consideration of the plan of care that will be developed and maintained in the Contractor's System as well. (R4) NE9.17 The Contractor's System shall link all of these items directly to the individual case record, and create a holistic view of the member all in one place. (R4)

10. Reporting Requirements

The Contractor's System shall:

i. Allow a User to create and display a clinical metrics dashboard.

ii. Generate member-centric dashboard reports to provide information on how a specific member relates to the overall characteristics of his or her population.

iii. Generate additional dashboard reports for supervisors and managers to view the aggregate caseload of their caseworkers and to drill down to view analytics at the individual worker level.

iv. NE10.1 Where applicable, provide reports consisting of clinical and operational performance measures (through Inter-rater Reliability tools), financial, satisfaction, and quality of life measures on a population level. (R2, R3, R4)

v. NE10.4 Complete outcomes reporting semi-annually and more frequently as requested by the State. Outcomes and reporting data will be based on claims data,

information collected in the Care Management Contractor's System, other State agencies or programs, providers, ACOs, etc. (R3)

vi. NE10.5 Structure the reporting processes to ensure consistent methodology and interpretation of data that is gathered. (R1)

vii. NE10.6 Monitor and report on service, program, clinical and financial outcomes, which support program operational, regulatory and certification goals. Reports include but are not limited to program, population, and provider, participant, clinical, staff productivity and financial reports; and are available per State established frequency rate. (R2-R3)

viii. Produce, at a minimum, and without limitation, the following types of reports, and any additional reports or information defined during JAD sessions.

Report Type	Type of Information
Population Reports	NE10.7 These reports may include but are not limited to: i. Eligible population ii. Population distribution (age, gender, geography, acuity) iii. Population that received care. (R3)
Provider Reports	NE10.8 These reports may include but are not limited to: i. Eligible population ii. Population distribution (age, gender, geography, acuity) iii. Population that received care. (R3)
Program Reports	NE10.9 These reports may include but are not limited to: i. Enrollment statistics, (e.g., referrals, opt-out, engaged, unable to contact and reason, cases closed and reason, health condition, etc.) ii. Health Condition iii. Participation-Total a. # of active participation (engaged with a CC) by severity level; b. Total # of active participants with an individualized plan of care. iv. Clinical- Condition specific v. Utilization and Preventative a. % of enrollees with 2 or more MD office visits within 12 months b. % of enrollees getting a flu vaccine c. % of enrollees getting pneumonia vaccine within last 5 years d. Other Wellness/Preventive care screenings based on the member population (R4)
Member Reports	NE10.10 These reports may include but are not limited to: i. Assessment Results ii. Member satisfaction survey iii. Plan of Care outcomes iv. Length of program participation (R3)
Financial Reporting	NE10.11 These reports may include but are not limited: i. Admissions and Readmissions ii. Length of stay iii. Admissions for specific conditions

	iv. Pharmacy costs in relation to overall costs (R4)
Staff Productivity	These reports may include but are not limited to: i. NE10.12 Total # patients referred, enrolled, number of member and provider encounters ii. Total # patients unable to contact a. Related to no valid phone # b. Related to unable to reach the patient either in person or telephonically iii. Number of initial screenings completed (R1)

11. Consent Management Requirements

The Contractor's System shall:

i. Provide its own Consent Management solution. NE11.1 The Contractor shall make use of the State of Vermont's HSE Consent Management solution once it is operational. (R3)
ii. NE11.2 Allow consent to be set at the field level. (R3)
iii. NE11.3 Provide consent notifications that are supported by a Business Rules Management System (BRMS). (R3)
iv. Allow Users to search at the global level, and NE11.4 sort and filter by pertinent fields, for a member's consent record. (R1 FINAL)

12. Health Care Reform Requirements

The Contractor's System shall:

i. NE12.1 Align with Vermont's health care reform plans during the term of the Contract. (R2)
ii. NE12.2 Provide integration with HSE platform and MMIS system to create a continuity of record at the person level. (R1 FINAL)
iii. NE12.3 Provide integration with Vermont Health Information Exchange (HIE) to create claims and clinical continuity of care records and the creation of data profiles at the member, physician, and provider facility levels for data transparency. (R3)

13. Case Management Certification

The Contractor's System shall:

i. NE13.1 Meet and maintain the requirements that will allow State programs to secure certification in Case Management by the National Committee for Quality Assurance (NCQA). (R1 FINAL)
ii. NE13.2 Meet and maintain the requirements that will allow State programs to secure certification in Disease Management and/or Health Utilization Management by the Utilization Review Accreditation Commission (URAC) or National Committee for Quality Assurance (NCQA). (R1 FINAL)

G. TECHNICAL REQUIREMENTS

1. Architecture & Policy Requirement

a. *Service Oriented Architecture*

The Contractor's System will be distributed service-oriented system architecture (SOA). The Contractor's System shall be comprised of loosely coupled standard based Web services that provide an Application Programming Interface (API) so that the services can be invoked from the Rich Internet Application (RIA) User interface or a dependent service. Each service will be a

well-defined encapsulated set of functionalities that does not depend on the context or state of other services or functions.

The primary transport protocol for external facing services will be HTTPS (X.509 certificate) to ensure that all traffic is encrypted and secure 256 bit or better.

The Contractor's service communication or integration will be achieved through standard description protocols such as the Web Services Description Language (WSDL) interface format. Web services in the environment will be distributed across multiple clustered and load balanced virtual servers. Production services will be centrally published via the WS-Discovery protocol to a Discovery Proxy service registry to ease discovery on the network for State applications utilizing a fixed proxy URL.

Each Contractor System service will be managed in compliance with change management policies ensuring all changes are authorized and accurate. Web service security will be configured for each service by endpoint policies via (WS-Policy) where requirements such as security tokens, type of encryption, and privacy rules are established. Each service will utilize the Brokered Authentication pattern where the service validates the credentials presented by the State issued by a third party that both the State of Vermont and Contractor trust.

All software architecture documents and artifacts (views/viewpoints) will be modeled per ISO/IEC/IEEE 42010 Architecture Description Template as part of the Vermont Enterprise Architecture Program Requirements.

All SOA Services will be reviewed, classified, and cataloged prior to use. The documentation Artifacts and Templates will be provided to the Contractor by the State of Vermont Enterprise Architecture SOA Governance Team. Duplicate services will be rational and tiered appropriately.

All WSDLs developed for the State will conform to the WSDL Development Standards.

The Contractor's System's SOA –related messages will be formally defined with XSD (preferable) or DTDs. SOA artifacts will be stored in the State of Vermont's SOA Repository. The Contractor's System's implemented services will rely on WS-Policy configuration for message reliability (WS-Reliable Messaging).

The Contractor's System will be aligned with and leverage the HSE Platform when available and at a date that is determined by the State and allows reasonable time for the Contractor to execute.

The Contractor's System shall be designed, built, and deployed with enterprise architecture best practices including substantial reliance on highly configurable SOA components. The Contractor will be compliant with the State's SOA architecture standards as the State's needs change.

b. *HSE Platform Alignment*

The Contractor will provide service-oriented architecture that will allow for effective future integration within the State's computing ecosystem.

The Contractor will leverage the Oracle "stack" and will redirect selected services to those the State has invested in and are hosting in their infrastructure whenever and wherever possible.

The Contractor will work closely with the State to determine what products are appropriate candidates for integration, Master Data Management (MDM), Identity Access Management (IAM), Consent Management, and will look to utilize those that meet the intent and requirements of the project while also providing what is necessary to support core functionality. Integration touch points are User authentication, clinical data exchange, member eligibility, prior authorization, claims, and email system.

c. *Technical Standards*

The Contractor's System shall be architected as a multi-tiered enterprise application composed of several loosely coupled autonomous modules. The general architecture of the Contractor's System shall follow a service oriented (SOA) pattern and the application will be broken up into very manageable distinct pieces of functionality, or services. The Contractor's System architecture will allow encapsulation of the State's business needs into an interchangeable component that will be easily plugged into the system.

The presentation layer will be developed on 100% native browser based technology.

The Contractor's data will be warehoused in a centralized relational database system (RDMS) which will be a comprehensive, integrated management and analysis platform that will provide tremendous scalability, performance, and security standardized naming conventions for all object types in the RDMS.

d. *Usability*

The Contractor's System must be designed to provide a browser based, or a Rich Internet Application, that will utilize feature rich applications that will be updated over the Wide Area Network (WAN) and the Internet, and will deliver a consistent User experience to Vermont Citizens, AHS employees, providers, contractors, and partners.

The Contractor will send and retrieve data in the background without interfering with or delaying User interface behavior in the browser. As newer browsers are released and are more capable of supporting technologies such as HTML5, the Contractor will capitalize on those improvements and incorporate them in the application.

The Contractor's System shall provide a dynamic Graphic User Interface (GUI) that allows access to information based on a User's role and associated permissions. Configurable functions as well as the current state of User interaction at any given point in time will be achieved via configurable business rules or branching logic that is associated with real-time responses within the application.

The Contractor's System shall present only what is relevant to, or required of, the User to accomplish a specific data entry or review scenario while still ensuring all pertinent data is

captured. All fields will include appropriate User entry validation such as data type, masking, and length.

The Contractor will use zero footprint technology, architecture, and applications that can be "styled" or "skinned" to the AHS color palette and logo.

The Contractor will provide secure single sign-on options to integrate into an existing client portal. Single Sign-On Options will include:

1. SAML 2.0 Tokens and Protocol
2. Encrypted Post

e. *Integration*

The Contractor will integrate between disparate external trading partners via secure standards based XML web services.

The Contractor will analyze each of the State's available service contracts to understand the methods and data associated with each. A gap analysis will be performed to identify those instances where the Contractor's functionality cannot be fully supported and simply remapped. Where there is an identified gap, the Contractor shall provide the State with a proposed plan for augmenting the State's services. Where a State managed service is not available, the Contractor will continue the integration until an equivalent replacement is implemented by the State. The Contractor will be fully capable of integrating with the State-wide HIE system and public registries to aggregate additional data that AHS cannot manage directly. Where bi-directional services are required, a service registry will be available for the State that supports the use of Web Services Description Language (WSDL) to discover all services and understand each contract.

The following table indicates the Contractor's current services.

Enterprise Master Patient Index (EMPI)	**Business Rules Engine**
Claims Warehouse	**Business Intelligence/Analytics Platform**
Clinical Data Repository	**Workflow Engine**
Service Authorizations	**Member Census**
Member Eligibility	**Provider (Physician/Facility)**
Medication Database	**Clinical Guidelines/Criteria**
Health Education	**Mapping/Geocoding**
Home and Community Based Services repository	

The interoperability features and capabilities of the Contractor's System shall leverage the State's deployments of Master Data Management / Master Person Index technologies to present a 360-degree view of patient clinical data to the Users.

The abovementioned will apply when integrating future capabilities that the State may require.

f. *Scalability and Extensibility*

The Contractor will deliver the highest levels of reliability and scalability to support any State IT initiative now and in the future. The Contractor's System will be co-located (does not share any resources with other datacenter clients) and will be completely isolated on the Contractor's own hardware.

The Contractor's System shall be delivered from a highly configurable network load balanced (NLB) web farm of virtualized data center servers (these servers shall be clones of each other).

The Contractor will not only keep up with the latest trends or changes but also adopt them when proven stable.

The Contractor will have the Scalability and Extensibility to:

1. Have the ability to meet future growth
2. Be configurable
3. Have the flexibility to keep up with changing technology and regulatory needs
4. Be easy to maintain

The Contractor's system will scale for multiple business units with different missions. (For example, if Department 'x' and Department 'y' both want to take advantage of automated case management, the Contractor's System shall handle increasing Users while maintaining responsiveness and insuring security, privacy, etc.)

g. *Business Analytics & Reporting*

NEG.G.1 The Contractor's System shall support the Business Intelligence (BI) functions and will deliver a balanced set of capabilities to the internal State Users across three (3) areas: information delivery, analysis, and development. (R1 FINAL) Additionally NEG.G.2 the Contractor's System shall include the reporting for both canned and ad hoc reports and will have the ability to provide dashboard capabilities to the State Users. NEG.G.2-1 The Contractor's System shall include the reporting for both canned and ad hoc reports, based on a person's user role and permissions, and will have the ability to provide dashboard capabilities to the State Users. (R1 FINAL)

NEG.G.3 The Contractor will design, develop, and execute complex data mining models and analysis. These models will be made available as Online Analytical Process (OLAP) cubes to Business Intelligence dashboards. NEG.G.3-1 The Contractor will design, develop, and execute complex data mining models and analysis. These models will be made available as Online Analytical Process (OLAP), which includes all capabilities inherent in the use of data cubes and additional capabilities inherent in the Tableau product, to Business Intelligence dashboards or ad hoc reporting. (R1 FINAL)

NEG.G.4 The Contractor's System shall provide dashboard views, graphs, and simple tables, and highly detailed reports which drill-down to the raw data.

All reports will be available in both hardcopy and in softcopy.

NEG.G.4-1 The Contractor's System shall provide dashboard views, graphs, and simple tables, and highly detailed reports which drill-down to the raw data. All reports will be available in softcopy with the ability to download and print hardcopy. (R1 FINAL)

NEG.G.5 The Contractor's data will be warehoused in a centralized relational database system which will be a comprehensive, integrated management and analysis platform that provides scalability, performance and security. (R1 FINAL)

NEG.G.6 Data system elements that the Contractor will use in report generation and submission process include:

1. Information collected by system which incorporates User entry validation and edits to ensure data integrity on User entry. (R1 FINAL)
2. NEG.G.7 Information recorded in relational database and analyzed by analytics team.
3. Advanced data mining structures to deliver complex aggregations to the reporting services.
4. Statistical analysis software used to create highly complex data analysis for ad hoc reports.
5. Submission of information either hardcopy or electronic as prescribed by AHS.

NEG.G.7-1 Data system elements that the Contractor will use in report generation and submission process include: 2. Information recorded in relational database and analyzed by analytics team. 3. Advanced data mining structures to deliver complex aggregations to the reporting services. 4. Statistical analysis software (John Hopkins ACG) used to create highly complex data analysis for ad hoc reports. 5. Submission of information either hardcopy or electronic as prescribed by AHS. (R1 FINAL)

NEG.G.8 The reporting process the Contractor will use will include these key elements:

1. Individual(s) or other sources responsible for providing the data and information.
2. Identification of the individual or process responsible for generating the report.
3. Determination of reporting media, such as hard copy or electronic (PDF, Excel, etc.).
4. Distribution parameters such as authorized recipients and number of copies.
5. NEG.G.9 Creation of a logging system to track report generation and receipt.
6. Individuals authorized to request modifications in formats, distribution, and schedules.
7. NEG.G.8 Maintenance of information and data confidentiality.
8. NEG.G.9 Establishment of retention schedules for archiving, disposal, and destruction.
9. NEG.G.8 Report quality assurance, and validity checking.

NEG.G.8-1 The reporting process the Contractor will use will include these key elements: 1. Individual(s) or other sources responsible for providing the data and information. 2.

Identification of the individual or process responsible for generating the report. 3. Determination of reporting media, such as hard copy or electronic (PDF, Excel, etc.). 7. Maintenance of information and data confidentiality, 9. Report quality assurance and validity checking (R1 FINAL)

NEG.G.9-1 The reporting process the Contractor will use will include these key elements: 5. Creation of a logging system to track report generation and receipt 8. Establishment of retention schedules for archiving, disposal, and destruction. (R1 FINAL)

NEG.G.10 The Contractor's System shall be capable of generating scheduled predefined reports as well as conducting ad hoc studies and analyses that provide meaningful information.

NEG.G.10-1 The Contractor's System shall be capable of conducting ad hoc studies and analyses that provide meaningful information. (R1 FINAL)

NEG.G.11 The Contractor's System's online analytical processing (OLAP) capabilities will provide real-time, dynamic, and interactive data. These Contractor's System capabilities will provide a view of all longitudinal data from the origination of the contract. (R1 FINAL)

NEG.G.12 The Contractor's System shall incorporate User entry validation and edits to ensure data accuracy and completeness. Data quality and accuracy will be achieved at the database level through integrity constraints such as entity relationships, primary keys, foreign keys, and default values. Advanced data mining structures will deliver complex aggregations to the Contractor's System's real-time web reporting services. (R1 FINAL)

NEG.G.13 The Contractor's System shall provide the AHS management teams with the data and information necessary to evaluate and validate program policies and procedures, and to administer all contract responsibilities. (R1 FINAL) The Contractor's System's real-time web-based reporting module provides prior authorization review activity, statuses, and authorization numbers for providers and recipients. NEG.G.15 The Contractor's System shall be fully compliant with Medicaid Federal and State security regulations, and will make all reports and associated exports available to providers and parties specified. (R1 FINAL)

NEG.G.16 The Contractor's System's dashboards will summarize a panel of common utilization metrics as well as a "heat" map depicting PM/PM costs. Active trend series and bar graphs will be connected to present the User with a series measure over time, as well as a "Top 5" bar chart and average for each metric at the current hierarchy.

NEG.G.16-1 The Contractor's System's dashboards will summarize a panel of common utilization metrics as well as a bubble chart depicting unit medical costs compared to average group size and average PM/PM costs. Active trend series and bar graphs will be connected to present the user with a series measure over time, as well as a "Top X" capabilities and average for each metric within the current hierarchy. (R1 FINAL)

NEG.G.17 The Contractor's System's dynamic filtering capabilities will allow a User to analyze the data for any time period to pinpoint areas of interest that could indicate potential issues where course correction is needed.

All data can be exported to Excel, PowerPoint, or image format.

NEG.G.17-1 The Contractor's System's dynamic filtering capabilities will allow a User to analyze the data for any time period within the data to pinpoint areas of interest that could indicate potential issues where course correction may be needed. All data can be exported to Excel (.csv), PowerPoint, or image format. (R1 FINAL)

2. Regulatory Policies, Audit Compliance, and Security

a. *General*

The Contractor will:

i. Adhere to, harmonize, and enable federal and local regulations.
ii. Protect and secure the information assets within the Contractor's System.
iii. Enable Identity and Access Management.
iv. Ensure State data, including but not limited to personally identifiable information, tax information, or HIPAA protected information, will be isolated and protected.
v. Leverage an MS Office SharePoint Server (MOSS) environment.

The Contractor's security policies will be designed to prevent unauthorized personnel from accessing a building, resource, or stored information to minimize the risk of data breaches and inappropriate access to information.

The Contractor's IT infrastructure will be isolated behind physical firewalls and intrusion detection and prevention systems ensuring security and privacy of all data. In accordance with HIPAA security requirements, all of the Contractor's computer systems will be protected from access by unauthorized persons through the use of frequently changed passwords, access codes, and other safeguards. The telephone voice messaging system and e-mail system can only be accessed through individualized pass codes.

All Internet applications will use 256-bit SSL AES or better standard encryption for secured transmission of information over the Internet.

The Contractor's activity logs for all Windows server based systems will be enabled by default and record system events continuously. The logs will provide thorough detail regarding logon, file access, system error, event ID, security access alerts, and document print tracking. The Contractor will ensure activity logs are routinely backed up.

The Contractor will have a comprehensive HIPAA compliance program that includes all required privacy and security regulations. The 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 (HHS), the Department of Defense (DoD) 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. The Contractor's HIPAA policy will 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.

The Contractor's policies and procedures will maintain security and confidentiality of patient medical information, review data, and any other data identified as individually identifiable. Each

Contractor employee will be required to review and sign a confidentiality protocol upon employment and will receive annual documented training to maintain security awareness and policy.

The Contractor will monitor all health care IT related legislation and regulatory bodies to ensure all requirements are met or exceeded.

The Contractor will monitor local and federal regulations to ensure that the Contractor's System at all times meets or exceeds compliance. The Contractor will remain informed of any legislation that will directly or indirectly impact work provided to the State. The Contractor will adhere to federal security policy and laws.

The Contractor will contract with third party security firms as agreeable to the State of Vermont to conduct annual security audits and examine the network security controls from the perspective of an independent source.

The Contractor's third-party security firm will review the following:

i. Any agreements, contracts, work obligations, or statements of work.
ii. Efficiency of network connections and their current security status.
iii. Current policies and procedures, and how those relate to data access.
iv. Engagement management tools, controls, and reporting.
v. Level of compliance in regard to regulatory requirements.
vi. Current industry standing, and corporate health, of the service provider.

The Contractor's security firm will conduct application penetration testing using a well-developed matrix of existing threats, vulnerabilities, and real-world recommendations to identify any potential security weaknesses. A report will be produced by the firm, and shared with the State, detailing the results of the audit and any detected deficiencies or threats.

The Contractor will apply a data sensitivity matrix to all data sources to understand the associated sensitivity rating (high, medium, and low) and the required level of controls needed to secure each.

The Contractor will monitor and control the entire software development environment from this platform and will be tightly coupled to development and change management practices and tools where software development lifecycle (SDLC) is managed.

b. *Security Architecture and Design*

The Contractor will maintain in-house a certified security specialist that holds one or more of the following certifications:

i. Information Assurance Manager (IAM).
ii. Information System Security Manager (ISSM) Certification.
iii. Certified Federal Information Security Act (FISMA) Auditor.
iv. International Information Systems Security Certification Consortium (ISC2) Certified Information System Security Professional (CISSP).
v. Information Systems Audit and Contract Association (ISACA) Certified in Risk and

Information Systems Control (CRISC).
vi. ISACA Certified in the Governance of Enterprise IT (CGEIT).
vii. EC Council Certified Ethical Hacker (CEH).
viii. Certified EC-Council Instructor (CEI).
ix. Health Information Trust Alliance (HITRUST) Common Security Framework (CSF) Practitioner.
x. Certified HIPAA Professional (CHP).
xi. Certified HIPAA Security Specialist (CHSS).

The Contractor will analyze the surface area vulnerability of Contractor's Systems to ensure all known vectors of attack are considered and hardened well beyond industry best practices. The Contractor will perform a security related review of all functional and technical specifications to ensure vulnerabilities are not introduced to the system using SDLC and ITIL infrastructure change control processes.

The Contractor's System shall not allow access without secure User authentication and resource authorization (specific functionality). All login User names must be unique and be associated with an industry best-practices strong password. Users must change passwords on a configured expiration timeframe and the reuse of passwords will be limited.

The Contractor will use VPN appliances to secure all remote connectivity needs within infrastructure. These appliances will provide intrusion detection and prevention, malware protection and packet level scanning real-time while continuing to maintain a very low latency and responsive connection.

The Contractor's System shall be deployed on a no single point of failure topology that allows the Contractor to recover from a failure of any element within the infrastructure. Fault tolerance and failovers are accomplished with both redundancy of critical hardware such as routers, switches, firewalls, and server hosts load balanced servers and routing.

The Contractor will:

i. Provide security-related input into IT infrastructure, system, and application design.
ii. Leverage published industry standards and models to apply security best practices.
iii. Support, enable, and extend the security policy by providing specific security-related guidance to decision makers.
iv. Contain the capability to provide User and site authentication.
v. Support VPN access.
vi. Include the ability to recover from a failure of any single element.
vii. Be easily serviceable.
viii. Support the establishment and active management of data sensitivity levels.
ix. Include application and system hardening processes.

The Contractor will provide an Information Security Risk Assessment Procedure as required by the Centers for Medicare and Medicaid Services: https://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/InformationSecurity/downloads/IS_RA_Procedure.pdf.

c. *Identity and Access Management (IAM)*

The Contractor will ensure integration platform services as these become available. The Contractor will support all service methods for creating Users, deleting or de-provisioning Users, verifying login credentials, changing passwords, and applying roles or permissions.

The Contractor will enable a consistent integrated login experience across all User interfaces including ICN Procedure codes, regardless of the platform it is being accessed from. The Contractor will ensure identification of Users and their associated security is abstracted from the data source that persist it.

The Contractor will ensure the audit trail is centralized, consistent, and verbose in its level of data capture and supports the scrutiny of security analysis or forensics meeting all compliance requirements for chain of custody and activity.

The Contractor will ensure User accounts are augmented by a profile provider. This provider allows for the addition of typed property values to be added to a User to store all additional information required to provide context for functionality like business rules, workflow, processes, and User preference managed from the respective User's profile screen and can also be managed by authorized administrative Users in the security module.

The Contractor will be in compliance with T3.47 RBAC and an HL7 permissions catalog needs to be developed for role-based access among HIT/HIE services. RBAC is to be provided by implementation of a SOA provider that delivers a standard interface.

The Contractor will:

i. Enable Vermont AHS to identify Users in different contexts so that Vermont AHS policies and User preferences can be applied consistently.
ii. Deliver an integrated login experience for Users across applicable Vermont AHS systems and channels.
iii. Enable coherent audit trails and chain of custody records needed for security forensics and compliance requirements.
iv. Support the proactive management of User access to Vermont AHS resources including de-provisioning when needed.
v. Enable Vermont AHS to consistently identify Participants so that customer service can be more effective.
vi. Support the use of an industry standard Directory for identification and authorization.

d. *Application Encryption*

The Contractor will provide:

i. Encryption of database columns and indexes for data at rest.
ii. Encryption of flat files at rest and in motion.
iii. Network encryption at the session layer (or lower) to secure communication streams that traverse un-trusted networks; and to provide encryption for sensitive data in motion across any network.
iv. Field-level encryption so custom applications can secure pertinent information within a communication stream.

v. Key management for secure creation, storage, and retrieval of encryption keys.

The Contractor will utilize transparent data encryption (TDE) a full-database-level bulk encryption technique for all data at rest.

The Contractor will ensure any data that is written into the database file is encrypted including all database columns and indexes and that data that is in use is not encrypted.

Data in motion will be protected by the SSL/TLS protocol standard between the server and any browser clients consuming or writing data over untrusted networks.

The Contractor's database schema will include several instances where cell or field-level encryption will be implemented for those scenarios where the database is accessed by a non-browser based custom application that may or may not be protected over a secure protocol or has the potential of storing data locally for later use.

The Contractor will support strong asymmetric keys for encryption approach.

e. *Privacy and Consent*

The Contractor will ensure role-based access within the Contractor's System shall conform to the State's policies regarding sensitive information.

The Contractor's System must be able to identify and delineate between internal and external Users (Users outside the Agency) and must give them different levels of visibility to System data. When displaying data, identification information tying the records back to specific Participants must be omitted where appropriate.

In addition, the Contractor's System's configurable security elements (roles, permissions) include the ability to store User specific configurable data fields, such as an email address, to facilitate automated notifications and indicators such as internal/external User or department that can be leveraged by business rule logic to support workflow.

The Contractor's System shall reset passwords without requiring a customer service representative. Data elements only necessary to manage the account are displayed and are de-identified to an appropriate level to ensure privacy.

f. *Security*

The Contractor will deliver a Security Plan that will address, but not be limited to, the following subject areas.

1) Security Audit
2) Database Security
3) Software and Hardware Security
4) Data Backup
5) Disaster Recovery

Security Audit

The following list of capabilities is leveraged by the Contractor to provide all auditing and monitoring of pertinent events and changes across the infrastructure:

Log Collection	**Log Archiving**
Automated collection of log files Supports Windows Event Logs – both. evt and .evtx formats Supports Syslog log files Configure to clear or not clear log files Collects all generated events Collects only certain types of events Can export log data from one source to another	Compression of log data Can provide email notification of failed archive attempts Can automatically retry failed archive attempts Continues from last collected event Scheduled time Percent full (threshold) Opens zipped event log files (. evt) for review
Log Consolidation and Storage	Data Formats
Secure log aggregation and storage for Windows Event Logs and Syslog data from devices and Oss Supports SQL databases for log data Provides log normalization Supports automated compression	Syslog SQL MS Access . evt Log Format Comma Delimited Text File HTML Report Format Comma-Delimited Report Format
Monitoring	Alerts and Notifications
Agentless monitoring Real-time monitoring Configurable polling Servers go offline/online System shutdowns/restarts Detect and track changes to Users/groups/computers Detect and track unauthorized account usage Detect and track printer activity Detect policy changes Detect account lockouts Track logon activity	Define alerts for events of interest Define alert for a single event Configurable thresholds Provides predefined alarms Alerts on devices and OSs supporting Syslog Define events as either high risk, medium risk or low risk Notification Support Network pop-ups E-mail messages Pager Short e-mail messages

Track errors and warnings Track changes/deletions on files/folders/registry keys Ability to create custom "alarms" for log monitoring	Syslog messages Database insertions NetBIOS broadcast notification Supports regulation of notifications Sends notifications to multiple e-mail addresses
Reporting	Log Analysis and Management
Provides out-of-the-box predefined reports Provides access to log reports via browser Can report daily, weekly, or monthly results for defined data Ability to create custom reports Configurable report formats HTML based reports	Provides a tree view of events and data for analysis Supports extensive filtering options Create custom filters for review Provides predefined filters Supports choice of log type to manage including: Application Security System DNS Server Directory Service File Replication Service

Audit Compliance

The Contractor shall contract with third party security firms, to be approved by the State of Vermont's Department of Information and Innovation Security, which meet the State's minimum qualification requirements, to conduct annual security audits and examine the network security controls from the perspective of an independent source. The Contractor will be proactive in handling security requirements that come from within the organization, as well as from outside regulators. The contracted security firm will review the following:

i. Any agreements, contracts, work obligations, or statements of work.
ii. Efficiency of network connections and their current security status.
iii. Current policies and procedures, and how those relate to data access.
iv. Engagement management tools, controls, and reporting.
v. Level of compliance in regard to regulatory requirements.
vi. Current industry standing, and corporate health, of the service provider.

The Contractor shall ensure the security firm conducts application penetration testing annually and prior to major application releases using a well-developed matrix of existing threats, vulnerabilities, and real-world recommendations to identify any potential security weaknesses as part of network security audit. Additional vulnerability assessments will be run quarterly. A

report is produced by the firm detailing the results of the audit and any detected deficiencies or threats.

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

Database Security

The Contractor will ensure confidentiality, integrity and availability (CIA) of the Database Management Systems responsible for managing data related to the proposed Contractor's System.
The following are Contractor's Systems and approaches to ensuring CIA.

Confidentiality:

i. Data Encryption – Detailed in 1.6.3 Application Encryption.
ii. Access Control - Authentication with strong passwords.
iii. Object level authentication – Access to specific tables, stored procedures, views etc. will be restricted at the User level.
iv. Upgrades and patches – As soon as patches and upgrades are available and thoroughly tested, they will be released to production.
v. Intrusion Detection and Prevention (IDS) – Packet level network IDS and profiling with alerts.

Integrity:

i. Database Backups - Enterprise level SAN replication at the block level. Data is de-duped and transmitted to disparate data center for immediate restoration of data in the unlikely event of corruption.
ii. Track and Audit – Capture all security related events and all changes to database objects and raw data.
iii. Constraints – Database design standards include enforcement of entity relationships, primary keys, foreign keys and default values.
iv. Hardware Configuration – Redundant Disk Arrays (RAID 10/5) to provide data partitioning/striping to reduce risk of data loss on drive failure.

Availability:

i. Scalable redundant hardware – Multiple routers, switches, and virtualization hosts.
ii. Fault tolerance and failovers – deploy a no single point of failure infrastructure. Virtualization of web servers in conjunction with Network Load Balancing (NLB) across the server farm.
iii. Disaster Recovery – In the event we the primary location is lost, the Contractor will real-time replicate to a hot site that can be promoted to primary with no loss of data.

Software and Hardware Security

The Contractor will ensure all server operating systems are properly deployed, configured, and managed to meet the highest security standards and guidelines concerning HIPAA, HITECH and FISMA Compliance. The Contractor will adhere to the following guidelines in the form of system/configuration management and proactive preventive maintenance:

i. All of server and client operating systems are setup and maintained by qualified

System Administrators.

ii. Strictly adhere to best practices and software lifecycle management directives.
iii. All servers are periodically scanned for malicious software, unnecessary services and access.
iv. Patch, upgrade, and test each operating environment for the latest releases. Procedures in place to control the installation of software on operational systems.
v. Remove or disable all unnecessary services, applications, and network protocols where practical.
vi. All security-related events on critical or sensitive systems are logged and audit trails saved.
vii. Access to services are logged and protected through access-control methods.
viii. Adhere to Least Privilege concepts and practices to include governing all Privileged User access.
ix. Perform periodic security and penetration testing.
x. Allow Third Party audits to include review of controls within the server operating systems.
xi. Conduct periodic reviews of server logs to identify suspicious activities.

The Contractor will enforce enterprise security policies on all mobile devices, such as restricting access to hardware and software, managing wireless network interfaces, and automatically monitoring and reporting when policy violations occur. The Contractor will adhere to the following guidelines:

i. Develop and maintain a mobile device security policy which defines which types of mobile devices are permitted to access corporate resources, the degree of access, and how provisioning should be handled.
ii. Implement and test all prototypes of mobile devices solution(s) before rolling into a production environment.
iii. Fully secure each mobile device before allowing User access.
iv. Support strongly encrypted data communications and data storage, and remotely wiping the device if it is lost or stolen and is at risk of having its data recovered by an untrusted party.
v. Require authentication before accessing organization resources, resetting forgotten passwords remotely, automatically locking idle devices, and remotely locking devices suspected of being left unlocked in an unsecured environment.
vi. Restrict which applications may be installed (through whitelisting or blacklisting), installing and updating applications, restricting the use of synchronization services, digitally signing applications, distributing the State's applications from a dedicated mobile application store, and limiting or preventing access to the enterprise based on the mobile devices' operating system version or mobile device management software client version.

The Contractor will ensure the security of Web Servers through augmentation of traditional security mechanisms consisting of frameworks based on use of authentication, authorization, confidentiality, and integrity controls. The Contractor will adhere to the following guidelines:

i. Use Secure Socket Layer and Transport Layer Security (SSL and TSL). Secure Sockets Layer uses a public key to encrypt data transferred over the SSL connection.

ii. Counter Denial of Service (DoS) attacks through replication of data and services for improved availability. Replication and redundancy can ensure access to critical data in the event of a fault and will enable the Contractor's System to react in a coordinated manner to overcome disruptions.

iii. Use logging of transactions to improve non-repudiation and accountability. Non-repudiation and accountability require logging mechanisms involved in the entire Web Service transaction.

iv. Use threat modeling, harden operating environments with the latest fixes, patches and configurations, and conduct software security testing to include scheduled penetration testing. The Contractor's solutions will provide a secure operating environment to withstand a variety of attacks.

v. Patch and upgrade the operating Contractor's System (OS), remove or disable unnecessary services and applications, configure OS User authentication, and periodically test the security of the OS.

vi. Use performance analysis and simulation techniques for end to end quality of service and quality of protection.

vii. Use Web Service security standards, tools, and techniques required for traditional security mechanism, such as firewall, intrusion detection systems (IDS), and secured operating systems.

a. These controls are in effect before implementation or deployment of Web Services applications.

viii. Support web browsers that use the latest security measures/controls and are supported by the provider.

ix. Only support the last three (3) browser versions to ensure the latest security architecture.

x. Use the latest utilities to conduct an optimization study, which enables us to maintain a proactive security posture in terms of browser types, versions and configurations.

g. *SLRs and Performance*

The Contractor shall proactively monitor the performance of the System's applications and rapidly respond to, and address, performance issues across the entire System. The Contractor will capture Web page response times from the State end point down to the backend database calls. The Contractor's performance monitoring will provide dashboards with drill down capability, reports, and customized alerts to provide a mechanism for stakeholders (including State staff) to review SLR/performance management.

All SLRs and performance metrics will be demonstrated during the Operational Readiness Testing.

3. Performance Requirements

The Contractor will ensure that all data transmitted over the Internet is encrypted using 256 bit at a minimum SHA1 encryption over an SSL connection.

Security and software updates will be regularly scheduled to insure the Contractor's systems remain secure, and compatible with the latest browsers and performance. Regular system updates will be communicated and scheduled in advance and will not be performed during peak usage times.

The Contractor will monitor the performance of both the storage and virtual infrastructures. The Contractor will provide real time monitoring and alerting with customizable thresholds to proactively address performance issues before they become a problem.

The Contractor will isolate and optimize performance and utilization of virtual machines, physical servers and storage resources, and investigate Users identified by the APM tool's algorithms as dissatisfied or frustrated to identify and fix their issue, improving overall system performance.

The Contractor's monitoring solutions will be role-based and provide real-time dashboards with drilldown capabilities described in this requirement. The Contractor's System configuration screens will allow for easy customization.

The Contractor's System architecture will support:

i. Internal State Workers and external participants.
ii. Mission-critical services/Service Level Agreements.
iii. Ease of management.
iv. Ability to upgrade (ease and compatibility).
v. Virtualization and resource management.
vi. Network Performance Requirements.
vii. Meeting System response time requirements.
viii. The Contractor's System must provide data dashboard capabilities to facilitate real time graphical display of technology performance metrics with drill-down capability aligned with IT Operations User's role and permissions.

4. Performance Monitoring and Management

The Contractor's Performance Monitoring and Management will include the methods for centrally managing system resources such as servers, backup, archiving, and recovery equipment, databases, and applications. The Contractor's methods will address auditing, tracing, and scanning the Contractor's System.

The Contractor will be proactive in diagnosing any problem across each critical layer.

All dashboards will be monitored daily by the Contractor's systems engineers and logs will be archived and available for auditing purposes.

The Contractor will monitor through a unified dashboard all hardware assets as well as all software service interfaces such as relational databases.

The Contractor's System shall leverage all registries as well as draw data from the current MMIS system to obtain beneficiary eligibility on a routine periodic schedule as determined. The Contractor's System shall interface with the future Integrated Eligibility System to obtain eligibility information. The Contractor's System shall interface with the Vermont HIE system to obtain details of interaction with and services provide to beneficiaries by the provider in real-time. The Contractor's System shall be capable of Exchange/Outlook integration with support from local IT resources to ensure security and fault tolerance.

5. System Availability

The Contractor is responsible for delivering a cost-effective, high-availability environment that minimizes the frequency and impact of system failures, reduces downtime, and minimizes recovery time in the event of catastrophic failure.

The Contractor will provide a multi-redundant architecture which ensures the availability of the Contractor's System.

The Contractor ensures that when one path is taken out of production temporarily for maintenance, a redundant path will pick up the load and keep the Contractor's Systems available during the maintenance cycle. All of the Contractor's high-density servers will be 'hot' capable so they do not need to be powered down or taken out of commission in order to scale.

The Contractor's System shall be hosted in Tier 3 or higher data centers, and will be equipped with multipath burstable bandwidth from the hosting facilities.

The Contractor will identify software bottlenecks, excessive calls to the database, suppressed errors, and system responses falling outside the minimum acceptable standards. The Contractor will immediately fix found issues to ensure issues do not make it into the production environment. The Contractor's Development Team will monitor the production environment using APM to proactively identify and resolve issues not detected during the development process.

6. IT Component Capacity Planning

The Contractor will plan, size and control the system as IT Component Capacity needs change. The Contractor's plan will address, but not be limited to the following system areas:

i. Database Storage Capacity
ii. Real-time Integrated / Centralized Database
iii. Data Warehouse and Data Marts
iv. Knowledge Base
v. Audit Log Storage

The Contractor's database instances will be centrally hosted on a primary Storage Area Network (SAN) and will be replicated real-time to a secondary site.

The Contractor will actively analyze the health of the storage systems at both the hardware and software layer. The Contractor will maintain a very conservative overhead of free raw capacity that will be immediately provisioned 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.

a. *System Administration and Support*

i. Account Administration

The Contractor's System shall include both authentication and authorization mechanisms. Authentication will follow industry best practices for password strength and reset frequency. The Contractor's System shall also automatically log a User out if a period of inactivity is exceeded. The authorization framework will allow an administrator to secure the Contractor's System down to the object (button, menu item etc.) level. 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.

ii. System Administration

The Contractor will provide ongoing support and maintenance, including customization of the Contractor's System computing ecosystem. The Contractor will have the State staff perform functions such as account administration, configuration of rules, reference file changes, etc. The Contractor's overall management framework will include:

1. Application management and monitoring
2. Web services management
3. Systems management and monitoring
4. Event management
5. Identity and Access Management
6. Network management and monitoring
7. Performance monitoring
8. Print Prioritization & Management
9. Workload Management

The Contractor will use technology for real-time User and application performance monitoring (APM), as well as provide real-time actionable intelligence to rapidly respond to and address performance issues across entire software portfolio.

The Contractor's System shall provide advanced drill down reporting, dashboards, and customized alerts to provide a single viewpoint for support and technical personnel and to proactively monitor application performance.

The Contractor's System shall capture Web page response times from the User end point down to the backend database calls to ensure Web pages meet or exceed the SLAs set forth in Section I – Maintenance Requirements, subsection 2 – Service Level Requirements of this Contract.

The Contractor will monitor web service performance, web requests, end-to-end monitor Internet Information Systems (IIS) application pools, web site availability, load balancing status, IIS logs and Windows events for all production Web sites. When one of the thresholds for a monitor is exceeded, alerts will be automatically sent to the appropriate staff, depending on the nature of the alert, a scripted action such as restarting an IIS application pool will be automatically triggered.

The Contractor will provide active and passive monitoring of items such as Central Processing Units (CPU), disk and memory utilization, device up time, and custom monitors for production related services such as SQL processes, anti-virus, and in-house developed applications. When one of the thresholds for a monitor is exceeded, alerts are automatically sent to the appropriate staff and depending on the nature of the alert, a scripted action such as restarting a service will be triggered. When alerts are received regarding CPU, disk, and memory utilization for the servers, the Contractor will

proactively add resources where needed without the need to shut down or restart the system.

The Contractor will analyze Syslogs, operating system events, World Wide Web Consortium (W3C) \IIS logs, and perform automated reporting and alerting on the log data. The Contractor will use unified threat management network security appliances. The Contractor will provide centralized logging for all security events and logs while conducting network security monitoring, analytics, reporting, and alerting.

The 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. The Contractor will give each account access levels that are in direct relation to job functions using the Least Privilege Rule.

The Contractor will use bandwidth monitoring on all firewall interfaces which includes VPN tunnels. The 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.

The Contractor will monitor at the server level using real time monitoring and alerting with customizable thresholds and proactively address performance issues before they become a problem.

The 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.

The Contractor will utilize a full IT service management software package built on ITIL (Information Technology Infrastructure Library) best practices.

The Contractor will track, report, and manage key ITIL processes, and track, monitor, and measure the workload to meet or exceed service level agreements.

iii. Audit Trail

Contractor shall track infrastructure and applications at a granular level across all tiers and capture all transactions, end-to-end, from a User click, to the database record and back. The Contractor will provide accurate and timely reporting, granular business transaction grouping and precise SLA management.

All dashboards will be monitored daily by systems engineers and logs will archived and available for auditing purposes.

iv. Data Backup

The Contractor will use offsite storage. Data backup should be stored offsite in the event of a physical disaster. The Contractor will ensure data is replicated near real-time and

failover is automated. Full online scheduled file level backups are snapped locally and replicated to disparate DR data center. Database and application backup procedures must be updated to include backups for the Contractor's System. Full online data backups must occur, as well as offline backups using tape storage.

v. Data Archival

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

1. The Contractor will maintain seven (7) years of data at the highest performing tier of storage and archive the expiring longitudinal dataset on a quarterly basis to lower tiers.
2. The Contractor will schedule maintenance utility flags for all candidate data and will perform the archival in a hierarchical approach to ensure all data dependencies are considered.
3. The Contractor's archived data will remain retrievable via a database management system but will be segregated by schema to exclude it from the Contractor's System during normal operation. This data can be restored to the production tier of storage by archiving utilities if necessary.

vi. Disaster Recovery

The Contractor will develop a High Availability & Disaster Recovery Plan for the entire Contractor's System driven by State's Recovery Time Objectives. The Contractor will have a thoroughly tested Disaster Recovery Plan and Business Continuity Plan on file that can be executed in the event of an unforeseen emergency/disaster. The Contractor's computer systems will be protected against catastrophic failure and business interruptions.

The 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. The Contractor will ensure that data is protected and operations will resume as soon as possible.

The Contractor will provide immediate redundancy locally to a secondary hardware footprint as well as a secondary location within wide area network (WAN). The Contractor's WAN will be comprised of private circuits that do not carry public traffic.

In the event of a catastrophe which results in the loss of the Contractor's primary location, a series of automated failovers and manual failovers will be enacted to cutover and promote the secondary location to reestablish a production environment. This will be accomplished within required recovery time objectives with virtually no loss of data.

b. *Technical Documentation*

The Contractor will provide comprehensive technical documentation consisting of detailed functionality, architecture, design and code sections. The functionality section will describe the intent of the application or module and subsections will include use case diagrams, site maps and a field matrix identifying key data columns. The architecture section will document the overall

structure of the software including components and application interfaces. The design section will include an object diagram, an entity relationship diagram and a data dictionary. 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.

c. *Technical Environments*

The Contractor will establish:

i. Multiple environments (e.g., development, testing, training, and production).
ii. Procedures used to migrate software from one environment to another.
iii. Steps needed to maintain the synchronization between environments.

The Contractor's software development lifecycle process will include several carefully managed and monitored environments to include: development environment, test environment, stage environment, and production environment.

When the Contractor's software has been fully tested, a cross-functional team of developers, system administrators, and quality assurance analysts, led by a project manager, will prepare for the migration process. The Contractor will document risks and resources will be assigned to facilitate the roll-out, and review the standardized procedures. Before any software is migrated, a full system backup will be created to ensure the integrity of data.

After implementation, the software will be validated in the new environment by the Contractor's release team. The Contractor shall provide a report regarding validation in the new environment. The State will review the report and provide comments.

H. IMPLEMENTATION

1. Project Management

a. *Project Management*

The Contractor shall follow project management methodologies that are consistent with the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK) Guide. All staff and subcontractors proposed to be used by the Contractor shall be required to follow a consistent methodology for all Contract activities.

The Contractor will provide a Project Manager (hereinafter referred to as "PM") whose effort will incorporate all the tasks necessary to successfully implement the project. These tasks will include, among others consistent with the PMBOK methodology, updating Project Plans, assigning staff, scheduling meetings, developing status reports and reviewing them with the State, addressing project issues and change orders, and preparing presentations for State stakeholders. The Contractor's PM shall have overall responsibility for the project deliverables, schedule, and successful implementation of the project as planned and all activities of Contractor's resources. The Contractor and subcontractor will use a unified project management tool set approved by the State Authorized Representative(s).

The State's PM shall supervise the Contractor's performance to the extent necessary to ensure that the Contractor meets performance expectations and standards. The Contractor's PM shall

work closely with the State's PM on a day-to-day basis. The Contractor's PM shall be on-site in Vermont as the State may require during the entire project based upon an agreed project schedule. The Contractor's PM shall be required to schedule and facilitate weekly project team status meetings either on-site in Vermont or via teleconference.

The Contractor PM shall provide weekly written Status Reports to the State PM. Status Reports shall include, but not be limited to:

i. The status of tasks and deliverables
ii. Issues and risks
iii. Upcoming activities

The State PM will determine the exact format and content of the report document at or before the project kickoff meeting.

The State shall require the following Project Management Deliverables:

i. Contractor PM to work with State project team to finalize a detailed project work plan (in Microsoft Project). The Contractor shall maintain and update the project plan (i.e., project schedule) on a regular basis (at least weekly, if not daily).
ii. Project kickoff meeting.
iii. A detailed Project Management Plan (PMP) that aligns with the State's Project Management Plan for this project.
iv. Weekly project status reports as defined above.
v. Up-to-date project issues log.
vi. Up-to-date risk log.
vii. Weekly project team meetings which shall include meeting agendas and meeting discussion log, action items and update issues and risk logs accordingly.
viii. Stakeholder register.

<u>Program and Project Management</u>
The Contractor will collaborate with Vermont AHS's program and project management team to align business objectives, establish key metrics and management reporting requirements to ensure on time, on budget delivery, with quality.

<u>Joint governance structure between Contractor and the State</u>
The State PM and State Vendor Manager (hereinafter referred to as "VM") shall supervise the Contractor's performance to the extent necessary to ensure that the Contractor meets performance expectations and standards. The Contractor PM will work closely with the State PM and VM on a day-to-day basis.

b. *Project Work-plan*
The Contractor's planning management model must be approved by the State and shall align with Vermont AHS's program and project management team, as business objectives and projects are implemented, in addition to instituting key planning metrics and standard reporting mechanisms to ensure on time, on budget delivery, with quality. The Contractor's planning management capability will support the overall organization in realizing its goals and in the process also help better collaboration with the project management teams.

c. *Organizational Change Management Plan*

The Contractor shall develop and implement a comprehensive Organizational Change Management (hereinafter referred to as "OCM") plan for both internal and external staff across functions, roles, and locations that are impacted by the Care Management Solution. The Contractor's OCM plan will address how various State staff are anticipated to react to the change and the development of open, timely, and consistent communication of the solution's benefits. The plan also will address relevant training and coaching to help staff understand what is expected of them, and will identify continuous feedback mechanisms to measure and adjust OCM activities.

The Contractor will:

i. Use an Organizational Readiness Assessment approved by the State Authorized Representative(s) to determine the organizational readiness of the DVHA, other State agencies, stakeholders, and providers to adopt the Care Management Solution.
ii. Identify and evaluate key organizational focus areas, impacts, and risks that need to be addressed to achieve program outcomes.
iii. Identify, analyze, and address differential impacts to various stakeholders and end-Users.
iv. Identify and evaluate the organizational capabilities (structure, strategy, systems, skills, style, staff, values, etc.) required to effectively leverage the functional and business capabilities deployed by the Care Management Solution.
v. Develop recommendations for the future organizational structure (business, technology and partners).
vi. Develop an overall organizational change management strategy that complements the implementation roll-out plan with specific attention to the following:
    1. Accelerated adoption of behaviors, attitudes, and operational practices required for impacted staff to support the change;
    2. No interruptions to service delivery during Care Management program roll-out.
vii. Develop and deliver a robust communication strategy consistent with DVHA's operating culture and information needs of different stakeholders.
viii. Conduct Change Impact Assessments to determine the impact on affected stakeholders, including business processes, people, and technology implications to inform content for future communications and training activities.
ix. Conduct Periodic Assessments that track successful change adoption among affected audiences, and inform the OCM plan by providing structured feedback on what is working well and identifying risks or issues.

The OCM plan will identify and evaluate the capabilities (skills, structure, roles/responsibilities, governance, etc.) required to effectively leverage the functional and business capabilities deployed by the Care Management Solution and develop recommendations for the future organizational structure (business, technology, and partners).

d. *Change & Release Management*

The Contractor shall provide a centralized solution to automate and control the software change and release management process.

Change and release management will contain:

i. Library Management—The classification, control, and storage of the physical components of the application.
ii. Version Control—The maintenance, tracking, and auditing of modifications to an application's components over time, facilitating the restoration of an application to prior development stages.
iii. Turnover Management—The automated promotion of software changes across different phases of the lifecycle (e.g., development, unit test, systems test, and production), including management of the approval process, production turnover, and software migration control.

The Contractor shall use a change management portal, designed using ITIL and State of Vermont's best practices, as a central point of control over the change process that tightly integrates technology with process. The portal will have the ability to create extensible workflows to ensure that any change introduced into the IT infrastructure follows a regulated process, thereby preventing unauthorized change and eliminating the potential for system downtime or system degradation.

The change management portal includes a centralized fully customizable change dashboard. Using the portal, the Contractor and State will identify "key performance indicators" or process metrics that are particularly important to the State that will be carefully designed, implemented, and monitored.

e. *Software Configuration Management*

The Contractor will provide the automatic capture and storage of IT Service to Application, Application-to-Component, and Component-to-Component relationships.

The Contractor will maintain the history of relationships and any transformation required of IT service to Application, Application-to-Component, and Component-to-Component to appropriately manage and document configuration changes which affect the application and the processing environment. Management and documentation will include, but not be limited to, source control, version control, profiles, and security plans.

f. *Relationship Management*

The Contractor shall be responsible for the following:

i. Identifying all stakeholders, including:
    1. Those people or groups directly or indirectly involved in the project.
    2. Those who are key to an effective implementation, the key decision makers and those accountable for the delivery of the benefits.
    3. People in the support functions.
ii. Establishing stakeholder's baseline positions and identifying stakeholder's issues.
iii. Mapping stakeholders and assessing their needs and requirements.
iv. Formulating a stakeholder Management Plan using the results of the stakeholder mapping.

g. *Issue and Risk Management*

The Contractor shall be responsible for risk and issue management, including the identification, assessment, logging, tracking/monitoring, reporting, escalation, resolution, and closeout of an issue.

The Contractor and the State of Vermont will determine when an issue is resolved, and the State of Vermont will approve the closeout of an issue.

h. *Quality Management*

The Contractor shall be responsible for quality management, which includes providing a Quality Management Plan and performing assurance and quality control. The Contractor Quality Management Plan shall have the following elements:

i. Detailed definition of all deliverables by phase and associated acceptance criteria.
ii. Defined deliverable review process.
iii. Disciplined deliverable review process.
iv. Regularly scheduled reviews of key project phases and milestones.
v. Identified target performance areas and proposed methods of measurement; establish the baseline metrics for the agreed upon goal areas; and assist the State in determining the level of achievement of the performance goals.

The Contractor's internal quality management program will ensure that the Contractor's System shall deliver returns and business value in accordance with the envisaged usage, both functional as well as technical.

A Quality Management Plan is required to guide the project team regarding quality processes and process improvement practices. The Contractor's Quality Management Plan will avoid rework and defects in the final product/deliverable(s). The Quality Management Plan will have the ability to track quality at any stage of the project, and provide a capability to identify defects, problems, complaints, etc. during each stage of the project.

The Contractor will define a system/process for quality control and establish, with the State, accepted standards of performance and measure against these standards. The Quality Management Plan will provide metrics that measure performance against standards.

The Contractor will recommend changes to the policies and practices in a manner that improves the quality of deliverables.

The Contractor shall:

i. Set up a regular cadence of internal and external inspections.
ii. Schedule inspections with a specific purpose, e.g. entry and exit gates in a process
iii. Establish criteria for each inspection.
iv. Develop an expectation that peer reviews, code reviews, and document walkthroughs are conducted and documented on a regular basis.
v. Set up a process for random inspections of these review processes.

The Contractor's Quality Management Plan will include:

i. Reporting
ii. Metrics management

iii. Documentation management
iv. Continuous improvement
v. Adoption and alignment with the quality standards of the State

The Contractor shall identify the measurable aspects of the project such as conformance to documentation templates, number of errors in a State document, number of defects identified, milestones met on time, schedule delays, etc.

The Contractor will develop a Quality Management process that will:

i. Include stakeholder participation in the quality process.
ii. Include key quality messages in a cadence (weekly, bi-weekly, monthly, etc.).
iii. Keep stakeholders informed and involved in process improvements.
iv. Keep the information consistent.
v. Track and report trends once an established pattern of metrics emerges.
vi. Provide a dashboard in a "pull" location such as a SharePoint® but also push it out to key stakeholders; the dashboard will simple and easy to populate.
vii. Provide internal and external quality reviews and readouts at all levels internal and external.
viii. Provide quality audits.
ix. Provide process analysis.
x. Take each high-level measurement and apply a formula for achieving a metric with expected inputs and output.
xi. Establish a standard format for the metric, e.g. a percentage, a ratio, a sum, etc.
xii. Ensure the data necessary to create the metric is readily accessible and is correct, and the measurements will be relevant.
xiii. Align quality management tool usage with the project.
xiv. Provide analysis, determine root cause, identify a solution, and execute continuous improvement.

The Contractor will consistently report quality metrics.

The Contractor, with the inclusion of the State, will provide inputs/outputs to quality measures. The Contractor will align measurements, acceptance, and timelines to the project. Measures, tracking of inputs/outputs will be monitored.

The Contractor will collaborate with stakeholders to evaluate lessons learned, and publish an After-Action Report. A template with requirements and key quality measurements (requirement traceability) will be prepared.

The Contractor will:

i. Establish a quality control process to monitor, measure, and manage quality process.
ii. Create realistic metrics and establish a quality dashboard.
iii. Establish tool sets to be used.
iv. Report on continuous improvement (from ground up).
v. Initiate internal audits to check the effectiveness of quality processes on the project.

The Contractor's Project Manager will:

i. Insure quality checkpoints are built into the project plan.

ii. Drive communication process to create a quality friendly environment.
iii. Conduct a lessons learned process post project delivery.

i. *Security and Regulatory Management*

The Contractor will maintain physical and logical security relative to the services it provides. This will include an overview of the policies and practices to prevent, detect, and resolve security breaches. In addition, the Contractor shall demonstrate experience and ability to meet all regulatory requirements (e.g., FISMA, HIPAA, and Vermont Statutes).

The Contractor will provide an information security structure that is based upon the ISO27001 framework which is in line with HIPAA and HITECH acts. The following minimum activities are performed to ensure current and future compliance:

i. All health care associates are mandated to undergo four stages of e-learning sessions on HIPAA; they must complete an assessment on their HIPAA understanding.
ii. All health care associates are mandated to undergo e-learning session on revised HITECH act and liability of a business associate.
iii. All employees are mandated to complete a course on acceptable use policy annually, which covers aspects for privacy and security.
iv. In addition to above, an information security awareness training program is conducted for associates, and security controls agreed to by the State are briefed to associates semi-annually.
v. The staff follows a detailed and well-documented approach to risk management. Facility level risks and account security risks assessments are conducted on an annual basis where physical security risks and risks associated with compliance controls agreed in MSA to comply with HIPAA/HITECH and State Statutes. Account level security risk assessment and vulnerability assessments are conducted on a quarterly basis checking the operating effectiveness of the controls.
vi. SAS 70 / ISO 27001 and Third-party audits are performed to check the control effectiveness in addition to above said internal audit. The Contractor shall notify the State's Department of Information and Innovation Security to review and approve before live data is entered into any third-party system.
vii. Security awareness notes are sent to all associates on a monthly basis.

Securing Customer Information

The Contractor will have appropriate operation and technological processes and procedures that are designed to safeguard against unauthorized access, loss, destruction, theft, use or disclosure of data. These controls will meet or exceed the requirements listed below.

<u>Process Controls:</u>

i. The Contractor will act only on the basis of State instructions with respect to State data that is processed.
ii. The Contractor will not disclose State data to a third party under any circumstance other than at the specified request of the State.
iii. All rights, title, and interest in personal data shall remain vested solely with the State.
iv. Periodic risk assessment and audits of accounts are conducted.

<u>People Controls:</u>

The Contractor will have a well-defined Acceptable Use Policy governing the safeguard of confidential information. All associates will read, understand, and sign the Acceptable Use policy document. Associates who fail to comply with this policy are subject to disciplinary action, including revocation of his / her privileges. Violations of this policy may result in termination.

i. The Contractor's associates are required to sign a Non-Disclosure Agreement (NDA)
ii. Stringent background checks are carried out on all personnel.

Technical Controls:

i. Servers will be hardened to standards.
ii. Servers are housed in secure data centers with physical access given only to authorized members of the system support team. Physical access to data centers and any server is monitored continuously from a centralized building management system.
iii. DoD compliant tool such as Darik's Boot and Nuke (DBAN) tool is used for disk sanitation.

This table references Non-Functional Requirements T3.55 and T3.56.

Contractor's Role	Contractor's Responsibilities
Intrusion Detection System (IDS) monitoring team	To detect all types of malicious network traffic and computer usage. This includes: o Network attacks against vulnerable services o Data driven attacks on applications o Host based attacks such as privilege escalation o Unauthorized logins and access to sensitive files, and malware (viruses, Trojan horses, and worms) o Report breaches discovered by the intrusion detection system
Network and System Support (NSS) engineers	Any real or suspected adverse event in relation to the security of computer systems or computer networks can be termed as a logical security breach. A logical security incident can be defined as network or host activity that potentially threatens the security of computer systems, includes activity such as: o Attempts (either failed or successful) to gain unauthorized access to a system or its data o Unwanted disruption or denial of service o The unauthorized use of a system for the processing or storage of data o Changes to system hardware, firmware, or software characteristics without the owner's knowledge, instruction, or consent

Administration (Physical Security) team	Physical security incident is the act of violating an explicit or implied physical security policy. Incidents include activity such as: o Attempts (either failed or successful) to gain unauthorized access to the facility o Riots / strikes which could adversely affect any of the Contractor's or subcontractor's locations o Theft of property
Internal / external (GIS to raise on their behalf) audit team	Ensure this by conducting periodic compliance activities including risk assessments and security audits.
Global Information Security (GIS) team	Development and maintenance of security and continuity related policies, procedures, standards and guidelines. Ensure that the above security policies are being followed and adhered to. Conduct periodic compliance activities including risk assessments and security audits.
Associates	Every associate is responsible to report any suspected / actual security compromise and this is reiterated through regular training programs and security campaigns run from time to time.

Communication of Security Compromise

All incidents are reported to the State of Vermont contacts and are accessible through the intranet, internet, email, intercom, or through toll-free telephone numbers. The incident reporting facility is available 24x7 and permits anonymous incident reporting. Based on the severity of the incident, escalation to concerned parties within defined timeframes as specified below:

i. A security incident or event is notified to the local incident response team and Global Information Security (GIS) team.
ii. The local incident response team immediately acts on the notified incident.
iii. Perform impact analysis and provide necessary support.
iv. If the incident is low impact and can be resolved within an hour, the incident report is submitted to the corporate incident response team and it is documented in the GIS portal.
v. If the incident is high impact or cannot be resolved within an hour, the team escalates to senior management.
vi. The corporate security and incident response team acts on the incident immediately.
vii. Designated State contacts will be informed of incidents as soon as they are escalated.
viii. If the incident is not resolved within 4 hours from the time of incident, inform the local Business Continuity Planning (BCP) team in case the incident warrants an invocation of the BCP.
ix. Based on the severity level, the team updates the State, project managers, and account managers.

All communications are sent through one or more of the following systems:

i. E-Mail
ii. Telephone / Mobile
iii. Hotline
iv. Fax

The Contractor will establish an Emergency Contact Center (ECC) with a toll-free number, wherein Users can call 24/7 and inform any incidents. The ECC is manned by trained professionals, who have access to detailed information on location of nearest medical facilities, civic authorities, support teams etc. Based on the type of incident and nature of emergency, ECC provides support to the User.

2. Environment Installation and Configuration

The seven (7) environments include:

#	Environment Name Description	Users	Data	PHI (yes/no)	Security Level
1	**Production**	* State users * eQH Level 2 Support * Operations Support	Live Data	Yes	High/Certified
2	**Disaster Recovery**	State users	Live Data	Yes	High/Certified Same as Production
3	**Staging (Vendor QA)**	* State users, * eQH Level 2 Support * Operations Support	Live Data (Copy of PROD)	Yes	High/Certified Same as Production
4	**Training**	State users /Dev/CMT Testing/eQ Testing	Obfuscated Data	No	Medium
5	**User Acceptance Testing (UAT)**	State Users/Dev/CMT Testing/eQ Testing	Obfuscated Data	No	Medium
6	**Test**	Dev/eQ Testing/CMT Testing	Dummy Data	No	Low
7	**Development**	Dev	Dummy Data	No	Low

Each of these environments will be managed by the Contractor's configuration management team. The training and production environments reside on a web farm hosted in a perimeter network and are isolated from the intranet by firewalls and gateway appliances. The hardware and software hosting of all non-development environments are detailed in Section G. Technical Requirements in this Contract.

A subset of the configuration will kept in an XML file that allows for runtime configuration of environment specific code. The abstraction of these configuration items allows a different

version of this file to be used for each environment and can be managed in source control in their respective branch.

The change management process, specifically the release plan, includes steps for the promotion of configuration values from development to production.

3. Knowledge Transfer & Training

The Contractor shall provide a Knowledge Transfer and Training Plan. The Contractor shall identify and evaluate the knowledge to be transferred, The Contractor will determine for technical personnel:

i. The knowledge to be transferred.
ii. How the knowledge will be used.
iii. Targeted Users of the knowledge, their learning styles and levels of expertise.
iv. What knowledge is critical for success.
v. How the knowledge will be located and accessed by Users.
vi. How the knowledge will be maintained and updated.

The Contractor will determine for managers and end Users:

i. The knowledge needed to achieve current performance.
ii. Users of the knowledge.
iii. What knowledge will deliver new value in the future.

The Contractor shall validate and document the knowledge. The Contractor will document all platforms, tools and databases, and all relevant hardware and software configurations. The Contractor will develop and validate a complete inventory of all current system documentation, will determine the value and application of each artifact, and will identify any gaps that need to be corrected to effectively capture system knowledge.

The Contractor shall publish and share the knowledge. The Contractor will provide detailed system documentation of items including but not limited to User profiles, transaction volumes, batch windows, system environments, security and access control procedures, maintenance practices, and issue resolution process. The Contractor will share this knowledge using the State's preferred method of exchange, including but not limited to publishing materials on shared sites and repositories, both belonging to the State or provided and managed by the Contractor. All knowledge repositories will facilitate efficient contextual discovery of comprehensive topical information.

The Contractor will determine the best method of knowledge transfer based on factors such as:

i. The type of knowledge to be transferred.
ii. The purpose for transferring the knowledge.
iii. The receiver's level of expertise.
iv. The receiver's learning styles and preferences.
v. Whether the knowledge will be applied in the same or a different environment.

The Contractor will develop training approaches that address the needs of different learning styles. After the Knowledge has been transferred and used by the recipient, the Contractor will conduct an assessment of effectiveness of the knowledge transfer relative to the expected results.

a. *Training Strategy*

The Contractor will provide relevant, thorough, and timely education and training, and will identify specific educational opportunities and provide individualized instructions throughout the implementation and operational phases.

The Contractor will develop a technical and User training strategy that includes:

i. Training State personnel who work on the project.
ii. Training AHS and other State Users.
iii. Training AHS executives.
iv. Training AHS IT staff to ensure technical capabilities exists to support maintenance and operations needs of the system.
v. Method of training each of the above classifications, including approximate numbers to be trained, estimated duration of each training component, and method to ensure training success. Methods include but are not limited to:
    1. State-wide workshops to train Users on our program, polices, technology, and clinical decision support tools.
    2. Frequent scheduled and ad-hoc webinars.
    3. Videos on specific system tasks and workflow related processes.

4. Design, Development, Customization

a. *System Design Methodology*

The Contractor must conduct Joint Application Design (JAD) sessions at its Vermont location to fully explore and understand the functional requirements for the Care Management Solution, and outline the number and topics of each session to be held.

The Contractor will apply component-based approaches to improve usability, extensibility, performance and maintenance which will provide the following benefits:

i. Avoiding large-scale and unnecessary rework.
ii. Managing the risk of Impact on deployed systems and Users.
iii. Improve usability, extensibility, performance and maintenance.

The Contractor will utilize JAD sessions to design systems. This includes a cross sectional team of key stakeholders with both technical and business expertise. During JAD sessions for this project, the Contractor and the State will come to a complete consensus on any given deliverable and discuss those topics specific to each work stream module such as Document Management, Workflow Management etc. across the functional requirements. These will be identified in the Work Plan / Work Breakdown Structure (WBS).

JAD will include the following:

1. JAD Plan- the project managers will meet with the business sponsors to establish JAD session deliverables and milestones of the JAD sessions. They will establish a JAD Plan that includes:
    a. The functional requirements needed.
    b. Clear, understandable, measurable, and attainable goals.
    c. The scope and limitations of the project.

d. Timelines.

2. *Assemble the team.* The Project Leader will develop a list of team members and clearly define their roles and responsibilities.
3. *Kickoff.* The JAD sessions will start off with a kick-off meeting at which the executive sponsor is present. Each team member will be guided to understand what he or she is expected to do.
4. *Execute the JAD sessions.* The Contractor will facilitate and record the activities and decisions of the sessions.
5. *Closure.* At the conclusion of the JAD sessions, the detailed design specification document shall be produced by the Contractor within the timeframe agreed upon during the planning stage. The solution will be presented to the JAD team and if warranted, a prototype demonstrated. State approval will be obtained to proceed, as will evaluation of the JAD process.

b. *System Development Methodology*

The Contractor will employ a System Development Methodology that corresponds to industry-standard best practices approved by the State of Vermont. The Contractor will provide constant and consistent communication, risk mitigation, collaboration, innovation, and continuous process improvement to quickly adapt to business requirement changes and deliver functionality. Dashboard reports will be available to team members and stakeholders alike to provide complete transparency at every phase of the software development life cycle (SDLC). The Contractor will ensure that the stakeholders are getting the needed functionality using ITIL v3 processes, including change management. At every software release cycle, the project manager and stakeholders will actively engage in an interactive demonstration of the latest functionality in the software. Product feedback will be taken back to the development team and worked into the work item backlog to correct any potential issues immediately, instead of waiting until the end of the SDLC. The change management portal will automate and audit the workflow for change requests based on ITIL v3 best practice guidelines and will adhere to internal change management policies.

Each work item of the project will have a mandatory business requirement, detailed design/technical specification, and test plan document linked to the stored document repository. Project transparency will be delivered through reports and dashboards.

The Contractor will employ Agile Methodology to develop its solution. Management of sprints and other Agile components is solely the responsibility of the Contractor, but the State of Vermont Project Team will be available for consultation on significant barriers or blockers during sprints. A small team of Business Analysts and Technical staff from the State of Vermont Project Team will participate with the Contractor's team to determine appropriate goals for each sprint and will review sprint output to determine if the goal has been met. The intent is to provide the Contractor with timely feedback and is in no way to be considered a formal approval. The

Contractor is still liable for formal deliverables listed within this contract. State of Vermont team will be informed and consulted at appropriate checkpoints leading up to production of formal Design deliverables. These checkpoints will be subject to approval by the State of Vermont and will be documented in the work plan.

c. *System Customization Methodology*

Contractor's System customizations will be accomplished by following the same process as the initial VCCI development and will be prioritized by the product owner as described in "Change Management", "System Design" and "System Development" life-cycle methodologies. Each customization will follow the same process as any standard new development and will be prioritized.

d. *Data Conversion Strategy, Approach and Timeline*

The Contractor will create a Data Migration Plan, logical and physical extract, transform and load (ETL) plan detailing how existing State data will be migrated. This plan will include the tools used for migration and the Contractor's Acceptance Criteria that will be applied by its Quality Assurance team, subject to State approval. The plan will include:

i. Reconciliation process(es) and data checking reports.
ii. Data profiling - The process of examining the data as it moves from source(s) to target(s) and collecting statistics and information about that data. This profiling will provide metrics on data quality (e.g. whether the data conforms to particular standards or patterns) and business risk.
iii. Data validation checks - The ability to look at each data record to make sure the information is valid and of good quality.
iv. Validation mechanisms - The use of web services or other programmatic solutions to ensure codes such as zip codes and other data are valid and de-duplicated.
v. Data standardization checks - Ensure that the data transition adheres to predetermined sets of standards set by internal enterprise IT, such as HL7, ICD9/10, CPT® and HPCS codes.

The Contractor will ensure data integrity and consistency throughout all phases of the project, and will work with DVHA to identify its transition data. The State will make a formal request on behalf of the Contractor to the data source entity. The data for each transition project will be transmitted via a secure FTP site provided by the Contractor. The Contractor will work closely with those parties identified to get file specifications (format, layout etc.) and mapping to understand all the various types of datasets.

Gap analysis will be performed to determine if the transition dataset includes all data elements required to successfully extract, transform, and load (ETL) into the system. Gap issues will be resolved in a logical and physical plan on how the data will be migrated. Included in the plan will be the tools used for migration and the Acceptance Criteria that will apply an execution of the conversion/transition plan with an Acceptance Test. Reconciliation and data checking reports

will be run to determine that all quantitative and qualitative metrics are achieved post-migration, and "data fixes" will be limited as much as possible with a thorough design plan.

e. *Data Transition Strategy, Approach and Timeline*

The Contractor will develop a Data Transition Strategy, Approach, and Timeline to ensure coordinated activities between the Contractor and the source entity are fully documented.

f. *Testing Strategy and Approach*

The Testing plan will address the Unit Testing, System Integration testing (end-to-end application testing), stress testing, performance testing, and UAT testing, backup and recovery testing and installation testing. Interim testing, such as that done during Agile development, will be delivered to the State of Vermont Project Team according to a schedule outlined in the Work Plan. Interim testing does not relieve the Contractor of delivering formal test results as described elsewhere in this Contract.

Testing starts with the exploration of the requirements, elaborating on the User stories from different perspectives. Testing is a continuous and integrated process where all parties in the project are involved. Testing will be performed throughout each construction iteration. Testers will be embedded in the development team and will actively participate in all aspects of the project. Programmers and testers will work side-by-side and share the single role of quality assurance.

The test team will perform parallel, independent testing throughout the project and will be responsible for the end–of-lifecycle testing performed during the release/transition phase of the project. The goal of performance testing is not to find bugs, but to eliminate bottlenecks and establish a baseline for future regression testing.

i. Performance Testing

1. The Contractor will develop a Performance Testing plan that includes a clearly defined set of expectations relevant to the component being tested. For example, for a Web application, the following would be included in the Performance Testing plan:
    a. Expected load in terms of concurrent Users or HTTP connections.
    b. Acceptable response time regardless of the expected load.
2. The following tools will be used to identify and resolve bottlenecks, at no additional cost to the State:
    a. At the application level, profilers will be used to spot inefficiencies in code (for example, poor search algorithms).
    b. At the database level, profilers and query optimizers will be used to gather all database level statistics for performance testing.
    c. At the operating system level, utilities or specialized kernel monitoring software will be used to monitor hardware resources such as CPU, memory, swap, and disk I/O.

d. At the network level, systems engineers will use packet sniffers and various utilities available in our environment to understand issues related to network traffic, switching and routing.
e. Black-box testing will also be done as part of Performance Testing.

3. The Contractor will employ tools that can simulate concurrent Users/HTTP connections and measure response times.
4. The Contractor will leverage its existing Coded UI automation tests and will include testing all given use case scenarios to capture performance for typical system activities.

ii. Load Testing

The Contractor will increase the load on the Contractor's System via automated tools as part of Performance Testing. The load is defined in terms of concurrent Users or HTTP connections and the associated traffic that can concurrently produce. Performance testing uses load testing techniques and tools for measurement and benchmarking purposes and uses various load levels. Load testing operates at a predefined load level, the highest load that the system can accept, while still functioning properly.

iii. Backup and Recovery Testing

The Contractor will conduct testing of Backup and Recovery processes at intervals determined in the Work Plan. The Disaster and Recovery Plan will verify backups can be recovered when needed within the targeted recovery time. Testing of backup and recovery will be performed on a regular basis. This is done at least once a year and more frequently if infrastructure changes (hardware or software) are introduced via the change management process. All Contractor System modifications affecting data will be reflected in an updated Backup and Recovery Testing plan.

The Contractor will make the backup and recovery testing as realistic as possible. The Contractor will restore the targeted application and associated databases to the secondary site and apply previously described performance and load testing scenarios to determine if the Contractor is capable of achieving the base line performance metrics outlined in the SLA.

5. Deployment

a. *Release Development and Rollout Planning*

The Contractor will release working software to the end User according to project schedule. The Contractor will take a release to the targeted end User base upon successful testing and training. The Contractor's process will ensure the accurate sequencing of deployment steps/activities to make each release as successful as possible.

The Contractor will utilize an established release planning process that will engage the project team and will result in defect free release candidates. A candidate will include all requirements

and functionality identified for the release. The Contractor will test, fix, and distribute a stable release only with the approval of the State. The release is pre-UAT tested by the Contractor in the testing environment. Once testing is complete, and there are no identified defects/issues, the release is scheduled for User Acceptance Testing (UAT). The Contractor will provide training such that the UAT team can effectively test. UAT is conducted to obtain confirmation that the Contractor's System meets all mutually agreed upon requirements and functionality. Static and dynamic source code testing shall be completed, and flaws remediated before production. Flaws that cannot be remediated must be accepted by the State's Chief Information Security Officer or her/his designee. Upon achieving successful UAT, a release to production date is scheduled for implementation.

b. ***Implementation Strategy***

The Contractor will develop and deliver a Transition to Operations Plan for each released implementation. The Plan will include staging activities, end User training, date and times for go-live, implementation support services, activities to address system stabilization, and system acceptance criteria. The Contractor will utilize a results-driven incremental (RDI) implementation and deployment strategy to effectively manage State specific releases. RDI consists of self-contained implementation sequences or phases where each achieves a certain business result or goal.

The project Work Plan details the projected delivery dates of all "Immediate" and "Future" requirements that map directly to the work packages in the WBS. These work packages are logically grouped functional requirements.

c. ***Transition to Maintenance and Operations***

The Contractor will, in concert with the State, manage system stabilization activities, monitor SLRs, create and maintain an issue log, and work to achieve systems acceptance utilizing predetermined criteria. At the point in which the system is stable and accepted, the Contractor will perform maintenance requirements activities as outlined in this Contract, and the release will be entered into warranty.

d. ***Lessons Learned***

Phased Rollout Schedule will focus on a specific objective. Each successive phase will leverage the work and experience from prior phases.

6. Quality Management

The Contractor will provide Quality Management of the requirements through the traceability matrices, configuration management activities, change readiness, metrics to analyze quality goals, and management of defects and issues tracking. The Contractor's Quality Management will include, but not be limited to, the following elements:

i. The State's management of the requirements. This includes the identification of inconsistencies between the requirements, and the project's plans and work products.
ii. The State's Requirements Traceability Matrices (RTM) that will be used for requirements management, and will map where in the software a given requirement is implemented.
iii. The State's configuration management activities that include: baseline control and monitoring of the software library. Approved changes to baseline software and/or

documentation should be made properly and consistently in all products, and no unauthorized changes are to be made.

iv. The practices and procedures that will be followed for reporting, tracking, and resolving problems or issues identified in software development, solution transition, and solution maintenance.

The purpose of the RTM is to ensure that all requirements defined for the Contractor's System are tested in the Testing Protocols. The Contractor will capture all the requirements and map them to relevant scenarios and test cases. The Contractor will create a RTM that captures the relation between business requirements, application features/functionality and the test design (test scenarios and test data). The RTM will be created at the very beginning of the project and it will form the basis of the project's scope.

The RTM will have bi-directional traceability, and the RTM will track the requirement "forward" by examining the output of the deliverables and "backward" by looking at the business requirement that was specified for a particular feature of the product. The RTM is also used to verify that all requirements are met and to identify changes to the scope when they occur.

The Configuration management process will include:

i. Identifying configurable items and defining configuration control approach.
ii. Identifying document and source code libraries.
iii. Defining and creating User groups and access control to be administered.
iv. Identifying State supplied products including documentation, tools, libraries etc.
v. Naming conventions to be adopted:
    1. Includes document / code labeling convention.
    2. Labeling convention to be used when using a tool.
    3. Criteria for base lining and identification of baselines.
vi. Change management process - Tracking changes to configurable items over the application / project life-cycle.
vii. Policies for archival and disposition of project items.
viii. Configuration audits – responsibilities and administration.
ix. Tracking versions, changes to configurable items and status accounting.

All of the above processes are documented in the Software Configuration Management Plan.

Throughout the lifecycle of this Contract, the Change Management process will apply to any change that potentially affects the project scope, baseline, objectives, budget, implementation/ deployment strategy, staffing plan or content of key deliverables.

While this engagement the Change Management process may be triggered due to the following reasons:

i. Changes in the existing requirements.
ii. New additions in requirements.
iii. Requirements deferred for future releases.
iv. Change in timelines.
v. Change in scope.

vi. Change in assumptions.
vii. Any changes to software, hardware, tools and any new tool implementations for supporting the applications in scope.

The impact of these change requests when initiated across various phases is described in the table below:

Triggers of Change Requests	Requirement Analysis/ Planning	Test Design	Test Execution
Changes to existing Requirements	Low	Medium	High
Addition of New Requirements	Low	High	High
Requirements deferred for future releases	Low	Low	Low
Changes in Timelines	Low	High	High
Scope changes	Low	Medium	High
Changes in Software/ Hardware/Tools	Medium	Medium	High

The total scope of work for the project defined in this Contract must be approved by the State before the commencement of the project. The State or the Contractor may request change to this original scope of work at any time using a formal Change Order Request. The Change Order must indicate: scope, source of funds, payment provisions, points of contact, ownership of data and any applicable data use agreement, and project specifics. No Change Order may increase the maximum amount payable under this contract, substantially deviate from the scope of this contract, or deviate from any term in any part or attachment to or of this contract.

The Change Order Request will be evaluated for its impact on the scope, schedule, quality and cost of project and the evaluation reviewed in a meeting between the Contactor and the State. Based on both parties' review and the mutual agreements reached, necessary Change Orders will be executed to the planned effort, budget, schedule and resource planning.

Both parties recognize that the Change Order process does not obviate the need for State or federal regulatory review of amendments to the scope, budget, or maximum amount of this agreement.

The Change Order process shall not be used in lieu of the amendment process where an amendment is appropriate. Each Change Order must clearly define payment either by rate per hour or deliverable received and approved. Each Change Order must be pre-approved before any work shall begin. The State will not pay for services that are not previously approved in a Change Order by both authorized representatives listed within this section. The State Authorized Representative and the DVHA Business Office have final authority over whether or not a Task Order is initiated under this agreement.
A Change Request will be implemented only upon the request of the State Authorized Representative(s). All the Change Requests will be recorded with the details of the requester and

approver, resolution, business and technical impact, impact to schedule and cost, and dependencies on other rollouts.

The Contractor will introduce and implement a metrics program which will help the State in moving towards 'metric driven' organization. Performance at project level will be tracked. Metrics will be used for the following:

i. Run time status and reporting.
ii. Risk index for health of program from schedule and quality perspective.
iii. Positive influence on the upstream quality.
iv. Realigning test strategy and plan.
v. Readiness decision for quality sign off.

The Contractor will track the engagement at various levels to ensure that all aspects of the engagement including project delivery, infrastructure, quality processes, resource management and financial issues are addressed.

Contractor Roles and Responsibilities

Account Director – Owns the entire process - testing, delivery, and relationship, maintains SOW, contracts, invoicing and acts as the first point of escalation.

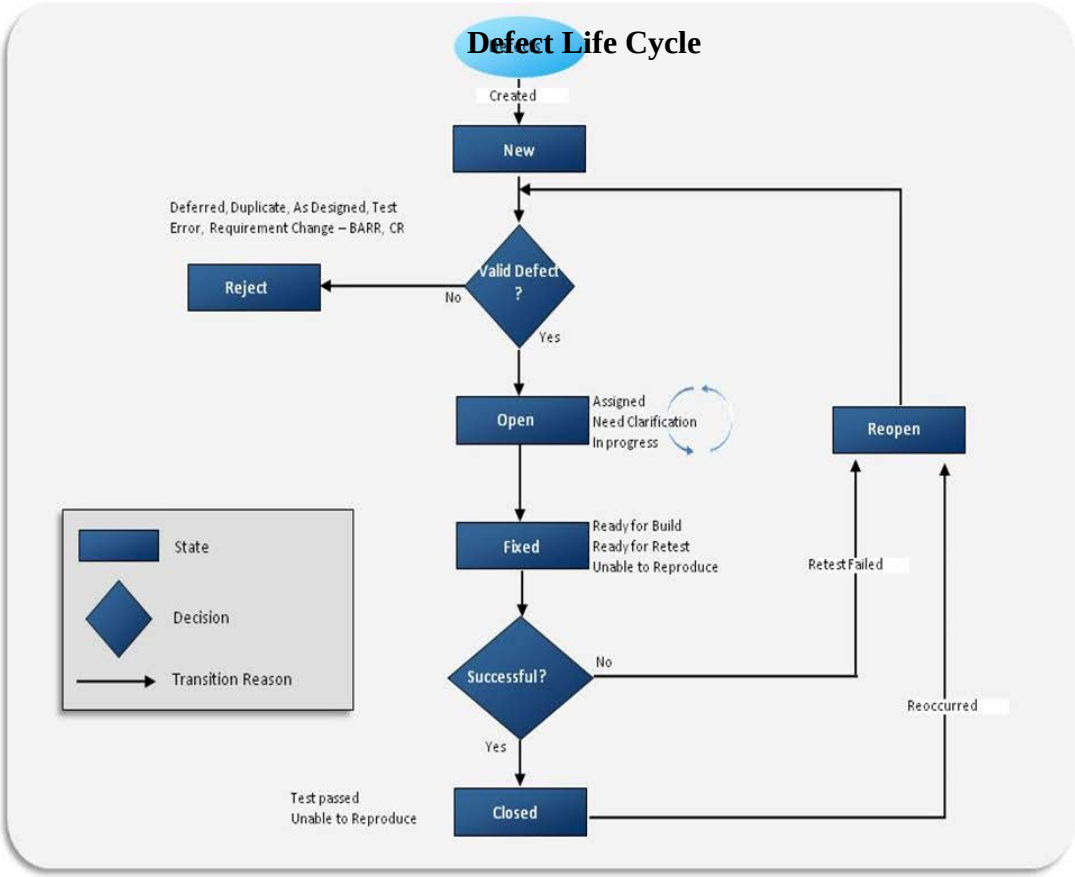
Project Manager - Acts as the single point of contact for the overall project, testing and ensures that the engagement progresses as per the pre-determined State objectives and delivery commitments.

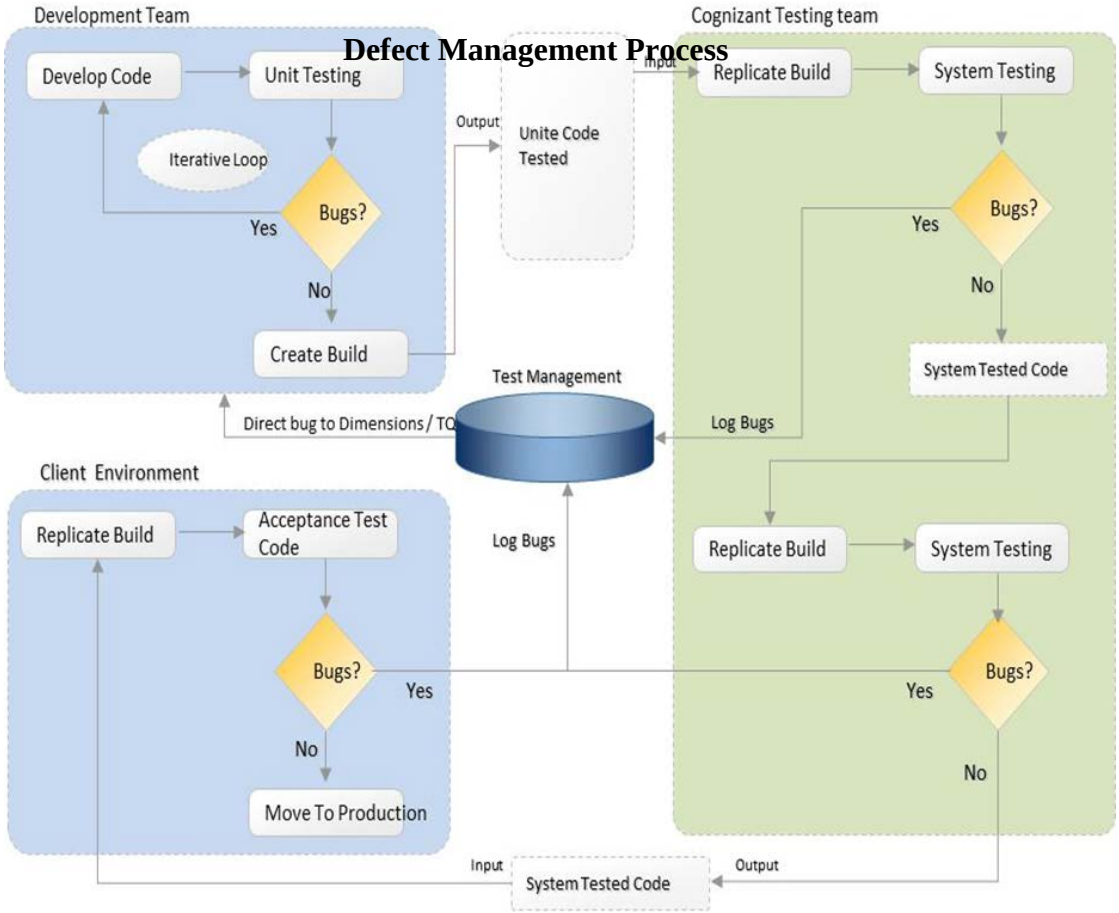
Test Lead - Designs the program test strategy and manages process enhancements, tools and approaches for efficient delivery. Identifies testing requirements and test plans and test reports.

Testers - Designs and executes test cases, provides status updates, participates in meetings with project managers as well as testing and development teams.

Defects will be measured and tracked. Following steps will be followed by the Contractor to ensure defect resolution:

i. Each defect, as it is discovered, will be identified and recorded. Defect tracking sheet will be stored on a shared location accessed by both the Contractor onsite and offsite testing team and the State testing team.
ii. Defect will be assigned to the lead developer for module/component from the implementation team.
iii. Lead developer from the build team will change the status to "ready for re-test."
iv. Once the defect is ready for retest, all the test cases impacted by the defect or the related components will be executed to ensure that the defect has been rectified. Then the team will change the defect status as "fixed and verified."
v. Then the test lead from the QA team will co-ordinate with the developer from the build team to close the defect and finally the build team will change the defect status as "closed."
vi. Defect prevention meetings will be conducted at regular intervals between the testing team and the development team to discuss the test execution and defect analysis.
vii. Only when the re-test has been successfully completed with no critical failures, testing will be signed off.


Defect Life Cycle
Created
New
Deferred, Duplicate, As Designed, Test Error, Requirement Change – BARR, CR
Reject
No
Valid Defect ?
Yes
Open
Assigned
Need Clarification
In progress
Reopen
Fixed
Ready for Build
Ready for Retest
Unable to Reproduce
Retest Failed
State
Decision
Transition Reason
Successful?
No
Reoccurred
Yes
Test passed
Unable to Reproduce
Closed


Defect Management Process
Development Team
Develop Code
Unit Testing
Iterative Loop
Bugs?
Yes
No
Create Build
Output
Unite Code Tested
Input
Cognizant Testing team
Replicate Build
System Testing
Bugs?
Yes
No
System Tested Code
Test Management
Direct bug to Dimensions / TQ
Log Bugs
Client Environment
Replicate Build
Acceptance Test Code
Bugs?
Yes
No
Move To Production
Log Bugs
Replicate Build
System Testing
Bugs?
Yes
No
Input
System Tested Code
Output

7. CMS Certification

The Contractor must participate in and support all planning activities associated with Federal certification of the MMIS Care Management Solution. Planning activities will ensure that Vermont's Medicaid Enterprise meets all CMS requirements and performance standards to qualify for the highest eligible Federal Financial Participation (FFP) rate retroactive to the first day of operation.

The Contractor will start preparation at the beginning of the project and continue through each step of the design, development, testing and implementation of the Care Management Solution. At the time of full MMIS certification, the Contractor will:

i. Include planning for CMS Certification as part of Project Kick-Off.
ii. Adhere to CMS' Seven Standards and Conditions in all deliverables.
iii. Map all requirements, gaps, use cases, testing artifacts, workflows, training documents, change management artifacts, and other applicable artifacts to the corresponding MITA Business Area(s) and MITA Business Process(es).
iv. Create a Certification Readiness Plan.
v. Create a Certification Plan.
vi. In conjunction with the State of Vermont Project Team and CMS, will determine which of the Medicaid Enterprise Certification Toolkit (MECT) criteria are applicable to the Care Management project and certification effort.
vii. Meet all MECT criteria applicable to Care Management.
viii. Within three (3) months of contract signing, the Contractor will report to the State of Vermont Project Team which of the applicable MECT criteria it already meets and it will then track and report the status of each criterion through the Work Plan.
ix. With the State of Vermont, will monitor and report changes in federal laws, policies, or regulations that could impact certification criteria. Significant changes will be implemented subject to the Change Management Plan.
x. Develop a CMS Certification Checklist, based on the CMS Certification Toolkit for more information about requirements of the Care Management Solution, see (http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MMIS/MECT.html), for those processes supported and impacted by the Care Management Solution.
xi. Support the State in all discussions with CMS regarding certification related to the Care Management Solution.
xii. Develop and execute on required and suggested remediation efforts to achieve certification.
xiii. Assist the State in preparing certification documents and reports related to the Care Management Solution.

The Contractor will be responsible for preparing all documentation and operational examples to demonstrate relevant criteria are met and Care Management Solution operations address all business functions and performance standards and business model expectations for certification.

A subsystem certification checklist will be developed specific to the proposed Care Management Solution as a baseline gap analysis to determine the scope of work required to meet certification. The Contractor will ensure all related Contractor's Systems review criteria specified in the Federal and State laws and regulations are met.

The Contractor will support the State in all discussions related to this subsystem. The Contractor will author all required documentation and create operational examples to demonstrate all criteria for certification, while making sure the Contractor's System meets or exceeds performance standards and business model expectations. Any issues identified during this certification process that are associated with the Care Management System will be immediately remediated by the Contractor's team through change management process. The Contractor will collaborate with CMS to understand the deficiency and develop the plan to correct it based on their suggestions.

I. MAINTENANCE REQUIREMENTS

1. Production Support and Transition

The Contractor shall follow ITIL V3 service management methodology as is described in detail Section G, (subsection 6.a.ii) System Administration and Support.

a. *Integrated Support Model*

The Contractor's services will include call-logging, management, monitoring, and maintenance.

Inherent components are:

i. Tiered Support
ii. Service performance at each tier base-lined, monitored, measured and reported
iii. Change management process
iv. Continual service improvements

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

Level of Support	Highlight of each Level
Level 1	▸ Shall provide 8x5 coverage 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 L1 teams shall defer to L2/L3 teams ▸ Focus on enhancing the SOPs and KBs through the course of the engagement to ensure increased fulfillment of requests at this layer
Level 2	▸ Service restoration through temporary fixes/workarounds, root cause analysis, KBs /SOP creation for repetitive incidents and enhancement of Knowledge Management artifacts ▸ Staffed with functional specialists with knowledge of applications and associated business processes with experience in direct business interaction
Level 3	▸ Staffed with application developers and technical analysts

	▸ Permanent fixes, application strengthening, continuous service improvement ▸ Dedicated team with technology-based sharing across applications

b. *Transition*
The Contractor is responsible for planning and coordinating resources to ensure specifications for the deployed Contractor's System are realized to identify, manage, and limit risks that could interrupt the system in operation. The Contractor will fully coordinate resources required to successfully deploy and operate the System.

c. *Pre-Transition Planning*
The Contractor will engage the State Authorized Representatives to acquire an approved project transition plan.

Transition Due Diligence is performed by the Contractor and all artifacts shall be documented. Resource coordination will identify, streamline, fit, and track across the capacities of people, procedures and tools the Contractor will provide and consume timely information. The Contractor will align resources to generate the targeted outcomes of the deployment.

A Configuration Management System will be available for all stakeholders to reference the model/profile of each component of the Contractor's System.

The Contractor's timing will be represented in terms of schedules where lead-time will be provided for accommodating anticipated stakeholder impacts of the deployment as it progresses from design to implementation to production.

d. *Transition*
The Contractor will have its Subject Matter Experts (SMEs) travel to the State's preferred location for the transitioning of all required knowledge elements to State staff or designated entities.

Information regarding usability, supportability and operational requirements with both deployment event and aftermath will be coordinated with the State by the Contractor. A combination of scheduled and on-demand information delivery regarding the service deployment will be established and maintained for stakeholders, organized for User-friendliness per the stakeholder's respective role. A knowledgebase (KB) will be generated during the Transition phase.

e. *Steady State*
The Contractor's transition teams will provide support during the Service Stabilization period that immediately follows 'Go Live' (also referred as Steady State) to ensure a smooth and trouble-free move from transition to maintenance and operations mode.

2. Service Level Requirements
The parties hereby agree that the State shall pay a varied service charge based upon different levels of performance by the Contractor, as set forth in the table below. Under no circumstances shall the payment of a service credit hereunder relieve the 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. The State shall have the right to terminate this Contract for cause whenever Contractor's successive or accumulated service level failures amount to "Chronic Under-Performance", which is defined as any of the following occurrences:

(A) Four or more of the SLRs numbered 1 through 9 are not met in a single month; or
(B) Four or more of SLRs numbered 10 through 14 are not met in a calendar year; or
(C) The same SLR is not met for three (3) times within a rolling 12-month period.

SLR Number and Name	Service Level Requirement After deployment of Release 1, Contractor shall monitor and report monthly on the following SLRs numbered 1 through 7b	Contractor Assessment of Service Credits (SC)
SLR 1 **Online Availability**	The components of the Solution under Contractor control as delivered into production shall be available 99.75%. The availability percentage will be verified with evidence from the Contractor. Scheduled maintenance will be allowed with the prior approval of the State of Vermont (SoV). An ongoing monthly maintenance schedule requires just one approval. Additional scheduled maintenance requires SoV approval at least 2 business days in advance. Scheduled maintenance should occur outside normal business hours.	[**$ 5000.00**] for each tenth of percentage point below the contracted level of availability
SLR 2 **Online Search and Lookup Queries Response Times**	The Contractor's System response time during operations will be 5 seconds or less for 95 percent of the search and lookup queries (does not include ad hoc queries and analytics). Maximum response time for search and lookup queries will not exceed 15 seconds except for agreed to exclusions. The Contractor shall investigate tickets from SoV that report response times exceeding the maximum response time and provide an analysis to SoV. The system response time is defined as the time it takes for the server to service a request.	[**$500.00**] per 0.5 seconds that the monthly average response time exceeds the maximum response time. Seconds will be rounded up to the nearest 0.5 of a second.
SLR 3 **Dashboard Report Response Times**	The Contractor's System shall return each Dashboard report (main, patient, provider, etc.) within 5 seconds or less, 95% of the time.	For each dashboard [**$ 500.00**] per 0.5 seconds that the monthly average response time exceeds the maximum response time. Seconds will be rounded up to the nearest 0.5 of a second.
SLR 4 **Static Standard Report Response Times**	The Contractor's System shall return a Static Standard report within 5 seconds or less, 95% of the time.	[**$ 500.00**] per 0.5 seconds that the monthly average response time exceeds the maximum response time. Seconds will be rounded up to the nearest 0.5 of a

		second.
SLR 5 Parameter-based Report Response Times	The Contractor's System shall return a parameter-based report within 20 seconds or less, 95% of the time.	[**$ 500.00**] per 0.5 seconds that the monthly average response time exceeds the maximum response time. Seconds will be rounded up to the nearest 0.5 of a second.
SLR 6 Online Application Response Times	The Contractor's System shall achieve performance for interactive transactions other than the reporting-related transactions above, conforming to the minimum acceptable performance standard of 5 seconds response time, for 95% of interactions.	[**$ 500.00**] per 0.5 seconds that the monthly average response time exceeds the maximum response time. Seconds will be rounded up to the nearest 0.5 of a second.
SLR 7a Software Maintenance Request Resolution Times: *Severity 1 - Emergency	The service provider must resolve (i.e. find and deploy the final solution to Production) Severity 1 Maintenance requests within 4 hours.	[**$5000.00**] per hour or portion of an hour beyond the 4-hour time requirement.
SLR 7b Software Maintenance Request Resolution Times: *Severity 2 -Urgent	The service provider must resolve (i.e. find and deploy the final solution to Staging) Severity 2 Maintenance requests within 24 hours.	[**$ 2000.00**] per hour or portion of an hour beyond the required 24-hour time requirements.
SLR 9 Submitted Ticket Response Times to Submitters	Tickets submitted by a user of the Contractor's system shall be categorized by the Defect Triage Group and a response (containing information related to the categorization) shall be sent to the ticket submitter. These tickets may be categorized as Defects, User Education issues, Change Requests, Governance issues, SoV data issues, etc. Each ticket shall be response to, via email, phone call or automated means, and shall be received by the submitter within five (5) business days.	[$ 100.00] per response sent after five (5) business days or not sent at all.
SLR Number and Name	Service Level Requirement After the start of the UAT phase for each Release, Contractor shall monitor and report monthly for the following SLRs numbered 8	Contractor Assessment of Service Credits (SC)
SLR 8 Quality of Code Delivered to UAT	Software deployed to the UAT environment for testing shall fix without defect the targeted defects for which it was deployed and additionally not introduce any new defects (i.e. defects not currently in the backlog). Otherwise, the SoV may request a Process Improvement review of the Contractor's UAT deploy process.	
SLR Number and Name	Service Level Requirement Contractor shall monitor and report annually on the following SLRs numbered 10 through 14	Contractor Assessment of Service Credits (SC)
SLR 10 Disaster Recovery	The Contractor's System's Recovery Time Objective (RTO) will be within 4 hours. In case of a disaster that affects the Care	[**$ 500.00**] per each 10 minutes or part of

RTO	Management operations, the entire service will be restored within 4 hours.	10 minutes over the RTO.
SLR 11 **Disaster Recovery RPO**	The Contractor's System's Recovery Point Objective (RPO) will be no more than 1 hour of data loss. In case of a disaster that affects the Care Management operations, 1 hour of data inputs to the Contractor's System (but no more) may be lost and needs to be re-entered.	[**$ 500.00**] per each 10 minutes or part of 10 minutes over the RPO.
SLR 12 **Record Retention**	The Contractor's System shall include the capability to maintain all data according to State-defined records retention guidelines (i.e., record schedule). General schedules can be found at: http://vermont-archives.org/records/schedules/general/ Specific retention disposition orders can be found at: http://vermont-archives.org/records/schedules/orders/ In general, record retentions range from 3 to 10 years. In addition to the above, note that case records including Child Support-related data must be retained for a minimum of 3 years after Case closure and the youngest child in the case is 18 years old.	[**$ 100.00**] per record instance out of compliance with the defined retention schedule.
SLR 13 **Document Retention**	The Contractor's System shall include the capability to maintain all images and electronic documents according to State-defined document retention guidelines (i.e., record schedule). General schedules can be found at: http://vermont-archives.org/records/schedules/general/ Specific retention disposition orders can be found at: http://vermont-archives.org/records/schedules/orders/. In general, document retentions range from 3 to 10 years.	[**$ 100.00**] per document instance out of compliance with the defined retention schedule.
SLR 14 **Online Case Retention**	The Contractor's System shall provide on-line access of all active cases and up to 12 months for closed cases.	[**$ 100.00**] per case instance out of compliance with the defined retention schedule.

Defects uncovered during User Acceptance Testing (UAT) and in Production will be categorized due to Severity. Severity is determined by the relative importance and response time requirements for the type of defect encountered.

Production Defect Severity Response Requirements

Severity 1 4 Hours
Severity 2 24 Hours
Severity 3 - 5 N/A. These defects are to be prioritized (see Priority Level definitions) jointly by the State and the Contractor and scheduled accordingly for investigation, correction and deployment into production.

Defect Severity Definitions:

i. Severity 1 – A complete loss of service, the customer's business operations are halted, or a critical system failure that impacts the entire user community and no workaround is possible.

ii. Severity 2 – Service is degraded, resulting in a loss of major functions for a substantial portion of the customer's user community. The customer's business operations are severely limited though the customer may do some work. A workaround may be possible.

iii. Severity 3 – Service is functioning but with a loss of minor functions to a limited number of users. The customer's business operations can continue due to a temporary workaround.

iv. Severity 4 – Service is functioning but one person is experiencing a problem. The customer's business operations are unaffected.

v. Severity 5 – Defect is a cosmetic issue. Warranty Requirements

The Contractor shall be responsible for fixing any errors that occur during the first Contract year and the two subsequent Contract years following the State's acceptance of each release deployed at no additional cost. The Software Warranty period applies to all "corrective" maintenance / reactive modification of the Contractor's System performed after completion of deployment to correct discovered faults with any functionality within the scope of original software development efforts. All such fixes are required to occur in a reasonable timeframe (depending on severity as defined above in Section I, subsection 2. Service Level Requirements) and shall be produced at no additional cost to the State of Vermont.

The Contractor shall provide two (2) years of Application Warranty following deployment of each release at no additional cost. The Contractor shall provide the equipment needed to support its staff for duration of the project. The Contractor shall be responsible for the root cause analysis activities to demonstrate whether a defect is related to the scope of functionality delivered by the Contractor.

The Contractor will meet Service Level Requirements by proactively reviewing performance indicators on a daily basis, and immediately taking corrective action when an indicator is not in compliance.

The Contractor will provide all prescribed warranties as outlined to cover any defects directly related to the approved final scope and associated technical requirements of each release phase. Any defects discovered during the warranty period will be remedied at no additional costs to the State.

The Contractor will comply with all State warranty requirements.

3. Maintenance & Operations

The Contractor will provide a Base Software Maintenance period to begin with confirmation from the State that the project deployment has been successfully completed and ending five (5) years starting two (2) months prior to Release 1 go-live date. Two (2) one-year optional extension periods must also be provided. The five (5) year agreement will be subject to annual review and renewals. The State, at its discretion, may conduct a market pricing survey to determine if the current pricing arrangement is in the best interest of the State. Based on the results of third party surveys, the State may choose to negotiate different terms or pricing with the Contractor. The Software Maintenance periods include "adaptive" maintenance / modification of the Contractor's System performed after completion of deployment to keep the Contractor's System usable in a changed or changing environment, and "perfective" maintenance which is modification of the Contractor's System after completion of deployment to improve performance or maintainability. During this period, the Contractor shall be in charge of Software Maintenance, and optionally hosting and operating the Contractor's System and providing Disaster Recovery services.

The Contractor must provide Base Software Maintenance period to begin Release 1 go-live. The Contractor shall communicate and document all software faults that are not part of the scope of the original development effort during the Software Maintenance period. For all Contractor System enhancements (over 20 hours of effort) that are not part of the original scope, the Contractor shall analyze the changes and provide cost estimates for performing those changes to Vermont AHS.

The Contractor will provide two (2) one-year optional Software Maintenance periods at the expiration of the initial five (5) years of Software Maintenance period. The State shall be able to exercise its option to sign-up for services similar to those offered in the initial software maintenance period.

a. *Production Support Staff*

The Contractor must provide:

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

1. Architect
2. Business Analyst/Functional Lead
3. Change Management Lead
4. Communication/Network Specialist
5. Database Administrator
6. Database Designer
7. Help Desk Specialist
8. Hardware Specialist
9. Operations Lead/Manager
10. Project Director
11. Project Manager
12. Programmer
13. Quality Assurance Manager
14. Security Systems Engineer
15. Systems Administrator
16. Technical Writer
17. Test Lead/Manager
18. Tester
19. Training Lead/Manager
20. Training Specialist

Termination Assistance Services strategy will include documentation and knowledge transfer to Vermont AHS which may include other subcontractor(s).

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

i. Base Software Maintenance Period.
ii. Incident and maintenance request reporting.
iii. Optional Extension Software Maintenance Periods.

The Contractor will ensure due diligence in personnel selection by following a two-stage filtering process for selecting the project staff which includes:

1. Round 1 – Review by Care Management SMEs within Healthcare SME.
2. Round 2 – Review by Contractor Account Director.

The Contractor's Project Manager shall be responsible for the smooth on-boarding of Team Members as per the program guidelines. The on-boarding process orients a Team Member to:

i. The general industry trends and news related to the program sponsor.
ii. The program's objectives, scope, and existing related information (e.g., PMP).
iii. The current status of the program.
iv. The program's overall organization structure.
v. The program time and expense guidelines.
vi. For Team Members who travel, program travel, lodging and per diem guidelines.
vii. Overview of the program's standard operating procedures.
viii. The approved process to request access to building and computing facilities.
ix. Orientation to the Team Member's project/sub-team.
x. Specific duties and expectations of the new Team Member.
xi. Detailed review of the tools and procedures the Team Member will execute to perform required duties.
xii. Overview of Program Sponsor's security and confidentially requirements.
xiii. Any other information required by contractual or compliance obligations.

The Contractor's Project Manager, in coordination with the Team Member, is responsible for identifying the training needed to improve a Team Member's skills as required by the program.

The following are the Termination Assistance activities that will be carried out by the Contractor to mitigate the transfer risk as much as possible while accomplishing the very important task of knowledge transfer.

The Contractor team will identify relevant knowledge areas in close co-ordination with Vermont AHS teams to identify the skills that have to be disseminated. The following kind of training, but not limited to, will be provided as necessary:

1. *Train the Trainer*-This mode of training enables State designated trainers (Core Team) to gather User level knowledge regarding the application. Once trained, it is their responsibility to train rest of the State Users. However, should the State need Contractor team's services to train all of its Users, the same can be made available to the State, through a Change Request.
2. *Application Administration training*-The core members of the State's team are imparted Application Administration training. Contractor team trainers impart training on the operational procedures.
3. *Application Support Training*- The application support training enables State designated support team to understand the complete application from technical perspective and become ready to support the application in due course.

b. *System Administration*

The Contractor's System shall automatically collect events logs from each system and store the information in a centralized database for a period of 90 up to 365 days, at which time they are

purged from the system. Log files will be archived to a different data store, if needed, beyond the specified time period. After the logs files are collected, the Contractor will perform event correlation and analysis for security related events and will send alerts when certain thresholds are met.

The Contractor will keep a history of changes made to the Contractor's System over time, and will rapidly respond to and address performance issues across our entire Contractor's System software portfolio. The Contractor's System shall provide advanced drill down reporting, dashboards and customized alerts to provide a single viewpoint for not only the State, but the Contractor's support and technical personnel to proactively monitor application performance. The Contractor's System shall have the ability to capture Web page response times from the State end point down to the backend database calls, application exceptions and much more, the Contractor will ensure the entire Contractor's System meets or exceed the agreed upon SLAs.

The Contractor will monitor Web requests end-to end, monitor IIS application pools, web site availability, load balancing status, IIS logs and Windows events for all production Web sites. When one of the thresholds for a monitor is exceeded, alerts will be automatically sent to the appropriate staff and depending on the nature of the alert, a scripted action such as restarting an IIS application pool is automatically triggered.

The Contractor's 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.

The Contractor's System shall be capable of Single sign-on (SSO) integration to any Lightweight Directory Access Protocol (LDAP) compliant repository for authentication.

The Contractor's server, network and database maintenance will be performed on a monthly basis. A four-hour maintenance window will be prearranged for the 3rd Wednesday of each month. The Contractor will work with the State regarding maintenance and maintenance windows.

The Contractor's public facing servers will be located in 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 virtual private networks (VPN). The firewall will perform deep packet inspections on VPN traffic with the use of gateway anti-virus, anti-malware and anti-spyware protection.

The Contractor's System shall provide a User friendly Web based security administration module that allows authorized State system administrators to self-service manage granular authorization profiles specific to each User. All User accounts will be created with a unique Username and strong password. Passwords require a change at a minimum of 90 business days and will be configured at the State level to be changed on a more frequent basis.

The Contractor'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 within a State Program. Users will then be assigned specific roles (care coordinator, coach, MD reviewer, RN, customer service, etc.). 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*

The Contractor will implement and comply with industry standard backup procedures and Vermont AHS' backup requirements, as well as Vermont AHS' record and document management policies. The Contractor's System data (images, letters, and databases) will reside on the latest technology which provides data safeguarding, backup time, recovery and operational efficiencies. All data will be backed up near real-time and will be capable of any required Recovery Time Objective (RTO) or Recovery Point Objective (RPO) to be defined by the State.

The Contractor will enable resource consuming activities to be offloaded from the virtual host servers to the storage system to improve resource utilization and performance. The Contractor's System shall create a near-instant, file system consistent, point-in-time copy or snapshot of the individual virtual machine and the entire datastore on which the virtual machines reside. After the snapshot is created it is then automatically replicated to another datacenter for disaster recovery purposes. The Contractor will be able to restore virtual machines at a granular level; virtual machine, entire virtual machine datastore or virtual machine disk.

For backup and recovery of databases, the Contractor's System will be configured for hourly, near- instant, point-in-time snapshots of the database and the Logical Unit Numbers (LUNs) on which the database files are stored. The Contractor will verify the snapshot for consistency and finally replicates a copy to an offsite datacenter. The Contractor's System shall support both up to the minute and point-in-time recovery methods through the automated replaying of transaction logs. A clone or copy of the production database will be used to recover missing or deleted data without having to restore a production database.

All data volumes will be protected. Each volume will be configured for hourly, near-instant, point-in-time snapshots of the entire volume. The snapshots will be replicated on a nightly schedule to another datacenter for disaster recovery. The User-driven recovery model will allow for Users to recover single files or entire directory structures almost instantaneously.

The Contractor will maintain an effective records management program that will meet all State requirements for record security, retention, privacy protection, and disposition. The Contractor will employ registered health information administrators (RHIA), who participate in the development of corporate records management policies and procedures and oversee implementation of all protocols for intake, routing, tracking, storage, transfer and disposition and ensure compliance with HIPAA regulations as well as all contractual requirements.

The Contractor's HIPAA compliance program must be comprehensive and include all required privacy and security regulations. The Contractor will comply with all HIPAA requirements,

specifically the administrative simplification provisions of the law and the associated rules published by HHS, the DoD 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. The 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, the 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.

The Contractor will employ a fulltime staff of highly qualified systems engineers experienced in managing state and federal contracts under the Federal Information Security Management Act (FISMA). The Contractor must develop, document, and implement a corporate wide program to provide security for the information systems in support of operations and assets.

d. ***System Management***

i. Application Monitoring

The Contractor's application monitoring services will ensure the Contractor's System maintains a high level of availability and performance for the State and its Users. The Contractor's ITIL V3 based approach will emphasize the importance of a continual cycle of monitoring, reporting and subsequent action in the case of availability and performance related exceptions. The Contractor's primary goal will be to reduce down time through monitoring and management at first level (Level 1) as outlined in our Integrated Tiered Support Model.

The Contractor shall:

1. Reduce downtime through monitoring availability and performance of applications.
2. Resolve an incident before it can impact the business (proactive detection and resolution), thereby moving from reactive to proactive Service Delivery.
3. Provide insights through trend analysis of ticket / event data (data analytics) in order to achieve suppression of events / alerts.
4. Detect unauthorized changes and ensures organizational compliance.
5. Integrate operations center at level 1, thereby considerably improving operational efficiency.
6. Automate repetitive manual monitoring tasks, for example manual "ready-for-business" checks.
7. Eliminate noise or false-positive application events through root cause fixes or by optimizing event threshold levels.

8. Implement advanced monitoring techniques resulting in the reduction of mean time to detect major incidents.

ii. Activities

The Contractor will:

1. Monitor the availability of applications, related interfaces and infrastructure at Level 1.
2. Monitor the availability of related databases at Level 1.
3. Ensure application performance is within acceptable levels as defined in SLAs.
4. Continuously monitor various application events and logs.
5. Manage events with automatic generation of Administrative Alerts and dispatch through most effective means (text, Email etc.).
6. Report exceptions and create incident tickets for the same.
7. Resolve incidents where there is a KB match and escalate unresolved incidents / issues to L2 /L3 as per the SLA time frames via escalation procedures.
8. Monitor performance and capacity of applications and underlining infrastructure against the baselines.
9. Validate and correlate events generated either through emails or application monitoring systems.
10. Raise Incident with the relevant service catalog owner in case of an infrastructure issue.
11. Notify the State on the infrastructure incident and resultant application unavailability (if any).
12. Follow up with the service catalog owner to restore the services.
13. Analyze the corresponding incidents and give feedback to the State.
14. Provide hand-offs with the Level-2, Level-3 application and Infrastructure teams.

iii. Process Overview

Event correlation – The Contractor shall correlate events to integrate the management of alerts from multiple systems including applications, infrastructure, network etc., in a coherent manner thus reducing false positives and prioritize critical events. Through the intelligent rules and the topology information of the environment, the Contractor's event correlation engine will be able to diagnose the root cause of failures and create exceptions for the same.

Run Book Automation –The Contractor shall create a routine compilation of procedures / workflows which will contain the steps to begin, stop, and supervise the application system. An effective run book provided by the Contractor will allow analysts, with prerequisite expertise, to effectively manage and troubleshoot an application system. Through run book automation, these processes can be carried out using software tools in a predetermined, effective and accurate manner.

Proactive pattern analysis and trends – The Contractor shall establish a proactive monitoring process through trend analysis of incidents / events by means of data analytics. This will help in reducing influx through problem management.

L1 Utility Layer – The Contractor's L1 Utility Layer will result in synergized Application and Infrastructure operations.

iv. Metrics Reporting

Service Metrics	Value Add Metrics	Service Analytics Metrics
Number of incidents related to capacity and performance of the application	Number of run-books automated	Number of false positive alerts on vs. total number of alerts
Number of applications where monitoring is not automated	Number of events that were not auto – ticketed	Number of trend analysis reports generated and acted upon in a month
% availability of applications	Number of events misrouted due to wrong categorization	No of newly added event monitoring rules to increase monitoring effectiveness
Transaction time / response time for online applications	Number of event eliminated through permanent fixes (event to problem management integration)	

An end User can initiate support via a button provided in the Contractor's System or the Contractor's Product Support Services Helpdesk can initiate a session from the Contractor's helpdesk module by providing an invite link.

v. System Operations Support Services

The Contractor's Software Support Helpdesk (SSH) will provide support through direct User and internal stakeholder interaction via phone, email and help desk system. The SSH will be a one-stop-shop for all software change requests, User assistance, system issues and data corrections.

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

The SSH will have a customer service oriented directive with a focus on customer satisfaction and service level agreements. Communication will be prompt and accurate with customers both internal and external. Customers will have the ability to engage the SSH through several options including a toll-free phone number, email, or web-based

entry. All requests for service will be logged in the corporate helpdesk management system to enable measurement and easy transition between support staff.

1. Helpdesk Management System

The Contractor's Helpdesk System will allow Users to report, view, and update incidents. The Contractor's System shall use a work flow status bar to represent each of the process stages an incident must go through before it is successfully resolved and closed. The work flow will track the entire process from the submission of an incident (New) throughout the life cycle until the request is successfully closed (Closed).

Incident types will be assigned to designate which IT department should handle the request. In addition, incidents will be prioritized and worked based on severity. Severity 1 and Severity 2 defects are to be worked immediately and don't go through the standard Defect Resolution process. Severity 3 - 5 defects are prioritized and worked via the standard Defect Resolution process. Priority assignments are as follows: 1 - Critical, 2 – High, 3 – Medium, and 4 – Low.

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.

The Contractor will:

1. Maintain automated telephone system to comply with contractual obligations.
2. Maintain website functionality and Contractor's provider helpline module.
3. Ensure adequate staffing for customer service lines proportionate to call volume.
4. Remain available in queue to accept incoming customer service line calls within answer timeframe.
5. Manage operations to ensure contract performance standards are achieved, and:
6. Enable automated response service to be activated, indicating office closure from 5:00 P.M.–8:00 A.M. each business day, through weekends and on state-approved holidays.
7. Enable alternate automated response service to be activated, indicating close of the office for prior authorization/certification line and customer service calls, after 5:00 P.M., weekends and on holidays.

2. Toll-free Phone System

The Contractor will provide a toll-free customer service line. It will be staffed from 8:00A.M. To 5:00P.M. EST, Monday through Friday, excluding the following approved State holidays:

New Year's Day	Martin Luther King Day
President's Day	Town Meeting Day

Memorial Day
Bennington Battle Day
Veteran's Day
Christmas Day
Independence Day
Labor Day
Thanksgiving Day

Customer service representatives receiving a call of a clinical nature or member specific process issues will perform a warm transfer (remaining on the line until the connection is completed) to a supervisor who assists the caller.

The Contractor will maintain an automated voicemail message system.

1. If a representative is not available within 30 seconds, the caller will be offered the option of continuing to hold, or to leave a voice mail message that will be returned on the same business day if received within the last hour of the day.

For calls received outside of business hours:

1. Customer Services line hours of operation will be stated
2. Customer will have the option to leave voice mail message that will be returned within one business day

Performance Standards:

Performance Indicator Regular Business Hours	Performance Standard Regular Business Hours
Busy signals encountered (blocked calls)	None
Call response time (average speed of answer)	90% answered within 30 seconds
Unanswered calls (abandoned calls)	No more than 10% of call volume
Response call to messages (voicemail)	Within 1 hour
Response call to messages (after business hours voicemail)	Within 1 business day

3. 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 SLAs
2. Pass, fail, and in progress defect resolution counts
3. Defect categorization and aging

4. Adaptive Maintenance Reports and Adaptive System Enhancement Reports

These deliverables shall provide summary-level fix statistics provided in PowerPoint format, and included in the regular project status report. Statistics provided will include:

1. Fixes available for deployment
2. Summary test results for proposed deployments
3. Short-term (4 week) deployment schedule

In addition, detailed release notes in Word format will be made available in preparation for each release approval meeting. This will include:

1. List of defects to be delivered in this release
2. End-User impact of each defect in business language
3. Cross references to incident tickets
4. Test results

The 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.

All of the Contractor's System enhancements that exceed an estimated 200 hours and are not included as part of the original requirements scope and will be treated as a change order. The Contractor will provide a separate functional requirement and detailed cost estimate to the State for review and approval prior to performing the enhancements. All warranty and maintenance periods (Base, Optional) discussed in Section I, subsection 3 "Warranty Requirements" will also apply to all approved enhancements.

f. *Defect Resolution and Solution Acceptance*

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

i. *Scope Severity*

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

Value Guidelines

Severity 1 – A complete loss of service, the customer's business operations are halted, or a critical system failure that impacts the entire user community and no workaround is possible. Severity 2 – Service is degraded, resulting in a loss of major functions for a substantial portion of the customer's user community. The customer's business operations are severely limited though the customer may do some work. A workaround may be possible. Severity 3 – Service is functioning but with a loss of minor functions to a limited number of users. The customer's business operations can continue due to a temporary workaround. Severity 4 – Service is functioning but one person is experiencing a problem. The customer's business operations are unaffected. Severity 5 – Defect is a cosmetic issue.

ii. Priority

Priority Level (Production and UAT) definitions

Severity Defects of 3 - 5 are to be prioritized as follows:

Priority 1: Critical - Defect should receive immediate effort to fix and deploy to the UAT environment for SoV testing;

Priority 2: High - Defect's prompt resolution is important and prioritized for next available sprint.

Priority 3: Medium - Defect's resolution may be prioritized for a later sprint.

Priority 4: Low - Defect's resolution is a nice-to-have.

iii. Actions

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

The 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 –The 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 automated 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.

iv. Hosting and Disaster Recovery Services

The Contractor's environments will be sized in accordance with planned use and be inclusive of all hardware, storage, networking, backup/restore, database, file system, monitors and other items as required to comprehensively support the effort.

Upon the State's determination that these environments are no longer required, and upon completion of any mutually agreed migration and direction from the State, these environments will be decommissioned by the Contractor. Any Contractor hardware usage charges arising from the use of this equipment shall no longer be the responsibility

of, nor billed to the State, and all State data or other artifacts resident on this hardware shall be destroyed or otherwise deleted.

In advance of use, and in consideration of State procurement, installation and commissioning cycles, the Contractor will specify all required environments to support the Contractor's System for the ongoing specification, design, development of the project associated with subsequent phases including, but not limited to the following environments:

1. Full Production Operation
2. Production Replica for Fault Resiliency / Onsite Disaster Recovery Purposes and defect/issue resolution purposes
3. Off-site Disaster Recovery Replication (see Disaster Recovery Section below)
4. Other environments deemed necessary by the Contractor to support production operations

These environments will be sized in accordance with planned use and be inclusive of all hardware, storage, networking, backup/restore, database, file system, monitors and other items as required to comprehensively support the ongoing development operation of the Contractor's System as well as to support the debugging or resolution of issues within the production environment.

Upon notification by the State of receipt of the hardware to support these environments in the State Data Center, the Contractor shall install, configure and commission for ongoing use in the project this hardware within the State Data Center should the State select this option.

As a priced option in Attachment B – Payment Provisions (expressed annually on a monthly basis) for the ongoing operation of Infrastructure related activities.

The Contractor will specify all required environments to support the Contractor's System for the ongoing operation of the production system in the event of a disaster or outage condition associated with the following environments:

1. Full Production Operation
2. Systems Development inclusive of then current code bases and associated data associated with the development effort
3. Other environments deemed necessary by the Contractor to support production operations in the event of an outage or disaster

These environments will be sized in accordance with planned use and be inclusive of all hardware, storage, networking, backup/restore, database, file system, monitors and other items as required to support limited development effort during the disaster or outage condition as well as to not adversely impact or jeopardize phases that are being developed.

The Contractor's *Hosting and Disaster and Recovery Service*, as a priced option in Attachment B – Payment Provisions in this Contract, shall provide the ongoing provision of a disaster recovery site (not at a State facility) for the solution.

The Contractor's computer systems (non-production, production and disaster recovery) will be hosted in premier commercial datacenter facilities in disparate geographical locations across the country. Each facility will allow delivery of the highest levels of reliability through multiple-provider fiber trunk access, redundant power sources and multiple backup generators. The facilities will include 24 X 7 security guards and closed-circuit surveillance video. Access to the datacenter floor will be gained by a two-factor authentication security system requiring a security badge swipe as well as a biometric hand or fingerprint scan. An additional mantrap will prevent "tailgaters" from following personnel into the hosting area. The collocated rack that hosts the Contractor's System equipment will have an additional keypad lock to gain physical access.

The Contractor will have isolated non-production environments to support the specification, design, development and quality assurance of the project. The Contractor will have training and UAT staging environments that facilitate all release activities. When a development cycle or iteration includes tangible content, the Contractor will demonstrate that to all stakeholders via web conferencing products or directly from the internet on the staging environment.

The Contractor's production environment shall have state-of-the-art systems that are stable, always available, with little to no unplanned outages that can be scaled quickly and easily as the State's needs change. This production environment will have highly redundant, fault tolerant architecture and topology.

The Contractor's Disaster Recovery (DR) environment shall mirror the production environment in both hardware and software. The Contractor's System shall achieve levels of recovery time and recovery point SLAs through the Contractor's near real-time replication from the production environments. Each production environment will have a geographically disparate DR site ensuring that in the event of a catastrophic failure at the production datacenter the Contractor can resume operations from the DR site without interruption.

All environments will be managed by ITIL service management approach. Service Delivery processes will include Service Level Management, Capacity Management, Availability Management and Continuity Management. The Contractor's centralized service catalog will capture all information technology within the enterprise. Each service in the catalog will have its own change management, configuration management and service desk policies and procedures to compartmentalize the enterprise into a highly structured and more efficient operational unit.

J. TURN-OVER/TRANSITION PHASE

The Contractor will develop and execute a Turnover/Transition Out Plan to be approved by the State, as defined in Attachment D of this Contract.

K. Design, Development, and Implementation (DDI) & ON-GOING TASK-RELATED DELIVERABLE(S) & APPROVAL PROCESS

All work must be pre-approved by the State Authorized Representative(s) stipulated under Section B.

All work must be reviewed and accepted by the State Authorized Representative(s) before the Contractor may submit an invoice to the State.

Task 0 – Project Monitoring and Status Reporting (Recurring Deliverable)

Project monitoring provides a high level timely and accurate picture regarding all key metrics related to project health. The following are components of the Project Monitoring and Status Report (referred to as Progress Reports in I1.13 and I1.14 of the Non-Functional Requirements, Appendix II).

i. Financial status (earned value method)
ii. Schedule (milestones and tasks)
iii. Issues and risks
iv. Change orders
v. Action items

Project monitoring will include periodic reporting of the following activities:

i. Graphical status of scope, schedule, and budget (red, yellow, or green)
ii. Status of work completed against the Project Work Plan
iii. Objectives for the next reporting period
iv. State responsibilities for the next reporting period
v. Recovery plan for all work activities not tracking to the approved schedule
vi. Projected completion dates compared to approved baseline key dates
vii. Escalated risks, issues (including schedule and budget), and action items
viii. Disposition of logged issues and risks
ix. Important decisions
x. Actual/projected Project Work Plan dates versus baseline Project Work Plan milestone dates
xi. Budgeted to actual budget figures, and estimated cost at completion (or similar forecast of remaining costs)
xii. One-page graphical summary of the Project Work Plan status of all major tasks and subtasks for each Phase in a Project Plan

Upon project initiation (Kickoff), the Contractor will provide required project status reporting.

All quantifiable Key Performance Indicators (KPI) data will be represented in a graphical manner and the Contractor will provide real-time electronic access to project Dashboards to State Authorized Users.

Contractor's Responsibilities	• **Project report card\dashboard (scope, budget & schedule)** • **Issues and mitigation plan discussion with State** • **Key issues for Escalation** • **Action items**
State's Responsibilities	• Define the schedule for recurring Project Monitoring and Status frequency • Raise concerns on the project report • Update on the State related action items and issues

Location	• Conference Call and\or Webinar • Onsite meeting as necessary

Task 1 – Project Initiation and Planning

Task 1A – Project Kick-off Presentation

The Contractor will conduct project initiation activities as well as ongoing project planning and management throughout the duration of the Contract.

Project Initiation will include the development and approval of the formal Project Charter. The Project Charter encapsulates the formal project description, scope, authorization, business needs and objectives. Key team member introductions and points of contact determined between the State and Contractor for near term tasks. A Project kick-off presentation will be delivered to stakeholders detailing the following:

i. Project Overview (mission, goals and objectives)
ii. Project Schedule (high level)
iii. Project scope (in and out of scope)
iv. Project approach (project plan)
v. Objectives and Definitions
vi. Artifacts
vii. Project timeline (schedule, budget)
viii. Project team roles and responsibilities (project organizational chart and team members)
ix. Project management (logistics, governance, meetings, issue management, change management, change control, issue/risk management, communication plan)
x. Keys to success
xi. Next Steps
xii. Questions and Answers (Q&A)
xiii. Resources

Contractor's Responsibilities	**- Upon Deliverable disposition (Rejection / Not Accepted) Contractor shall have five (5) business days to resubmit.** **Organize & moderate the meeting, take minutes and follow-up on action items**
State's Responsibilities	• Identify the Key stakeholders to participate in the meeting • Clarify expectations and validate the project scope • Establish the project single point of contact on the State side, core team and the extended team for the scope of the project. • The state will complete review of all payment based deliverables within ten (10) business days. • Subsequent state reviews of previously rejected /

	Not accepted deliverables will be returned with disposition with five (5) business days.
Location	Contractor Office Location

Task 1B – Project Management Plan

The Contractor will develop the Project Management Plan to manage project execution and will document the actions necessary to define, prepare, integrate and coordinate the various planning activities. This plan also defines how the project is executed, monitored and controlled and when applicable closed. It encompasses several subsidiary plans discussed in the following sections. It is a living document and is progressively elaborated by updates throughout the course of the project.

The Care Management Project Management Plan shall address the initiating, planning, executing, controlling, and closing processes. The Project Management Plan will consist of the following sub-plans:

a. *Scope Management Plan* - This plan documents the project vision and goals, items that are in-scope and out-of-scope and their prioritization, dependencies between the scope items, and risks associated with the inclusion and removal of items from scope. The plan also defines the process used to modify project scope.
b. *Cost Management Plan* — The Contractor is responsible for developing a plan that indicates how project costs/budget will be incurred, controlled, and reported. The plan must include the finalized cost and budget for the project. Cost-related progress report formatting will be developed and included by the Contractor, consistent with AHS requirements and format, with inputs from State team members, and must include a tracking of costs to the project budget baseline.
c. *Risk Management Plan* — Development of a Risk Management Plan is required. The Contractor, with the support of State team members, must submit a baseline Risk Assessment (800-30 Risk Assessment methodology) to the State's Project Manager within one (1) month of the project initiation.
d. *Quality Management Plan* — The Contractor's plan must have the following elements:
    i. Defined quality assurance responsibilities.
    ii. Detailed definition of all deliverables by project phase and associated acceptance criteria.
    iii. Defined deliverable review process.
    iv. Disciplined deliverable review process.
    v. Regularly scheduled reviews of key project phases and milestones.
    vi. Identified target performance areas and proposed methods of measurement, baseline metrics for the agreed upon goal areas, and the level of achievement of the performance goals as determined with the State.
e. *Human Resource Management Plan* — The plan for this initiative will be tied to the proposed project timeline and phases. The Contractor is responsible for proposing the potential roles and responsibilities for staffing the different activities, articulating what the Contractor will need to provide and what the State should provide.
f. *Schedule Management Plan* – The plan developed by the Contractor must include the following:

i. How the project schedule will be monitored for variances.
ii. What types of corrective actions will be taken to address schedule variances during the life of the project.
iii. The process, roles, and responsibilities involved in making changes to the project schedule.

g. *Communication Management Plan* — The plan must detail the varying levels and needs of the project's stakeholders for information regarding the project, status, accomplishments, impact on stakeholders, etc. As part of Communication Management, issues must be logged and reported bi-weekly and the plan must detail the escalation mechanisms for issue resolution. As part of the Communication Management Plan, the Contractor must also address *Issues Management*, wherein an issue is defined as a problem that cannot be resolved with current resources and must be escalated to management or other parties for resolution. Issue management is the process of identifying, communicating, tracking, and resolving issues throughout the life cycle of a project and in a timely manner. It includes categorizing and prioritizing issues, as well as determining an escalation path for issues unresolved within a predetermined length of time. It is the responsibility of each project team member to identify, communicate, and log issues into an issue list. Issue Management must include the processes, tools, and techniques used in issue identification and analysis and must describe how issues are tracked, monitored, reported on, and resolved. It must also identify roles and responsibilities throughout the issue life cycle as well as describe how escalation will be initiated if needed.

i. Closure Approach —Upon the completion of the Base and Extension Operations Periods, the Contractor will perform all activities necessary to close out the Project. This includes:
ii. Performing formal Contract closure.
iii. Updating process documentation and transferring this to the State.
iv. Transitioning any relevant process and/or solution responsibilities over to the State Project team, or to another contracted Contractor.
v. This includes updating and transferring all solution documentation, performing formal Contract closure, and transitioning any relevant solution responsibilities over to the State Project team.

h. Change Management Plan — The Contractor must adhere to the Change Management Plan, which will be developed by the Contractor and approved by the State Authorized Representative(s). The plan describes how the Change Control Board (CCB) will manage the process for review, acceptance and rejection of change requests. For any decisions that cannot be made by the CCB or project management team, the decision will be escalated.

In the Change Management Plan, change requests will be:

i. Drafted by the Contractor.
ii. Reviewed and edited by the State Project Manager.
iii. Approved or rejected by the CCB with direction from State management, as necessary.
iv. Implemented by the Contractor, as necessary.

The Contractor must perform updates to the project schedule and cost estimates when change requests are approved.

Contractor's Responsibilities	**Development and maintenance of the following:** • **Scope management plan** • **Cost management plan** • **Risk management plan** • **Quality management plan** • **Human resource management plan** • **Schedule Management Plan** • **Communications plan** • **Closure approach** • **Change management plan**
State's Responsibilities	Review, comment and approve
Location	N/A

Task 1C – Project Work plan and fully resourced Schedule

The Contractor will develop a Project Work plan that will include the Work Breakdown Structure (hereinafter referred to as "WBS"), which decomposes the total project scope into smaller deliverable oriented components or work packages. The WBS is then sequenced in a Logic Network or Gantt Time Chart detailing which activity logically precedes or follows another. This determines critical paths and dependencies of work items throughout the project. The work packages are estimated to determine the overall project schedule as well as the specific resources necessary to complete each package.

The Contractor shall maintain and update applicable portions of the Project Schedule no less than bi-weekly to reflect the current status of the Project with a comparison made to the Initial and Baseline Project Schedules. The Project Schedule shall be consistent with available State and contracted project resources. The State resources will be identified by the State and communicated to the Contractor prior to Schedule development. The State shall have direct electronic access to the Project Schedule as well as all Deliverables and working papers for immediate review and coordination of schedules and plans. The Contractor shall document any work plan or schedule changes from the plan submitted with the Contractor's original Proposal.

The Contractor shall provide a Project Work Plan and Schedule to include identification and integration of all Phases of the Project, the sequences of the Phases, the duration of the Phases, and the duration of the Project. The Contractor will deliver a Project calendar in Microsoft Project. The Project Schedule shall identify the resources to be provided by both the Contractor and the State, together with the scheduled dates those resources will be required. It shall consider State holidays, holidays that will be observed by the Contractor staff, periods during which the State has advised that data processing systems will be unavailable to the Contractor, and the resources that the State has committed to providing in the Contract. The Project Work Plan and Schedule, once accepted by the State, will form the Baseline Work Plan and Schedule for the overall Care Management Project. As part of the Project Work Plan and Schedule, the

Contractor shall prepare and submit a WBS that encompasses all activities from Project Initiation and Planning to Project Closeout. The WBS shall define the Project's overall objectives by identifying all Project tasks and Deliverables.

Contractor's Responsibilities	**Develop and update bi-weekly the following:** • **Work Breakdown Structure (WBS)** • **Gantt chart(s)** • **MS Project calendar** • **Resource assignments**
State's Responsibilities	Review and coordinate schedule and plan
Location	N/A

Task 1D – Requirements Analysis, System Design and Development Strategy

The Contractor will develop a clear understanding of the State's Care Management Solution needs and document them in terms of a strategy document. The Contractor will perform a Requirements Analysis throughout the project to gain a clear understanding of the intent, expectations, and constraints associated with each functional and non-functional requirement. The Contractor will apply the information gathered to the overall project scope. This living document will serve as a guiding document for the development of the Contractor's System. The document will also outline the Contractor's methodology to achieving the clear understanding of the project. The Contractor's process will include meetings with appropriate stakeholders and Users to determine the requirements by a system of Q&A to identify utilization, functionality, etc. This process then translates into a detailed system design documents that specifies the system requirements and overall architecture.

The Contractor shall provide a Requirements Analysis, System Design and Development Strategy Document that includes, but is not limited to, a description of:

i. The business processes and the functionality that the Care Management Solution will provide. Please note, the State prefers that business processes for the Care Management Solution be generated using a Business Process Management tool that will ensure the business processes will be stored and re-used by the State as needed.
ii. The methodology that will be used to:
    a. Analyze and validate requirements.
    b. Select, configure, and develop the components of the Solution.
    c. Create a coherent and integrated system design.
iii. The intended use of Commercial Off the Shelf (COTS) software in the creation of the solution.

Contractor's Responsibilities	• **Develop a strategy document that will demonstrate the Contractor's understanding of the State care management program needs.** • **Document will outline various business processes that will be used in the development of the product** **The document will further outline the process to:**

	• **Analyze and validate requirements** • **Select, configure and develop the components of the solution** • **Create a coherent and integrated system design**
State's Responsibilities	Review, comment and approve
Location	N/A

Task 1E – System Implementation Strategy

The Contractor will develop a System Implementation Strategy that will detail all components necessary to ensure an on time, on budget, well-orchestrated and quality solution. The deliverables for this task will include, but not be limited to the work plan, development approach or methodology, integration approach, conversion strategy (where applicable), testing and deployment strategy.

The document shall include the strategy for the implementation of all functional requirements, starting with VCCI go-live through full solution implementation, to ensure that all functionality required of the Care Management System is implemented. The Implementation Strategy must provide a phased approach where pre-defined success criteria for each release provide input to key "go-no go" decision points.

The Contractor's System Implementation Strategy shall also identify any technical challenges (which, if any, are the sole responsibility of the Contractor to resolve) and include the deployment schedule of the releases.

The Contractor shall provide a System Implementation Strategy document to include, but is not limited to, the following components:

i. Project implementation plan
ii. Target end-User population included in the Project
iii. VCCI Go-Live and Full Implementation success criteria, by release
iv. Deployment schedule by release
v. Workflow analysis and documentation
vi. Technology components required for the Project, by release
vii. Identification of the source systems to be integrated, by release
viii. Identification of technical challenges the Contractor must overcome to implement the Contractor's System

Contractor's Responsibilities	• **Project implementation plan** • **Deployment schedule** • **Success criteria by release** • **Rollback plan** • **Workflow analysis and documentation** • **Required technology components for project** • **Analysis of source systems for integration by release** • **Technical risks or challenges to implement**

	Contractor's System
State's Responsibilities	Review, comment and approve
Location	N/A

Task 1F – Master Testing Strategy

The Contractor will develop a Master Testing Strategy detailing the framework for overall testing methodology and will include the environments, tools, processes and monitoring and controlling metrics. The core of this strategy aggregates all the information from the requirements, Contractor's System design, and acceptance criteria into a detailed plan for testing. The Master Testing Strategy will detail how the Contractor will conduct testing throughout the project to ensure all development meets State expectations.

The Master Testing Strategy will ensure that the Contractor has identified the major system testing activities and associated deliverables. A separate and complete set of testing as outlined below shall be required for each Release or module of functionality that will be put into production. Complete testing shall also be required for every Contractor's System interface that is built and put into production. The testing functions of the Project shall be iterative and span the entire length of the Project.

The Contractor will employ a robust test methodology based on standards set by one of the following organizations in the execution of the required system testing activities:

i. Software Engineering Institute (SEI), such as the Capability Maturity Model (SEI CMM)
ii. International Standards Organization, such as ISO9000
iii. Institute of Electrical and Electronics Engineers (IEEE), such as IEEE 829 Standard for Software and System Test Documentation and related standards

The Contractor shall be responsible for populating the test system(s) with the data necessary to ensure the validity of the testing for all phases of testing. State staff shall not be required to manually enter data to pre-populate the test environment for any test phase. The Contractor shall use an automated test management tool suite to manage, assess, track, and perform the required test and deployment support activities. The Contractor shall have a software-based defect tracking system capable of providing an acceptable level of detail and reporting and facilitating the following functions:

i. Capture – Details about each defect will be recorded when the defect is discovered, including a description, symptoms, sequence of steps to re-create it, type, and severity.
ii. Review and Assignment – Project management shall be able to review all open issues and assign a priority level and resources responsible for resolution.
iii. Estimate and Resolution – Those assigned to resolve the defect shall be able to record an estimated duration and delivery date, and provide adequate explanation upon resolution.
iv. Track status and history – A complete history of each defect shall be maintained so that the life cycle of each defect can be tracked and reported on.
v. Management reporting – The defect tracking system shall provide recurring reports to

Project Management throughout the Project.

The Contractor shall provide the Master Testing Strategy deliverable that shall include:

i. The test methodology to be employed for overall Contractor's System testing.
ii. The automated method of populating the test systems with data.
iii. Identification of the software-based tracking system that will be employed.

Additionally, the Strategy document shall also identify and include the strategy for testing each Project Phase:

i. Unit and Integration Testing
ii. System Testing
iii. End-to-End Testing
iv. User Acceptance Testing
v. Performance and Load Testing
vi. System Regression Testing
vii. Security Testing
viii. Conversion testing
ix. Interface Testing
x. Operational Readiness Testing (includes test cases and scripts)

Contractor's Responsibilities	• **Test methodology based on acceptable industry standards** • **Automated method of populating data for system tests** • **Identification of software tracking system for capture of all testing activities capable of providing the required detail and reporting** • **Strategy for unit, system, end-to-end, User acceptance, performance, regression and security testing**
State's Responsibilities	Review, comment and approve
Location	N/A

Task 1G – Requirements Traceability Plan

The Contractor will create a Requirements Traceability Plan which will describe the process and tools utilized to document the life of a requirement providing multi-directional tracking between a given requirement and all dependent/associated requirements and other artifacts such as use cases, workflow diagrams, business rules, test cases, etc. as well as to relevant MITA Business Process Areas and MITA Business Processes. This plan provides a framework to capture any change made to a requirement as well as the governance related items specific to the change management process. Additionally, the plan provides dependent artifact mapping to items such as functional and technical system design documents described in following task sections.

The Contractor shall provide a Requirements Traceability Plan to detail the methodology for tracking the specific Functional and Non-Functional requirements of the Project. The

Requirements Traceability Plan shall identify the methods, tools and technologies used to capture, catalog and manage the Contractor's System requirements to ensure traceability to the process workflows and detailed requirements identified in the Contract.

The Contractor shall provide a Requirements Traceability Plan document to include the approach and method of capturing and maintaining requirements traceability throughout the development and deployment process. The plan shall, include:

i. The process the Contractor shall utilize to identify how the requirements traceability matrix will be developed, validated, and maintained throughout the life cycle of the Contract.
ii. How requirements are validated.
iii. How any new requirements (if any), as approved through the State's Change Control Process, are analyzed and managed.
iv. How the State works with the Contractor to ensure traceability of requirements to the delivered Care Management Solution.
v. Identification and implementation of the tool to be used to perform requirements traceability.
vi. Approach and methodology to track the Project requirements including:
    a. Mapping the requirements to a unique identifier in the tool.
    b. Mapping the requirements to all associated artifacts such as use cases, workflow diagrams, business rules, test cases, etc. as well as to relevant MITA Business Process Areas and MITA Business Processes.
    c. Mapping the requirements to the individual test events.
    d. Mapping the requirements to the individual test cases, scripts and procedures.
vii. Approach for updating the status of the requirements based on the results of each test event.
    a. Each test event will include an identifier that will be linked to the corresponding requirement(s) in the Traceability Matrix. The test event will include status of the event (Pass/Fail) as well as a link to any defects identified as a result of the test.
viii. Identification of the requirements by status (e.g., satisfied, waived).
ix. Identification of the reports to manage and validate the requirements, including Test Coverage by test event.

Contractor's Responsibilities	• **Requirements Traceability process, tracking tool and matrix document maintained and validated throughout the project** • **Compliance with change management process and tracking** • **Plan to ensure State requirement visibility and validation through implementation including test coverage** • **Reporting to manage and validate all requirements coverage, statuses and progress**
State's Responsibilities	Periodic review of Traceability Report. Participate in

	change management process
Location	• Conference call and\or Webinar • Onsite meeting as necessary

TASK 2 – Requirements Analysis and System Design

Task 2A – Functional Specification and System Design Document

A focused and detailed Requirements Analysis will be conducted by the Contractor to clearly understand each requirement included in the final system scope. This involves frequent communication with Contractor's System Users to determine specific expectations so that the final Contractor's System meets the State's needs rather than attempting to mold User expectations. This analysis provides the development team with a model of system information, function and behavior which translates into data, architectural and component-level designs. The following are the objectives of this analysis:

i. Identify specific needs
ii. Evaluate feasibility
iii. Technical analysis
iv. Allocate functions to system elements
v. Establish schedule and constraints
vi. System definitions

The requirements analysis process bridges directly to Contractor's System Design. System Design includes the architecture, components, modules, interfaces, and data to meet each requirement as well as the logical and physical design of data flows, inputs and outputs of the system.

The Traceability Plan will include an associated Functional Specification and Contractor's System design artifact for each requirement. The Functional Specification is geared towards the Contractor's System User's perspective and is the artifact that describes the requested behavior. Typically, a mockup design is included when the requirement is related to a User interface component. This document will not describe the technical aspects of the requirement and how it will be implemented. Instead, it focuses on expectations when interacting with the Contractor's System. The goal of the Functional Design document is to inform the developers on what to build, instruct the testers on how to test, and let the stakeholders know exactly what they are getting.

The technical implementation of each requirement is captured in the Contractor's System Design document. This document details the system requirements, operating requirements, architecture, files and database design, input formats, output formats, processing logic and external interfaces.

In order to ensure that the Contractor fully understands the system requirements, the Contractor must lead and facilitate the process for reviewing and validating the detailed Functional and Non-Functional Requirements documentation. The Contractor shall also conduct Joint Application Design (JAD) sessions to fully explore and understand the functional requirements for the Care Management Solution, and to identify any gaps that the Contractor shall address in order to comply with the requirements identified in this Contract. Based upon the outcome of the JAD sessions, the Contractor shall document in detail the design and development actions

necessary to fully meet DVHA's requirements. The Contractor shall lead and facilitate the process for developing the Functional Specifications and System Design Document.

The Contractor shall develop and provide the State with Functional Specifications and System Design Document, including, but not limited to:

i. A comprehensive list of functional specifications to implement the Functional Requirements, that assures no interruption of VCCI services.
ii. Recommendations on how to close specific gaps that require changes to the State's business processes.
iii. Business rules definition.
iv. Reporting capabilities and prebuilt reports.
v. User profiles and security role permissions (Roles and Privileges Matrix).
vi. Contractor's System functionality traceable back to the Requirements Traceability Matrix.
vii. Contractor's System overview diagrams illustrating which Solution components provide what functionality, linking back to the functional capabilities.
viii. Domain model.
ix. Data Integration/Interface Design Document – Contractor will gather data specifications from internal/external hosted systems, servers, applications that will be used in the CARE target architecture.
x. Use Cases – a list of workflows mapped to business processes mapped to Contractor's System requirements.
xi. User Interface screens for the Contractor's System.
xii. Identification of functions or User roles that initiate workflow, receives the workflow, and any processes that occur as a result of the workflow.
xiii. List of assumptions made during the design as well as recommended next steps and required actions that shall be confirmed by the State before the development.

Contractor's Responsibilities	• **Facilitate the elicitation, documentation, review and validation of all requirements via Joint Application Design (JAD) Sessions and one-on-one SME interviews** • **Catalog of functional specifications (indexed and searchable)** • **Schedule and conduct JAD sessions (~31) around functional and non-functional requirements with key SME(s)** • **Create the necessary artifacts associated (example; finalized business requirement, business rules, process flows etc.)** • **Finalize the design requirement** • **Update the overall system architecture** • **Identify the data sources/ data connectivity** • **Identify State software components & integration**

State's Responsibilities	• Key SME(s) participate in the JAD sessions • Analyze & validate the requirements • State sign-off on the final requirements
Location	• Contractor location for larger JAD sessions • State location for one-on-one meetings with SME(s)

Task 2B – Data Integration and Interface Design Document

The Contractor will develop Data Integration and Interface Design Documents for each identified integration point. A catalog will be developed enumerating and describing each that will include information regarding endpoint addresses, protocols (tcp/ip, http(s)), payloads (data types, formats) and security configuration. A diagram or conceptual model will also be created for each integration detailing the source and target systems. All data translation/mapping will be included as well as any logical transformations of data.

This document must be developed based on outputs from the design sessions conducted with the Contractor and the State. The Data Integration and Interface Design Document must include the following components:

i. Entity Relationship Diagrams
ii. Data Flow Diagrams
iii. Data Dictionary
iv. Data Transformation and Loading
v. Processing controls
vi. Data Test plans
vii. Conversion Testing results
viii. Processes to manage Contractor's System installation and configuration
ix. Data backup procedures
x. Interconnection Security Agreement

The Data Integration and Interface Design Document must include the interface definitions and design.

The Contractor must conduct a walkthrough of the final Data Integration and Interface Design Document with the Care Management Solution Project team to validate the contents, the incorporation of all information from the design sessions, and the incorporation of all Non-Functional Requirements. Approval of the Data Integration and Interface Design Document is required before development can begin.

Contractor's Responsibilities	• **Contractor will develop a Data Integration and Design Document to include Emergency Department diagrams, data flow diagrams, data dictionary, data transformation and loading process controls, data test plans, data backup procedures**
State's Responsibilities	Review, validate and approve the document

Location	N/A

Task 2C – System Architecture

The Contractor will author an overall System Architecture document, which includes a conceptual model or diagram that is a representation of the components that make up the Contractor's System, the relationships between these components and the design principles and patterns that govern their development. An architectural framework or industry best practices reference model will be leveraged to provide effective visualization for all stakeholders to understand the broad scope and complexities of the Contractor's System. This deliverable will be maintained throughout the project as system components are added or changed to reflect the most current state.

The Contractor shall develop a System Architecture, which details the SOA model-driven framework being used across all the domains (e.g., services, trust and security, infrastructure) that enables the development of service-oriented models to facilitate the interaction and communication of technologies. This document shall describe the set of technologies that support Care Management Solution operations, incorporating the industry best practices and standards. It shall detail the COTS package components, design patterns, information architecture, technology infrastructure and the conceptual, logical and physical architectures for the Contractor's targeted baseline System.

The Contractor shall provide the System Architecture deliverable incorporating details of any COTS packages that are part of the Solution. This System Architecture shall define and document:

i. A conceptual architecture that will produce a design to fulfill Care Management stakeholder's functional expectations.
ii. A logical architecture that identifies the SOA layers, Contractor, Service Customers, Service Broker(s), and object dependencies. To complete the logical design model, the Contractor shall define the interfaces for each service, and include data field definitions and their validation rules.
iii. A physical architecture that defines the various services of the Contractor's System and how they shall be implemented. This shall also include details around the integration layers, potentially using Web Services, and various other integration technologies.
iv. A detailed list of all the proposed production environment platforms, including Hardware, OS, Networking, and all COTS and third-party systems/tools/ utilities, etc.
v. The details of Security, Privacy and Consent Management Plan for Care Management.
vi. The Security Plan will provide the technical approach to satisfy the following:
    a. Network segmentation
    b. Perimeter security
    c. Contractor's System security and data sensitivity classification
    d. Intrusion management

e. Monitoring and reporting
f. Host hardening
g. Remote access
h. Encryption
i. State -wide active directory services for authentication
j. Interface security
k. Security test procedures
l. Managing network security devices
m. Security patch management
n. Secure communications over the Internet

vii. 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.

viii. The High Availability and Disaster Recovery approach and plan describing how the Contractor's System shall enable the State to provide information to its members in the event of a disaster.

ix. How the architecture design features ensure that the Contractor's System can scale as needed for future transaction volumes, storage requirements, and Contractor's System usage expands over the next 10 years.

x. How the Contractor's System shall ensure performance based on expected data and User loading, target source systems and target platforms. Areas that shall be addressed are expected Contractor's System performance during peak transaction volumes and key critical business activities.

xi. How the Contractor's System shall meet capacity requirements, including:

a. A description of how Contractor's System capacity and capacity requirements were calculated, including all formulas and calculations used in capacity planning for the State. This shall include:

1. Business Capacity Management
2. Service Capacity Management
3. IT Component Capacity Management
4. Capacity Management Processes
5. Capacity Management Tools Infrastructure
6. Descriptions of how capacity utilization will be monitored and capacity thresholds will be established.
7. A description of corrective and escalation processes that will be used in the event any capacity thresholds are reached.

Contractor's Responsibilities	**System Architecture document will include:** • **Conceptual architecture** • **Logical architecture layers** • **Physical architecture**

	• **Environment definitions** • **Security, privacy and consent management plan** • **Disaster recovery plan** • **System scalability** • **System performance**
State's Responsibilities	Review, comment and provide feedback
Location	N/A

Task 2D – Technical Design Document

The Contractor will author an overall Technical Design document (TDD) that details the system characteristics (topology), design patterns, programming standards, naming conventions, entity relationship diagram, third party libraries and development tools used to build the Care Management System. The Technical Design Document will reflect the final requirements for Contractor's System configuration and operation. This document must be developed based on outputs from the technical design sessions conducted with the Contractor and the State.

The Technical Design Document must include the following components:

i. Detailed description of Contractor's System architecture
ii. Entity Relationship Diagrams
iii. Data Flow Diagrams
iv. Data Dictionary
v. Data steward and data governance approach to the solution
vi. Business processes as mapped to enterprise platform components
vii. Processing controls
viii. Processes to manage Contractor's System installation and configuration Data backup procedures
ix. Security controls
x. Availability and resilience controls such as load balancing, failover capabilities, and fault tolerance

The Contractor may propose alternatives to any of these components, but they must be clearly justified and have the prior approval of the Care Management Solution Project team.

The Technical Design Document must include the interface definitions and design (including XML/SOAP specifications for file formats), the new Contractor's System design based on reviewing existing class diagrams, sequence diagrams, updated object models that represent the internal workings and designs of the containing subsystems that will expose the services, and the component specification (details of the component that will implement the service) and service assignment to each layer defined in the Contractor's System architecture.

The Contractor must conduct a walkthrough of the final TDD with the State to validate its contents, the incorporation of all information from the design sessions, and the incorporation of all non-functional requirements. Approval of the TDD is required before development can begin. The final TDD, once formally approved by the State, will, together with the approved Functional

Specifications and Design Document, constitute the complete Contractor's System definition for the new Care Management Solution.

These two (2) deliverables will constitute the agreement between DVHA and the Contractor regarding the functionality and operation of the new Care Management Solution. The two (2) documents will be the documentation used by the Contractor during Contractor's System development and use cases, and will be the basis for the development of the User Acceptance Test (UAT).

Contractor's Responsibilities	• **Interface definitions and design** • **Object models** • **Service architecture**
State's Responsibilities	Review, validate and approve
Location	N/A

TASK 3 – System Configuration and Development

Task 3A – System Implementation Plan

The Contractor will develop a System Implementation Plan that describes how the Contractor's System shall be deployed and transitioned into the production operational environment. This plan is utilized by change management and configuration management personnel during scheduled implementations. The plan includes the overview of the Contractor's System, a brief description of the major tasks involved, the implementation task schedule, the resources needed to support the implementation effort and any site-specific requirements and a Rollback plan. 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.

The Contractor shall develop a System Implementation Plan document that incorporates the final Design Documents for Contractor's System implementation. This document shall be developed based on outputs from the planning and design sessions conducted with the Contractor and the State. The plan shall include detail on the following components:

i. Description of functionality for each implementation release (starting with VCCI capacity to go-live).
ii. Releases from VCCI go-live through full implementation.
iii. Roll-out/implementation schedule for each release.
iv. Points-of-contact to include individual names and contact information for each member of the implementation team, Contractor and State.
v. Major tasks.
vi. Security and privacy.
vii. Implementation support.
viii. Hardware, software, facilities and materials for all Environments.
ix. Personnel and staffing requirements.
x. Outstanding issues and the mitigation plan for each.
xi. Implementation impact and organizational change issues.
xii. Performance monitoring.
xiii. Configuration management interface.

xiv. Risks and contingencies.
xv. Implementation verification and validation.
xvi. Definitions of the criteria for both success and failure of the System Implementation for each release.
xvii. Exit plan and strategy addressing portability of Solution in the event the State wants to bring the Solution back in-house.

The Contractor will provide a separate System Implementation Plan for each major functionality release of the project, to include the elements outlined above and the following components:

i. Project implementation roadmap.
ii. Target end-User population included in the implementation.
iii. Deployment schedule for the release.
iv. Technology components required for the Project release.
v. Identification of the source systems to be integrated for the release.

Contractor's Responsibilities	• **Release plans and schedules** • **Implementation support** • **Issues and mitigation plan** • **Organizational change management** • **Performance monitoring** • **Training**
State's Responsibilities	Review, comment and approve
Location	N/A

Task 3B – Data Integration and Synchronization Plan, including multiple test files (MMIS/claims, PBM, eligibility, VCCI legacy, etc.)

The Contractor will develop a Data Integration and Synchronization Plan that will detail all points of integration between the Care Management Solution and external systems. The plan will include the analysis and design tasks required to understand the data, layout, protocol and frequency of exchange. The testing, verification and validation phases of the plan will include the exchange of test files resulting in final sign-off from all stakeholders. The Care Management Solution shall address the State's need for integration of real-time operational data of the State's relationship with a Member during service delivery, as well as integration and aggregation of data from a variety of siloed source systems into operational data stores, data warehouse and data marts. This data shall be usable for operational and performance reporting (static / canned and ad hoc), shared analytics, and State-wide alerts.

The Contractor shall perform the necessary data integration and synchronization work to implement the Care Management Solution in compliance with the requirements of the Statement of Work. The Contractor shall develop a detailed plan to validate all integration and synchronization routines, as well as the accuracy and integrity of all data integrated from the source systems or otherwise generated.

The Contractor shall design, develop, and implement the technology infrastructure required to enable the Data Integration in the functional and technical specifications of this Contract and

integration of operational data residing in the existing siloed State systems. Operational Data Integration shall focus on combining select data elements from a variety of existing data sources to present a dynamic / temporary view of authorized and relevant Member information, as well as the State's relationship with that individual across all Departments and programs within the scope of the Care Management project.

The Contractor shall provide an analytical data integration infrastructure that includes consistent data across the Enterprise to meet the analytics needs for each Program. This data must be available in a form suitable for the required analytics and reporting functionality, and available to authorized Users.

The Contractor shall provide a Data Integration and Synchronization Plan to include all the elements of operational and analytical data integration described above.

Contractor's Responsibilities	• **Identify and catalog integration points** • **Analyze data payloads and synchronization schedule** • **Data integrity and validation procedures** • **Exception handling process**
State's Responsibilities	Review, comment and provide feedback
Location	N/A

Task 3C – System Maintenance and Support Plan

The Contractor System Maintenance and Support Plan deliverable will include the processes, policies and responsibilities of the product support services team. Contractor's System modifications post DDI phase can be required due to defects or evolving original requirements. The documentation, tracking, impact analysis, testing and maintenance release process will be detailed in this plan.

The Contractor shall provide a written plan for the Maintenance and Operations Support of the Care Management Solution into the Production Environment. The following documentation shall be prepared by the Contractor and included in the System Maintenance and Support Plan provided to the State:

i. Development of Contractor's System support structure and organization, including estimates of manpower requirements to support operation and maintenance of the Contractor's System.
ii. Contractor's System Installation and Administration Manual.
iii. Completed Code.
iv. Operating Procedures Manual: Includes Diagnostic procedures, backup and restore procedures, and disaster recovery procedures.
v. Maintenance Manual: Information to aid in analyzing and debugging the software, apart from information already available in other delivered documentation.
vi. Maintenance and repair policies and procedures.
vii. Updated system architecture diagrams and inventory (systems, servers, etc.) that clearly identify what is in the pilot and in production use.

viii. Care Management Solution Database Schema.
ix. Complete Data Dictionary.
x. Contractor's System "Run Book" as defined by the State.

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

Contractor's Responsibilities	• **Development of system support structure and organization** • **Operating procedures manual** • **Maintenance manual**
State's Responsibilities	Review and comment
Location	N/A

<u>Task 4 – Testing</u>

Task 4A – Test Plan

The Contractor's Test Plan will detail the systematic approach to thoroughly testing all components of the Contractor's System. The plan includes a strategy for design verification and compliance, acceptance testing and regression testing. Each requirement will be tested via one of several methods such as coded unit tests, manual testing and automated User interface testing. The three major components of the plan include:

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

The Contractor will be responsible for the development of a Detailed Test Plan, which includes the following testing events:

a. *Unit and Integration Testing* – The Contractor shall perform Unit and Integration testing as necessary during the configuration/development process. The State will require the presentation of Unit and Integration test plans and results during scheduled development review meetings.
b. *System Testing* – The Contractor's System testing is aimed at proving that the Contractor's System meets the stated requirements and objectives by validating the total system in a real-world scenario. This testing shall be performed by the Contractor and supported by a limited number of State subject matter experts/power-Users (not end-Users) at the sole discretion and to the limit deemed appropriate by the State Project Manager. Contractor's System testing will be combined into a single test phase to provide streamlined testing without compromising the testing objectives.
c. *Entry Criteria* – The feature set, although largely defined and static, may still not be completely finalized. The software has been unit tested, and there is a high level of confidence the completed Care Management software is ready.
d. *System Test Execution* – The Contractor's System Test shall utilize "real" data, and shall be performed by the Contractor or a third party. The Contractor's System test shall be intended to demonstrate the critical business functions of the

Contractor's System and the overall effectiveness of the User-facing aspects. The Contractor shall provide and the State shall accept the System Test Plan before it is executed. The Contractor shall incorporate the following activities during System Testing:

i. Demonstrate Critical Business Function Scenarios (as defined by and approved by the State) – data and processes must be fully integrated across functional areas and that integration fully demonstrated.
ii. Transaction Testing (as defined by and approved by the State).
iii. Error Message Testing.
iv. Documentation Testing (as defined by and approved by the State).
v. Help Systems Testing (as defined by and approved by the State).
vi. Demonstrate the Complete Sequence of Functional Business Tasks (as defined and approved by the State).
vii. End-to-end business process testing (as defined and approved by the State).
viii. Report Generation and Printing.
ix. Interface Testing (All Interfaces included in the module/system).
x. Demonstrate the Complete Sequence of Functional Business Tasks (as defined and approved by the State).
xi. Usability/Interface Testing.
xii. Reliability Testing.
xiii. Performance Testing (stress, load testing).
xiv. Security Testing.
xv. System Recovery and Restoration Testing.
xvi. Regression Testing.
xvii. Integration Testing.
xviii. Integrity Testing.

e. *Exit Criteria* – The results of the System Test are to be presented to the State for approval before the development Contractor's System status can be promoted to UAT stage for end User testing. This presentation shall take the form of a live demonstration of Contractor's System functionality as outlined below. The State shall define, no less than 20 business days before the start of System Test phase, the criteria necessary for State approval of test results, including requirements for presentation of the results to the State and timeframes for State review.

f. *User Acceptance Testing* – The purpose of User Acceptance Testing is to confirm that the Contractor's System is developed according to the State's business functionality, performance, and technical requirements and that it is ready for enterprise deployment and operational use. During UAT, selected State End-Users will compare the Contractor's System's functionality, features, and performance to the State's System Requirements Documents, Design documents and State documented UAT exit criteria.

g. *Entry Criteria* – Prior to moving from System Testing to UAT, the Contractor's System's feature set shall be fully defined and static. The Code shall be complete and frozen. The final release version shall have been built from source control. This final version shall have passed a formal Contractor QA acceptance test,

which also covers "installation" instructions on how to update the server and end User documentation.

h. *Pre-Test* – The Contractor shall perform the following activities prior to User Acceptance Testing (UAT):
   i. Build the UAT System release.
   ii. Develop and document the software build instructions for UAT.
   iii. Install and configure the UAT release Contractor's System components and database(s) on the State's testing environment.
   iv. Develop and provide the required UAT Test documentation (e.g., end User guides, systems administration manuals, User help files) and provide to the State for approval for use during UAT activities.
   v. All Engineering Change Requests (ECRs) completed.
   vi. Load database(s) with complete and validated production-ready dataset.
   vii. Develop comprehensive UAT Scripts that test each and every requirement as specified in this SOW in a logical and business process-oriented manner.
   viii. Conduct UAT – There are a number of activities that the Contractor and the State must perform for the completion of the UAT. The following activities shall be performed:
      a. Identification of the required State and Contractor resources to support UAT activities.
      b. Provide Contractor resources to support UAT activities.
      c. Development of the defect resolution management plan (Contractor).
      d. Review and acceptance of the defect management plan (State).
      e. Development of the overall UAT Test Plan and schedule (Contractor).
      f. Development of required UAT Test Cases (Contractor).
   ix. Each requirement identified in the Contract shall be tested by at least one Test Case. One Test Case may provide for the testing of multiple requirements Review and acceptance of UAT Test Cases (State).
   x. Compilation of all relevant data needed to permit State to validate that the Contractor's System meets all functional, operational, performance, and support requirements. This shall include:
      a) The Project Statement of Work (State).
      b) Systems Requirements Documents (State).
      c) Software Requirements Document (State).
      d) Requirements Tractability Matrix (Contractor).
      e) Systems Configuration Management Data (Contractor).
      f) End-User Documentation (User manuals, systems administration procedures, and training documents) (Contractor).
      g) State Approved UAT Test Plan (State).
   xi. Compiling and evaluating the UAT Test Results (Contractor) and State approval of the UAT Results and corrective actions (State).
   xii. State acceptance of the overall Contractor's System and its readiness for production deployment (State).

xiii. The Contractor shall prioritize all problem/error tickets within two (2) business days. Any Severity 1 (causing the Contractor's System to fail to perform a basic business function) problem shall be resolved within four (4) hours. The acceptability of remedial fixes will depend on the nature of the problem, but shall be solely at the State's discretion. When UAT tests are rerun, the reruns shall be treated as any other UAT test activity and documented accordingly.

xiv. Software shall be feature complete. Changes taking place must be considered by State a low risk to the underlying stability of the software. The software shall have been rigorously tested by the Contractor's QA and the original software developer's QA. There shall be a high level of confidence the software is working as State and members will expect.

i. *Exit Criteria* – The requirements for release from UAT are zero Severity 1 and Severity 2 defects. The State desires but does not require zero Severity 3 defects before deploying to production. The Release Committee will review the defects and make a recommendation to the State whether to release to production or not. The State and Contractor Project Managers will meet and mutually agree on an acceptable level of Severity 4-5 defects in order to move forward. Defect levels of severity are as defined above.

i. All known problems are to be reviewed by the Release Committee. No outstanding problems should affect overall customer expectations for the Contractor's System. Supporting materials such as release notes, User manuals and training manuals shall be in final form and shall also have been verified by the Contractor's QA or other appropriate reviewers. State support (if applicable) shall be fully prepared to support the product at this point.

ii. The Contractor shall present in person the results of the completed User Acceptance Testing process to the State. The Contractor shall also prepare a report detailing any remaining defects of all severities and the expected impacts of each, and deliver the Report at the same time as the presentation. The State will review the results and approve or reject the completion of the UAT phase.

j. *Performance Testing* – The Contractor shall perform Performance Testing. Performance Testing shall include both Stress and Load Testing to verify Contractor's System performance in accordance with the SLRs.

k. *System Regression Testing* – The Contractor shall perform Regression Testing throughout the testing process to verify Contractor's System integrity after functional improvements or fixes have been made as a result of Contractor's System Integration and User Acceptance test activities. Regression testing shall be designed to confirm that fixes have not created any new problems and that the results are as planned. The results will also define the Contractor's System baseline configuration to be released to the State. The Contractor team shall

document all tests performed. It shall be the responsibility of the Contractor to ensure all automated test scripts have been assessed to ensure their proper function. The 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. Activities in the Test Plan shall include, but are not limited to:

i. Definition of the Test Phase and Objectives
ii. Entrance Criteria for the Test Phase
iii. Exit Criteria for the Test Phase
iv. Key milestones (i.e., relationship in terms of timeframes days / weeks / months, to predecessors and successor tasks) associated with each Testing Phase, including:
v. Test Case Approval
vi. Test Environment Readiness
vii. Test Start and End dates
viii. Code Baseline Configuration Established
ix. Code Freeze Date(s)
x. Required Approval Dates for Test Cases, Entrance and Exit Criteria, etc.
xi. Regression Testing start and end dates
xii. Test Results Review Meeting Completion
xiii. Code Promotion Go/No-Go Decision

Contractor's Responsibilities	• **Unit and integration testing** • **System testing** • **User acceptance testing protocols** • **Evaluation of UAT test results** • **Regression testing** • **Performance testing** • **Release test schedule**
State's Responsibilities	• Conduct UAT testing • Sign-off on release to production
Location	UAT testing will be conducted online in Contractor's provided UAT environment.

Task 4B – Test Scenarios, Test Cases and Test Scripts

The Contractor will author Test Scenarios, Cases and Scripts for all functional and non-functional requirements in a logical and business process-oriented manner. All UAT material will be developed and executed in concert with State participation. The development methodology leveraged will include the use of User Stories created by the Contractor and the State. A User Story is a description, in general language, that captures what a User does or needs to do as part of his/her job function as it relates to the Contractor's System. Each User Story has associated test scenario(s), test case(s) and test script(s) that will effectively and accurately validate and verify that the expected results are produced. The Test Scenarios, Test Cases and Test Scripts will cover all test events defined above and will be co-developed with State staff

involved. The Test Scenarios, Test Cases and Test Scripts will also be supported by Contractor-developed data sheets that reference the test cases to the Requirements to ensure comprehensive coverage of each test event specified.

The test scenarios will describe the functionality that will be tested and more specifically the actions of a given actor or User. Test scenarios are typically made up of one or more test cases.

Test scripts are a set of instructions that are performed on the Contractor's System to test the functionality. Each User Story and associated test scenario/case will have an authored test script that will provide full coverage. In addition, automated testing via unit tests and User interface automation will be conducted to ensure regression coverage of previously developed code base.

To ensure that the Contractor's System has been thoroughly tested, the Contractor shall provide Test Scenarios, Test Cases and Test Scripts as well as data sheets to include all of the elements defined above to ensure comprehensive test coverage of each and every requirement as specified in this contract. The Test Scenarios, Test Cases, Test Scripts and data sheets will map to the unique identification numbers assigned to all requirements in the Requirements Traceability Matrix.

Contractor's Responsibilities	• **Use cases encapsulation process flows and system functionality**
State's Responsibilities	Review, comment and provide feedback
Location	N/A

Task 4C – Documented System Results

The Contractor will capture all testing results via the Team Foundation Server (TFS) tracking system. The TFS allows all stakeholders to monitor and track test progress and success/failure. Management reporting will be available to easily visualize KPIs, trends and overall project testing activity. Complete traceability from the requirement to the development and eventual test result is available real-time electronically.

The Contractor shall provide comprehensive Documented System Test Results for each test event identified for State review and approval. The Contractor shall provide Documented System Test Results that include all of the test activities identified above, with the following components for each test event:

i. Test Coverage Matrix for each Test Phase identified above (excluding Unit and Integration Testing).
ii. Completed Systems Requirements vs. Functionality Tested Matrix for each phase and for the Final System Delivery.
iii. Defect Reports.
iv. Monthly Test Issues and Mitigation Reports.
v. Test Phase Final Results Report and Corrective Action(s) Plan.

Contractor's Responsibilities	• **System results document** • **Reporting (defects and corrective actions)**

	• **Performance based on SLAs**
State's Responsibilities	Review and participate.
Location	N/A

Task 5 – Training

Task 5A – Training Plan

The Contractor's system Training Plan shall include a comprehensive approach to delivering the most effective modality of training for each type of identified User. The use of multiple types of media (written, video) and delivery (classroom, webinars) will be outlined including topic coverage and schedule.

The Care Management training must provide the following benefits to the State:

i. Build adoption of person-centered service delivery to support the objectives of Vermont's 'Agency of One' vision.
ii. Increase collaboration and coordination among programs through use of the Care Management Solution for activities such as service referrals and collaborative case management.
iii. Enable authorized Contractor's System Users to be self-sufficient in the use and extension of the Contractor's System through the various configuration and parameter change capabilities.
iv. Provide the State the ability to efficiently and effectively assume training responsibilities subsequent to implementation.

The Contractor shall provide a Training Plan that meets the requirements described above and the following components:

i. Overview stating the purpose and scope of the Training Plan that meets the requirements of the Training Curricula.
ii. Detailed description of the training model for adult learners.
iii. Flow diagrams and detail for the training curriculum for each functional area and integration into the end-to-end business process.
iv. Specific training curricula targeted and delivered to the different Users in a manner that meets their specific needs including, but not limited to Care Management Solution User training focusing on hands-on Care Management Solution usage to enable Users to accomplish their day-to-day activities including performance management through business analytics and reporting.
v. Training Materials Development Plans.
vi. Role of the 'Training Team.'
vii. Documentation style standards for the development of training material (e.g., document format, references, acronyms, font).
viii. Plan for review of training material.
ix. Approach to prototyping and testing training materials with training recipients.
x. Approach to modifying or adjusting training materials based on the results of the Evaluation of Training.
xi. Training Equipment Plans: Contractor shall provide all training facilities and equipment.
xii. Training Methodology and Delivery Plans.

xiii. Identification of the training mix including, but not limited to: Web-based learning, in-person learning, learning-labs, and informal learning. Because of the constraints related to scheduling staff out of the office for multiple training sessions, Contractor shall develop a training mix that leverages use of on-line training tools and self-guided learning material that is supported by in-person training.

xiv. Identification of plan to motivate and engage Care Management Solution Users to learn about and use the System and complete the training.

xv. The logistical plan for preparing and delivering the training solution.

xvi. Training Schedule: Schedule and timeline of training development, delivery, and evaluation.

Contractor's Responsibilities	• **Training approach across all releases**
	  o **Modality**
	  o **Types of Users**
	• **Training schedule, curriculum and agenda per release**

State's Responsibilities	• Identify training participants • Participate in training • Provide training feedback
Location	Contractor's facility, webinar and video

Task 5B – Training Manuals, End-User Guides and Materials

The Contractor will develop a comprehensive Training Plan that will include materials such as manuals, end-User guides and videos. Training manuals will be available in electronic format and indexed for easy navigation to specific content or functionality. End-User guides will be available within the Contractor's System via help menus and shortcuts. The video content will be available from a training web site and will include use case scenario video topics.

The Contractor shall develop training materials in such a way as to allow for the capability of training to continue beyond initial deployment. This construction includes the ability to modularize the material. All training material shall have a consistent look and feel and shall be provided in a soft copy format so that the State may easily make modifications to the materials. All training materials shall be maintained to reflect the latest version of the Care Management Solution and the changes resulting from evaluations and use during acceptance, pilot testing, and implementation. All training material shall be maintained in a centralized on-line repository.

The Contractor shall be responsible for developing and providing training materials and for training State staff on Contractor's System operations. The Contractor shall employ professional training staff (not technical staff) to conduct training sessions and to prepare training and User materials. The State shall have approval over Contractor-provided staffing used for training and over the format/content of the training to be given. The State and Contractor staff shall work together to develop the format/content for the training and User materials that the Contractor

shall produce. These materials shall be provided to the State in both hard and soft copy. The State must accept these materials before they are distributed to State staff for use.

Training Manuals, Guides, and Materials shall include, but not be limited to:

i. Instructor/Trainer Guides shall provide the ability for State staff to perform the training on a continuing basis.
ii. Trainee Packages shall provide the trainees exercises and usable examples with which to practice the lessons provided during formal training.
iii. Contractor's System User Manual shall provide Care Management Solution information. It should be as non-technical as possible and emphasize program collaboration, and related business functions in the explanation of Care Management Solution features, specific workflows, functions, modules and tools and the detailed procedures for using the Care Management System. The Contractor's System User Manual shall be designed for ease of use so that any User, regardless of his or her function, can readily locate, identify, understand and use the information. The manual shall include a description of the problems and issues that may arise in using the Care Management Solution and the procedures for resolution. The manual shall include copies of all screens with instruction on the use and function of each, including the definition of all data elements. Contractor's System User Manual shall include a catalog of all reports, forms, letters, and other system-generated documents (generated either automatically by the Contractor's System or by the User). This catalog shall include a copy of each report, form, letter, or document together with a description of its contents and step-by-step instruction on how to produce it.
iv. Desk Aids shall provide quick access to solutions and information that Users most frequently need.
v. User tips, which shall be designed as short messages that can be sent to recent trainees with reminders about short-cuts, features, and other relevant information to promote end-User adoption and use of the Care Management Solution.

Contractor's Responsibilities	• **Training manuals** • **End-User scenario videos** • **General materials (Job aides, etc.)**
State's Responsibilities	Review, comment and approve
Location	N/A

Task 5C – Conduct Training

The Contractor shall conduct system training for all participants for each release. The Contractor shall provide the training facility. The training will include Contractor's System functionality and process flows. The training shall be conducted via classroom and webinar as per the State's proposed training schedule. The training will include live system exercises for participants to navigate while in training.

Location	**Contractor's hosting environment**

Task 5D – Documented Evidence of Successful End-User Learning

The documentation of end-User training by the Contractor shall be specific to the type of training delivered. For training delivered via classroom and Webinar a class roster will be generated including date, time and topics of training. Training conducted via the video website will capture the authorized User name, date/time and specific videos accessed. Post training User satisfaction surveys shall be conducted after each training session to understand the effectiveness of the training and leverage as a continuous feedback loop to improve training content and delivery.

The Contractor shall provide Documented Evidence of Successful End-User Training at the end of each phase of training. Evidence shall include:

i. Tracking of trainee attendance and completion of training courses and modules.
ii. Actions addressing any deficiencies in the proficiency of the current cohort of trainees based on the results of the evaluation of training effectiveness.
iii. An action plan to adjust or modify future training based on the evaluation outcomes.

Contractor's Responsibilities	• **Training logs** • **Training improvement action plan** • **Conduct training satisfaction surveys**
State's Responsibilities	• Participate in training satisfaction surveys and provide feedback
Location	N/A

<u>TASK 6 – Deployment</u>

Task 6A – Deployment Plan

The Contractor shall develop a Deployment Plan that defines all tasks required to release changes to each Contractor's System environment. Each plan includes the manual and automated steps and required tools or scripts 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.

The Contractor shall produce a detailed plan for deployment of the planned functionality for each release. Moreover, the Contractor shall provide a Deployment Plan that documents all the activities that need to be accomplished to successfully migrate the Care Management Solution from the testing environment to the production environment. The 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	• **Deployment schedule** • **Deployment environment and configuration** • **Release notes** • **Rollback plan**
State's Responsibilities	• Verify, validate and sign-off post deployment

Location	Target environment • Development • Test • UAT • Production • Disaster Recovery (Replication)

Task 6B – System Incident and Defect Resolution Report

The Contractor will develop System Incident and Defect Resolution Reports that will be readily available to Authorized Users electronically real-time from the tracking systems. The Contractor will provide reports to the State that are designed to meet all requirements. The State will review and comment on the layout and content of these reports, or the Contractor will propose, and the State Authorized Representative(s) will approve, the layout and content of these reports to meet all requirements.

The Contractor shall document all incidents and defects that occur during System Deployment that are part of the Contractor's System scope and communicate with the Care Management Project Manager within a reasonable, agreed upon time frame, on a regular basis. The System Incident Report must contain the priority of the incident, a description of the incident, incident resolution status, and the proposed course of action for remedying all open incidents.

All defect resolution requests that are part of the Contractor's System scope that occur during the Warranty period must be documented and communicated with the Care Management Project Manager within a reasonable, agreed upon time frame, on a regular basis. The Defect Resolution Report must contain the description of the maintenance request, resolution status, and the proposed course of action for remedying all open defect resolution requests.

All changes and fixes will be implemented based on a mutually agreed upon schedule. All changes will go through all phases of testing by the Contractor and the State Project Team. The Contractor shall document the test results and provide to the State for approval before a decision is made to put the new release into production. The Contractor shall update all required Contractor's System documentation as appropriate and provide to the State at the conclusion of any Contractor's System changes.

Contractor's Responsibilities	• **Report content and design** • **Capture appropriate data to support report content** o **Defects, resolution, timeframes**
State's Responsibilities	Verify and validate
Location	N/A

Task 6C – Completed Detailed Functional and Technical Specifications Traceability Matrix

The Contractor will author and maintain a cross-tabular document listing all individual Contractor's System requirements with columns representing the functional and technical

specifications completeness as well as an identity cross reference to the Test Matrix. An electronic report will also be developed for real-time access with links to each associated specification document for viewing. This will also be available via reporting from the TFS system previously described in Task 4C.

After completion of each release and upon final Contractor's System delivery, the Contractor shall assemble, update, and provide an updated Complete System Design, Requirements, and Specifications document to the Care Management Project. The document components shall include:

i. Updated Functional Requirements with disposition in the Functional Specifications and Design Document (see Task 2A).
ii. Updated Technical Specifications with disposition in the Technical Design Document (see Task 2D).

Contractor's Responsibilities	• **Updated Functional Requirements with each release** • **Updated Technical Specifications with each release**
State's Responsibilities	N/A
Location	N/A

Task 6D – System Source Code and Documentation

The Contractor's Team Foundation Server (TFS) system used to manage all aspects of the Contractor's System development process includes web-based source code and documentation repositories. The Contractor's System source code repository provides historical versioning, branching and merge capabilities. The document repository can be accessed from the web and has check in/out, approval and versioning capabilities as well. The Contractor will work with the State to determine the personnel that require authorization to access either repository.

At the completion of the Project, the Contractor shall conduct a review with the State and identify any documentation that must be updated as a result of changes during the three-year warranty period. The three-year warranty period starts after the full scope of the Project is released into production. The Contractor will be required to update the documentation and provide it to the State for review and Final Acceptance.

The following shall be updated and provided to the State's Project Manager at the completion of the Project:

i. Functional Specifications and Design Documentation
ii. System Architecture
iii. Technical Design Documentation
iv. Data Management and Synchronization Plan
v. Test Cases and Test Scripts
vi. Training Manuals, End-User Guides, and Materials
vii. Final versions of the Contractor's System software files

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

Contractor's Responsibilities	**Update all artifacts associated with Care Management system throughout project:** • **Functional specification and design** • **System architecture** • **Technical design documentation** • **Data management and synchronization plan** • **Test cases and test scripts** • **Training manual, User guides and materials** • **Final versions of the system software files (code)**
State's Responsibilities	N/A
Location	Contractor's hosting environment and offsite replication location

Task 6E – Deployment

The Contractor will deploy all the functionality associated with each release to the production environment for live usage. Additionally, prior to the deployment of the production environment the Contractor's System shall be deployed in stage, test, and training environments for purposes of testing of Contractor's System functionality and training of the Users.

Task 6F - Performance SLAs

The performance SLAs will be captured via the Contractor's application monitoring tool, network monitoring tool and Care Management relational database. An SLA deliverable report will be developed to aggregate and communicate all SLAs at the required State frequency throughout the project. The SLAs are included in Section I, subsection 2 of this Contract.

The Contractor shall provide ongoing compliance monitoring and reporting for the Service Levels (Performance Measures and Associated Remedies) above and included in detail in Non-Functional Requirements.

Contractor's Responsibilities	• **Track/capture all appropriate data elements to produce each SLA** • **Compliance monitoring** • **Corrective plans to ensure SLA compliance**
State's Responsibilities	Review
Location	N/A

<u>TASK 7 – Phase and Project Closeout</u>

Task 7A – Readiness Approval/Task B Complete Phase Closeout

The Phase/Project Closeout shall be facilitated by the Contractor with a comprehensive template. The template includes scope review, financial analysis, documentation, lessons learned and administrative closure or sign-off as well as turnover to operations where applicable.

The purpose of the Phase and Project Closeout task is to identify the conclusion of a Project Lifecycle Phase and the Project Closeout and gather the required approver signatures. This document will signify that all required deliverables for the Project Phase being closed have been completed and approved with the date of approval for each deliverable indicated. The document shall also list the status of each of the Exit Criteria for the Project Phase and the Project Closeout. The Contractor shall provide documentation to support Phase and Project Closeout to include the elements described above and the following components:

i. State validation that all deliverables for the Phase have been provided, accepted, and placed in the Project repository.
ii. State validation that all Exit Criteria for the Phase have been met.
iii. State validation that all deliverables for the Project have been provided, accepted, and placed in the Project repository.
iv. State validation that all Exit Criteria for the project have been met.

Contractor's Responsibilities	• **Prepare release closeout report to include release functionality, User acceptance testing results, requirements traceability and training completion records, and Data Dictionary.** • **Release (system) acceptance criteria** • **Transition to operations (production) plan**
State's Responsibilities	Validation and acceptance
Location	N/A

TASK 8 – CMS Certification Planning and Planning Documentation

The Contractor will develop a comprehensive project plan based on CMS requirements for this sub-system. All high-level project planning components (scope, requirements, WBS, schedule, test plan, etc.) will be developed as well as requirement artifacts and Contractor's System documentation. The Contractor will create the Care Management sub-system certification plan by developing sub-system review criteria, documentation and certification checklists that comply with the overarching MMIS CMS certification.

The Contractor must participate in and support all planning activities associated with Federal certification of the MMIS Solution. Planning activities will ensure that Vermont's Medicaid Enterprise meets all CMS requirements and performance standards to qualify for the highest eligible Federal Financial Participation (FFP) rate retroactive to the first day of operation. While certification application activities will occur post-implementation of the Core MMIS, the Contractor should start preparation at the beginning of the project and continue through each step of the design, development, testing and implementation of the Care Management Solution.

At the time of full MMIS certification, the Contractor is responsible for:

i. Developing a CMS Certification Checklist, based on the CMS Certification Toolkit for more information (http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MMIS/MECT.html), for those processes supported and impacted by the Care Management Solution.
ii. Supporting the State in all discussions with CMS regarding certification related to the Care Management solution.

iii. Developing and executing required and suggested remediation efforts to achieve certification.
iv. Assisting the State in preparing certification documents and reports related to the Care Management Solution.

The Contractor is responsible for preparing all documentation and operational examples to demonstrate relevant criteria are met and Care Management Solution operations address all business functions and performance standards and business model expectations for certification. See the CMS Certification Toolkit for more information (http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MMIS/MECT.html).

Contractor's Responsibilities	• **Develop CMS certification checklist for care management sub-system** • **Support State discussions with CMS regarding certification** • **Prepare all required documentation for care management sub-system certification**
State's Responsibilities	• Provide resources to adequately test certification scenarios
Location	Certification environment

TASK 9 – System M&O

Task 9A – System Incident Reports – M&O

The Contractor will deliver System Incident Reports throughout the project. This will be accomplished via the ITIL compliant web-based Service Desk module which includes comprehensive incident management capabilities with flexible reporting. Incident reporting includes high level dashboards as well as parameterized reports at a granular level. Ad-hoc query functionality is available to authorized Users to answer specific questions related to incidents.

The Contractor must complete the following services. (The Contractor may propose additional deliverables as needed to achieve the task goals of System Maintenance and Operations):

System Incident Resolution – Maintenance and Operations of the Contractor's System includes software faults that are not a part of the scope of the original development effort. All incidents that occur as part of ongoing operations must be addressed and resolved within a reasonable time frame as per the SLAs.

Adaptive Maintenance – All changes and fixes will be implemented based on a mutually agreed upon schedule. All changes will go through all phases of testing by the Contractor and the State. The test results must be documented and provided to the State for approval before a decision is made to put the new release into Production. All relevant Contractor's System documentation will be updated and provided to the State at the conclusion of any Contractor's System changes.

System Enhancements – If the State determines that Contractor's System enhancements are required, it will submit a request for those modifications to the Contractor. The Contractor will analyze the changes and provide a cost estimate for performing those changes to the Care

Management Solution. These cost estimates will be negotiated based on rates proposed and agreed to. The State can then decide whether it wishes to move forward with the requested enhancements, which will be incorporated as a change order to the Contract. All incidents that occur during the Base and Optional Extension M&O periods must be documented and communicated with the State within a reasonable, agreed upon timeframe, on a regular basis. The Contractor's System Incident Report must contain the severity of the incident, a description of the incident, incident resolution status, and the proposed course of action for remedying all open incidents.

Contractor's Responsibilities	• **Prepare ongoing Contractor's System incident reports** • **Incident resolution status**
State's Responsibilities	Review and comment
Location	N/A

Task 9B – Adaptive Maintenance Reports

The Contractor will deliver Adaptive Maintenance Reports throughout the project. The Change Management Tracking system includes verbose reporting for all types of Contractor's System changes including those associated with previously deployed requirements and functionality. Each item includes a detailed description of the "As Is" and "To Be" adaptive change. A real-time parameterized report can be executed to view the details of each change.

All adaptive maintenance requests that occur during the M&O period must be documented and communicated with the State within a reasonable, agreed upon timeframe, on a regular basis. The Adaptive Maintenance Report must contain the description of the maintenance request, resolution status, and the proposed course of action for remedying all open maintenance requests.

Contractor's Responsibilities	• **Prepare Adaptive Maintenance Reports** • **Adaptive maintenance status**
State's Responsibilities	Review and comment
Location	N/A

Task 9C – System Enhancement Reports

The Contractor will deliver System Enhancement Reports throughout the project. Contractor's System Enhancements are managed by the change management tracking system as previously described. The same data capture and reporting capabilities are available for changes specific to the "Enhancement" change type. Detail descriptions of the Contractor's System enhancement will be provided in the associated release notes. Corresponding training materials will be updated to reflect changes.

All Contractor's System enhancement requests (changes requiring 200 or more hours of effort) that occur during the M&O period must be documented and communicated with the State within a reasonable, agreed upon timeframe, on a regular basis. The System Enhancement Report must

contain the description of the enhancement request, progress, and the test results and outcome of each request.

Contractor's Responsibilities	• **Prepare System Enhancement Reports** • **System enhancement status**
State's Responsibilities	Review and comment
Location	N/A

Task 9D – Operations and System Administration Procedures Manual

The Contractor is responsible for developing an Operations and System Administration Procedures Manual that includes the following components:

i. Diagnostic procedures, backup and restore procedures, and disaster recovery procedures.
ii. Information to aid in analyzing the software, apart from information already available in other delivered documentation.
iii. Maintenance and repair policies and procedures.
iv. Updated Contractor's System architecture diagrams and inventory (systems, servers, etc.).
v. Database Schema.
vi. Contact information for all appropriate State and Contractor parties. (system owner, security owner, business owner, system administrator, etc.).

Task 9E – Tier 2 Service Desk Plan

The Contractor's Tier 2 Service Desk Plan will describe the required Contractor's Systems, processes and procedures necessary to effectively support all stakeholders and Users of the Care Management System. The plan will detail the "hand-off" or escalation from the Tier 1 team and the policies and procedures by which each ticket is processed. This includes hours of operation, severity level turnaround timeframes, and communication mechanisms and reporting.

The Contractor is responsible for developing a Tier 2 Service Desk Plan that indicates how support will be provided and how escalated incidents are resolved. The Service Desk shall use ITIL v3 compliant Incident and Problem Management processes. The plan must include a proposed organizational structure, service level commitments related to the resolution of logged incidents (based on issue priority or severity), and metric reporting for monitoring the Contractor's System and Service Desk performance. The Service Desk shall use an ITIL v3 compliant COTS IT Service Desk solution and shall electronically interface with the Contractor's defect and quality management tools.

Contractor's Responsibilities	• **Contractor's System support structure and organization** • **Processes and policies** • **Support tools (ticketing, voice mail etc.)** • **Hours of operation** • **Communication and escalation plan**

State's Responsibilities	Review
Location	N/A

L. TASK RELATED DELIVERABLES: PROJECT TIMELINE

Task Deliverable 1-C, Project Work Plan and Schedule, and the updated Project Schedule represent the approved schedule of record for tracking progress against completing and approving all contract deliverables. Deliverables are considered approved when the State issues a Deliverables Acceptance Document (DAD) signed by the State's authorized representative.

Deliverable 6-D, System Source Code and Documentation, for each release will be due upon receipt of payment by Contractor for approved task Deliverable 7-B, Phase and System Acceptance.

Updated code will be delivered to the State quarterly after Contractor receives the M&O payments for the quarter.

M. CONTRACTOR PROJECT ORGANIZATION & STAFFING

1. Staffing Plan

The following staffing plan details the Contractor personnel, level, roles and responsibilities, and team reporting relationships and identifies the approach to providing "shoulder-to-shoulder" team reporting relationships for key staff roles. This plan shows Contractor's personnel hours by phase, by personnel level and by role for the entire project.

a. ***The term "Key Project Personnel***", for purposes of this Contract, means Contractor personnel deemed by the State as being both instrumental and essential to the Contractor's satisfactory performance of all requirements contained in this Contract. The Key Project Personnel shall be engaged throughout both the implementation and operations periods. Changes to the positions and responsibilities shall only be allowed with prior written permission from the State. Certain Key Project Personnel, as further described in the Staffing Tables, are to be full-time and dedicated solely to the Vermont Care Management account.

b. ***Location of Contracted Functions and Personnel***

i. The Contractor's Key Project Personnel must be able to participate in-person during Care Management -related meetings as scheduled by the State. The Contractor will provide local meeting space as needed with 24 hours' notice. The State may provide individual workspace for Contractor Project Personnel. Onsite work must be performed during normal business hours, 8:00 AM until 4:30 PM Eastern Time, Monday through Friday, except State of Vermont holidays.

ii. The State and the Contractor shall establish appropriate protocols to ensure that physical property/facility security and data confidentiality safeguards are maintained.

iii. The Contractor must ensure Key Project Personnel have, and maintain, relevant current license(s) and/or certification(s).

iv. The Contractor shall seek and receive State approval before hiring or replacing any Key Project Personnel and all Vermont-based staff. The Contractor shall remove Key Project Personnel, if requested by the State, as well as develop a plan for the replacement of that Key Project Personnel, all within two (2) weeks of the request for removal.

v. The Contractor must provide the State with written notification of anticipated vacancies of Key Project Personnel within two business days of receiving the individual's resignation notice, the Contractor's notice to terminate an individual, or the position otherwise becoming vacant. Replacements for Key Project Personnel shall have qualifications that meet or exceed those specified in this Contract and shall be subject to approval by the State. The Contractor shall provide the State with status update reports every 30 days on the progress of the replacement candidate recruiting process until a qualified candidate is hired. The Contractor shall have in place a qualified replacement within ninety (90) calendar days of the last day of employment of the departing Key Project Personnel. Contractor shall agree to provide the first thirty (30) days of a replacement resource with equivalent skill at no additional charge.

vi. The State's right to request replacement of Contractor personnel hereunder relates solely to the removal of individuals from work on this Contract with the State and does not create any employment or principal-agent relationship. Nothing in this Contract authorizes the State to direct the Contractor's termination of, or other adverse action related to, the employment of any individual.

2. Key Project Personnel

The following table provides 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	Roles and Responsibilities	Reporting Relationship
Sr. Account Executive	Primary point of contact with the State's contract administrator, care management director and other State executive sponsors for activities related to contract administration, overall project management and scheduling, correspondence between the State and the Contractor, dispute resolution, and status reporting to the State for the duration of the contract Authorized to commit the resources of the Contractor in matters pertaining to the implementation performance of the contract. Responsible for ensuring all Contractor-required resources identified by project manager are staffed on time. Responsible for addressing any issues that cannot be resolved with the Contractor's Project Manager. Senior business expert in the area of care management systems with a strong understanding of the Contractor's business application Is expected to work 30% on site with State staff during the DDI Phase.	State Contract Administrator eQHealth CEO
Account Director	Responsible for the Engagement working with both State Leadership, steering committees and Contractor & Subcontractor teams. Closely work with Sr. Account Executive to ensure all program operations are being conducted as per the vision. Work with State team to facilitate the escalation of issues. Responsible for oversight of the Care Management Project team. Responsible for all business aspects of the	State Contract Administrator eQHealth Sr. Account Executive Cognizant Leadership

	reporting. To ensure all the program requirements are being met on-time and on budget. Expected to work 75% of the time onsite with State staff during the DDI Phase	
Project Manager	Providing onsite management of the project and is the chief liaison for the State for design, development, and implementation project activities as well as the project's maintenance and operational phase. Authorized to make day-to-day project decisions. Responsible for facilitating the project by using the project management processes, organizing the project, and managing the team work activities consistent with the approved work plan. Responsible for scheduling and reporting project activities, identifying resource requirements well in advance, coordinating use of personnel resources, identifying issues and solving problems, and facilitating implementation of the Contractor's System. Hosting weekly onsite status meetings, monthly milestone meetings, as well as interim meetings. Will assign Contractor staff to those meetings as appropriate. Will provide an agenda and develop minutes for each meeting. Providing expert guidance ensuring that care management policy and business rules as defined by the State are correctly implemented in the Contractor's solution. Advising the State regarding best practices and recommends modifications to business processes, which improve the overall care management program. Is expected to work 100% on site with State staff during the DDI Phase. Must hold current project management certification.	State Contract Administrator State Project Manager eQHealth Sr. Account Executive Cognizant Leadership
Data / Health Informatics Analyst	Responsible for all State data requirements and reporting needs including those that exceed the standard reporting package and the information available through the decision support tool provided by the Contractor. Providing ad hoc reporting, predictive modeling and risk stratification reporting as requested by AHS staff and other program staffs (once on-boarded). Management of procedures associated with Contractor's Systems change orders Ensuring the integrity of data used for care management predictive modeling, risk stratification, etc. Is expected to work 100% on site with State staff during the DDI Phase.	
Account Manager	Responsible for business aspects of the project to ensure the overall project goals are being met and that the Project Team has all the necessary resources in terms of skill sets, knowledge and all items related to scope. Is expected to work 10% on site with State staff during the DDI Phase.	eQHealth Sr. Account Executive eQHealth CEO
Clinical Program Analyst	A clinician who is responsible for clinical workflow design and business rules based on the Vermont Care Management program. Subject matter expert providing knowledgebase of the current product to the team and the necessary design and configurations	IT Project Manager eQHealth CSO

	changes required for customizing to AHS needs. Is expected to work 60% with State staff during DDI Phase.	

Project Role	Original Resource	
Account Executive	Sean Marchiafava	JAD Facilitator
Account Manager	Mayur Yermaneni	
Account/Project Director	Jim Gesek	
Project Coordinator	TBD	
Project Manager	Srivaths Srinivasan	JAD and process discussions
Change Management Lead	TBD	
Health Information Analyst	Emma Pineda Fortin	JAD and process discussions
IT Business Analyst	TBD	JAD and process discussions
IT Business Analyst (consulting)	TBD	JAD and process discussions
Clinical Business Analyst	TBD	JAD and process discussions
Clinical Business Analyst (consulting)	TBD	JAD and process discussions
Technical Writer	TBD	
Training/ OCM Lead	TBD	
Trainer	TBD	
Helpdesk Support	TBD	
IT Project Manager	LaDonna Web, Pam Riddle	JAD Sessions Facilitator
Architect	Jeff Engerski	
Lead Developer	TBD	
Developer	TBD	
Clinical Program Analyst	Marina Brown	JAD and process discussions
Lead QA Analyst	TBD	
QA Analyst	TBD	
DBA	TBD	
System/Network Administrator	Steve Yurisk	

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.

Staff Contingency Plan
The Contractor shall:

a. Maintain a Contingency Plan that shows the ability and process to add more staff if needed to ensure the project's deliverables are met on the due date(s) and go-live dates.
b. Provide a plan to monitor the project, and how a determination to deploy contingency staffing will be made.

3. Staff Management

The Contractor shall:

a. Have internal standards, policies, and procedures regarding hiring, professional development and human resource management.
b. Ensure a continuous and steady influx of skilled and qualified resources to project teams at all times.
c. Have a Human Resource Management Plan in place tied to the proposed project timeline and phases. The Contractor is responsible for proposing the potential roles and responsibilities for staffing the different activities, articulating what the Contractor will need to provide and what the State should provide.

4. Training Policies and Procedures

The Contractor shall ensure the training and ongoing education of its personnel. The Contractor shall ensure that all Subcontractor's staff receive training on and have an in-depth understanding of eQSuite® before Subcontractor's staff begins its engagement on the project. For Subcontractor's staff that that will be on the project at its inception, this training shall be completed prior to Task 1A Project Kickoff Presentation, and shall include, but not be limited to the following:

KNOWLEDGE TRANSFER TYPE	AUDIENCE To include, but not limited to:	CONTENT Will include, but is not limited to:	DURATION
Assignment Mobilization, Application Use Cases, and Process Flows	Program Manager Project Manager Change Management Lead Health Information Analyst Training/OCM Lead	General introduction to the assignment: Case management for Vermont Contract requirements by functional area Work plan and phasing Program organization Team building exercises Hands on training on the major care management workflows from the perspectives of a case worker, manager, and system administrator, including: Creating a case for various scenarios Case management Reporting and analytics System administration and customization	Two weeks
Database Administration	Database Administrators	Administration of the eQSuite® databases: Logical and physical architecture of the system as configured in development, test, staging, and production environments Database entity relationship diagrams and data flows Use of third party tools, especially Extract, Transform, and Load (ETL) Routines for backup and restore Periodic maintenance tasks (run book)	One Week
Application Use Cases for Business Analysts	IT Business Analyst IT Business Analyst (Consulting) Clinical Business Analyst Clinical Business Analyst (Consulting) Technical Writer	Hands on training on the major Care Management workflows from the perspectives of a case worker, manager, and system administrator, including: Creating a case for various scenarios Case management Reporting and analytics System administration and customization	One Week
Application Use Cases for Quality Assurance and Training	QA Analysts Trainers	Hands on Hands on training on the major Care Management workflows from the perspectives of a case worker, manager, and system administrator, including: Creating a case for various scenarios Case management Reporting and analytics System administration and customization	One Week

5. Contractor's Use of Vermont Staff

The Contractor's staffing plan shall include the number of resources (both business and technical), anticipated role and responsibilities, level of participation (e.g., part time, full time) and necessary capabilities/ skills of State Staff.

N. WORK PLAN

The Contractor shall submit the project work plan (i.e., Project Schedule) deliverable for State approval within thirty (30) days of project initiation.

O. REQUEST FOR APPROVAL TO SUBCONTRACT

Per Attachment C, Section 19, if the Contractor chooses to subcontract work under this agreement, the Contractor must first fill out and submit the Request for Approval to Subcontract Form Attachment H (Required Forms) in order to seek approval from the State prior to signing an agreement with any third party. Upon receipt of the Request for Approval to Contract form, the State shall review and respond to the request within five (5) business days. Under no circumstance shall the Contractor enter into a sub-agreement without prior authorization from the State. The Contractor shall submit the Request for Approval to Contract form to the State Authorized Representative(s) and to: AHS.DVHAGrantsContracts@vermont.gov

Should the status of any third party or Subcontractor change, the Contractor is responsible for updating the State within fourteen (14) days of said change. For the avoidance of doubt, the Contractor shall remain liable for the satisfactory performance of all work required under this Contract. Additionally, a prior written approval under this section will not constitute an amendment to the Contract unless it changes the general terms and conditions or the terms of payment in the base Contract.

APPENDIX I – Functional Requirements

Appendix I. Functional Requirements	
Contract # 28739 **Functional Requirement Number**	**Section Title**
FR	**Functional Requirement**
FR1	General (includes Document Management; Member, Authorized Representative, and Community Provider/Partner Portal; Alerts and Notifications; Workflow Management; Centralized Mailing)
FR2	Establish Case Criteria (includes Rules Management; Candidate Identification / Risk Stratification; Eligibility Determination)
FR3	Establish Case (Intake: Outreach; Case Assignment)
FR4	Perform Screening and Assessments
FR5	Manage Treatment Plan and Outcomes
FR6	Manage Case Information (includes Case Documentation; Scheduling; Disposition; Transition; Care Coordination; Case Closure)
FR7	Manage Population Health Outreach
FR8	Manage Registry
FR9	Authorization Determination (includes Referral Management; Service and Treatment Plan Authorization)
FR10	Reporting
FR11	Consent Management
FR12	Sample List of Reports

General		
Document Management		
Requirement number	**Requirement**	**Planned Release**
FR1.1	The Contractor's System will store State-approved letter templates.	R1 FINAL
FR1.2	The Contractor's System will allow Users to access appropriate letter templates based on need and role.	R1 FINAL

FR1.3	The Contractor's System will pre-populate letters with the profile of the User, which includes but is not limited to: a) First and last name b) Title c) Department d) Contact information (email address, phone number, etc.)	R1 FINAL
FR1.4	The Contractor's System will pre-populate letters with the date	R1 FINAL
FR1.5	The Contractor's System will allow Users to enter freeform text to communicate notes / comments (number of characters as approved by the State during requirements validation)	R1 FINAL
FR1.6	The Contractor's System will save the completed letters and associate it with Member's record.	R1 FINAL
FR1.7	The Contractor's System will allow for scanned documents to be associated with Member's Plan of Care or record	R1FINAL
FR1.8	The Contractor's System will allow for Users to edit letters	R1 FINAL
FR1.9-1	The Contractor's System will be able to access, pull, and format Member's data into appropriate letters (e.g., Discharge summary will show Member's progress from pre- to post-Chronic Care engagement), then batch and mail).	R1 FINAL
FR1.9-1*	The Contractor's System will be able to access, pull, and format Member's data into appropriate letters (e.g., Discharge summary will show Member's progress from pre- to post-Chronic Care engagement), then batch and mail	R4
FR1.10-1	The Contractor's System will be able to include, at a minimum, the following document management capabilities: a. Accessible letter templates and forms b. Updateable templates through the ticketing process. Contractor will release the updated templates to SoV for testing in an agreed upon timeframe c. Store documents and files d. Generate materials in both hard copy and electronic format, including forms and letters e. Create letter templates and forms for the following areas: i. Community Provider/Partner materials ii. General correspondence/notices for Community Provider/Partners and Members The Contractor's System will be able to include, at a minimum, the following document management capabilities: a. Accessible letter templates and forms b. Updateable templates through the ticketing process. Contractor will release the updated templates to SoV for testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 5 business days after Contractor receives requirements. The requests are limited to the current document management framework of the application. c. Store documents and files d. Generate materials in both hard copy and electronic format, including forms and letters e. Create letter templates and forms for the following areas: i. Community Provider/Partner materials ii. General correspondence/notices for Community Provider/Partners and Members	R1 FINAL
FR1.10*	The Contractor's System will be able to include, at a minimum, the following document management capabilities: a. Accessible letter templates and forms b. On-line, updateable templates that allow Users to customize on an as-needed basis c. Store documents and files d. Generate materials in both hard copy and electronic format, including forms and letters e. Create letter templates and forms for the following areas: i. Community Provider/Partner materials ii. General correspondence/notices for Community Provider/Partners and Members iii. Letters (financial, denial, EOMB, Notice of Decision, etc.) iv. Coordination of Benefits Letter v. Prior Authorization Letters	R2

FR1.10**	The Contractor's System will be able to include, at a minimum, the following document management capabilities: a. Accessible letter templates and forms b. On-line, updateable templates that allow Users to customize on an as-needed basis c. Store documents and files d. Generate materials in both hard copy and electronic format, including forms and letters e. Create letter templates and forms for the following areas: i. Community Provider/Partner materials ii. General correspondence/notices for Community Provider/Partners and Members iii. Letters (financial, denial, EOMB, Notice of Decision, etc.) iv. Coordination of Benefits Letter v. Prior Authorization Letters	R3
FR1.11	The Contractor's System will provide optical character recognition to be able to extract text from scanned documents	R4
FR1.12. a FR1.12-1	The Contractor's System will allow Users, with appropriate access levels, to contact eQHealth in order to create / modify / delete / update State-approved referral forms, letter templates, and other appropriate documentation. This will be done by following an easy-to-use, well-defined process and at no additional cost to the State.	R1 FINAL
FR1.12*FR1.12. a FR1.12-1	The Contractor's System will allow Users, with appropriate access levels, to create / modify / delete / update State-approved referral forms, letter templates, and other appropriate documentation. The Contractor's System will allow Users, with appropriate access levels, to contact eQHealth in order to create / modify / delete / update State-approved referral forms, letter templates, and other appropriate documentation. This will be done by following an easy-to-use, well-defined process and at no additional cost to the State.	R2
FR1.12**	The Contractor's System will allow Users, with appropriate access levels, to create / modify / delete / update State-approved referral forms, letter templates, and other appropriate documentation	R3
Member, Authorized Representative and Community Provider/Partner Portal		
FR1.13	The Contractor's System will display a step-by-step form with branching logic to capture the required and optional data elements for a new Member, Community Provider/Partner, or Authorized Representative portal account. Data elements may include but are not limited to: a) First name b) Last name c) Account password d) Contact information (e.g., email address, phone number, etc.)	R3
FR1.14	The Contractor's System will validate the information provided by the Member, Community Provider/Partner, and Authorized Representative. Validation will be based on at least: a) Required field completion b) Field content types (e.g., names must not contain numbers) c) Acceptable values (e.g., no birth dates before 1/1/1900) d) Values based on available real-time and stored data sources (e.g., VCCI information about the Member, Medicaid Provider verification)	R2 – R4
FR1.14*	The Contractor's System will validate the information provided by the Member, Community Provider/Partner, and Authorized Representative. Validation will be based on at least: a) Required field completion b) Field content types (e.g., names must not contain numbers)	R2

	c) Acceptable values (e.g., no birth dates before 1/1/1900) d) Values based on available real-time and stored data sources (e.g., VCCI information about the Member, Medicaid Provider verification)	
FR1.14**	The Contractor's System will validate the information provided by the Member, Community Provider/Partner, and Authorized Representative. Validation will be based on at least: a) Required field completion b) Field content types (e.g., names must not contain numbers) c) Acceptable values (e.g., no birth dates before 1/1/1900) d) Values based on available real-time and stored data sources (e.g., VCCI information about the Member, Medicaid Provider verification)	R3
FR1.15	The Contractor's System will grant and limit access to Member, Community Provider/Partner, and Authorized Representative to view/update information, based on User role, access rights and program rule	R4
Workflow Management		
FR1.16	The Contractor's System will allow Users to save the data at any point during data entry across the process area	R1.01
FR1.17	The Contractor's System will automatically save work-in-progress and notify the User that the data entry was saved	R1
FR1.18	The Contractor's System will allow Users to continue with other steps of workflow and other components of a process area if a single component has not been completed	R1.01
FR1.19	The Contractor's System will notify Users when mandatory data fields are incomplete	R1.01
FR1.20	The Contractor's System will allow Users to electronically approve / deny documentation, where appropriate and within policy	R4
FR1.21	The Contractor's System will have workflow management to allow Users to electronically send referrals or other documentation through the organizational hierarchy for review, approval and/or denial	R3
Alerts and Notifications		
FR1.22-1	The Contractor's System will have the capability to generate alerts and notifications for Users to see at any stage of the case management process. The following Alerts will be introduced in R1.02: • Case Assigned • Participant Reassigned • Member Deceased • Issues, Goals and Interventions are Closed	R1-FINAL
FR1.22-2	The solution must send alerts to users.	R1 FINAL

FR1.22-3	The solution must allow an authorized user to configure alerts.	R1 FINAL
FR1.22-4	The solution must send notifications to users.	R1 FINAL
FR1.22-5	he solution must allow an authorized user to configure notifications.	R1 FINAL
FR1.23	The Contractor's System will have the capability to present alerts and notifications from external systems such as Business Intelligence, Integrated Eligibility, and others identified by the State	R4
FR1.24	The Contractor's System will allow Users to subscribe and unsubscribe to alerts and notifications, based on policy and role	R3
FR1.24-1	The solution must capture a client's preferences for his/her subscription to alerts.	
FR1.24-2	The solution must capture a client's preferences for his/her subscription to notifications.	
FR1.25	The Contractor's System will allow for electronic mailing (e-mailing), printing, batching and mailing of alerts and notifications	R2
FR1.26	The Contractor's System will prompt User to indicate action needed / requested for a specific alert	R1 FINAL
FR1.27	The Contractor's System will allow User to prioritize alerts and notifications	R1
FR1.27-1	The Contractor's System will display the priority of alerts and notifications as defined by policy. Any changes to the priority can be managed through the ticketing system.	R1 FINAL
FR1.28	The Contractor's System will allow User to search for alerts by Member, alert type, etc.	R1 FINAL
FR1.29	The Contractor's System will allow User to track age of alerts and notifications	R1 FINAL
FR1.30	The Contractor's System will allow managers / supervisors to view pending or unread alerts and notifications of their staff. a. The Contractor's System will push these alerts and notifications to managers / supervisors after predetermined timeframe based on program policy	R1 FINAL
FR1.30-1	The Contractor's System will allow managers / supervisors to view notifications of staff including details such as status.	R1 FINAL
FR1.31	The Contractor's System will allow the author of an alert / notification to indicate an overdue date and/or time. The Contractor's System will allow the author of an alert / notification to indicate an expiration date and/or time	R1 FINAL
FR1.31-1	The Contractor's System will allow the author of an alert / notification to indicate an overdue date and/or time	R1 FINAL
FR1.32	The Contractor's System will send alerts/notifications to appropriate Users when a condition has been achieved. This may include but is not limited to: a) Medication filled b) Progress towards goal (e.g., partially achieved in first visit and needs to be addressed at next visit) c) Member contact requirement, per program policy d) Urinalysis completed for substance abuse patients	R1 FINAL

FR1.32-1	The Contractor's System will send alerts/notifications to appropriate Users when a condition has been achieved. This may include but is not limited to: a) Medication filled b) Progress towards goal (e.g., partially achieved in first visit and needs to be addressed at next visit) c) Member contact requirement, per program policy d) Urinalysis completed for substance abuse patients. The following Alerts will be introduced in R1.02: • Gap in Care	R1 FINAL
FR1.33	The Contractor's System will send alerts/notifications to Users who have: (1) subscribed or been assigned to these types of notifications, (2) the correct access rights, and (3) have a valid reason for viewing this data	R1 FINAL
FR1.34	The Contractor's System will send notifications based on the preferences a Community Provider/Partner, Member, Authorized Representative or User has indicated in their profile unless a delivery method is specified by policy (e.g., certain notifications must be sent via US postal mail, ADA compliant communication). Where possible, electronic delivery methods (email, SMS) will be selected.	R4
FR1.35	The Contractor's System will be able to send automated phone notifications to Community Provider(s)/Partner(s), Members, Authorized Representatives or Users	R4
FR1.36	The Contractor's System will automatically create alerts based on best practice (e.g., prenatal checkpoints), where applicable	R2
FR1.36-1	The Contractor's System will automatically create alerts based on best practice (e.g., prenatal checkpoints), where applicable. The following Alert will be introduced in R1.02: • Participant Gap in Care	R1 FINAL
FR1.37	The Contractor's System will allow Users to modify System-generated alerts	R1
FR1.37-1	The Contractor's System will store rules for system-generated alerts. Any updates to the alerts rules can be managed by submitting a ticket request to eQHealth.	R1 FINAL
FR1.38	The Contractor's System will send alerts to Users of Member admissions and discharges from hospitals, nursing homes, residential care facilities, emergency bed services for Mental Health, and out of home services	R3
General		
FR1.39	The Contractor's System will include decision support tools such as but not limited to: a) Links to appropriate program policies aligned to appropriate data items b) Clinical links (e.g., McKesson, InterQual) c) Standards of care d) Case Management protocols	R1
FR1.40	The Contractor's System will have the ability to automatically populate the appropriate data elements when supplied in any approved electronic format, including the execution of the necessary edits, business rules, and calculations	R1 FINAL
FR1.41	The Contractor's System will have the capability to interact with other systems as needed to collect, track, and report on programs at the Member, Community Provider/Partner, and aggregate level	R4
FR1.41. a FR1.41-1	The Contractor's System will have the capability to interact with other systems as needed to collect, track, and report on programs at the Member and aggregate level.	R1 FINAL
FR1.42	The Contractor's System will have the capability to save all forms, reports, documents, screens, etc. based on User role and program policy	R1.01

FR1.43	The Contractor's System will have an easy-to-use and well-formatted print functionality for all forms, reports, documents, screens, etc. based on User role and program policy	R1.01
FR1.44	The Contractor's System will provide the ability to associate a single electronic document with multiple members if appropriate (e.g., household)	R2
FR1.45	The Contractor's System will send a notification to appropriate User when a deadline, per policy, is approaching (i.e., a PA request must be acknowledged within 'X' hours - The Contractor's System will notify appropriate User at the 'N'th hour if progress has yet to be made)	R4
FR1.46	The Contractor's System will provide Users the ability to review data entered on forms prior to submission	R1 FINAL
FR1.47	The Contractor's System will have a spell check function for all text (e.g., secure messages, case notes)	R1 FINAL
FR1.48	The Contractor's System will automatically save information as Users complete forms	R1 FINAL
FR1.49	The Contractor's System will allow Users to submit forms when all information is completed	R1.01
FR1.50	The Contractor's System will validate that all mandatory data fields have been completed when a Community Provider/Partner, Referring Party, or User attempts to submit a form (Note: this includes performing validations when moving from one screen to the next)	R2
FR1.50. a FR1.50-1	The Contractor's System will validate that all mandatory data fields have been completed when a User attempts to submit a form (Note: this includes performing validations when moving from one screen to the next)	R1 FINAL
FR1.51	The Contractor's System will allow a User to change screens (backwards or forwards) without losing data entered	R1
FR1.51-1	The Contractor's System will allow a User to change screens (backwards or forwards) from Surveys to other tabs within a case without losing data entered	R1.01
FR1.52	The Contractor's System will apply mailing address validations including address, zip code, etc. (e.g. USPS, Pitney Bowes, etc.)	R3
FR1.53	The Contractor's System will inform the Community Provider/Partner, Referring Party, or User of errors on the form based on the validations performed	R4
FR1.54	The Contractor's System will allow the Community Provider/Partner, Referring Party, or User to review and update the form if there are correctable errors	R2
FR1.54. a FR1.54-1	The Contractor's System will allow the User to review and update the form if there are correctable errors	R1 FINAL
FR1.55	The Contractor's System will allow for a system administrator to indicate mandatory and optional fields in forms	R1 FINAL

FR1.56	The Contractor's System will provide the ability for Users to format text in The Contractor's System (e.g., capitalization, special characters, highlight, bold, underline)	R2
FR1.57	The Contractor's System will display a progress indicator on all forms that span more than one screen	R1 FINAL
FR1.58	The Contractor's System will have the ability to share case information among AHS departments and view the full range of services for an individual and the family, based on User's role and access level	~~R4~~
FR1.59	The Contractor's System will allow Users to upload acceptable file types as defined by The Contractor's System design	R1 FINAL
FR1.60	The Contractor's System will have rules-based access control at the data field level and display information based on the following: a) User role and program affiliation (e.g. VCCI, COU, etc.) b) Consent provided by a Member c) Any other regulatory or policy based restrictions	R4
FR1.60-1	The System will have rules-based access control at the case level and display information based on the following: a) User role and program affiliation (e.g. VCCI, COU, etc.)	R1.01
FR1.61	The Contractor's System will have a User interface written in English (including warnings, notifications and User prompts) free of grammatical errors and typos	R1.01
FR1.62	The Contractor's System will contain written language targeted to the average adult reading level. Note: This applies to all languages	R1 FINAL
FR1.63	The Contractor's System will provide the capability to determine an individual's language preference to be used on notices, correspondence and other materials	R1 FINAL
FR1.63-1	The Contractor's System will provide the capability to determine and document an individual's language preference.	R1 FINAL
FR1.64	The Contractor's System will maintain a record (e.g. audit trail) of all changes made to data in the Contractor's System - system initiated changes or User initiated changes. This should be readily searchable by User ID, system ID or Member ID. This must include but is not limited to: a) The User ID of the person who made the change or system ID if the change was system generated b) The date and time of the change c) The information that was changed d) The data before and after it was changed e) The data source if the change was system generated	R1.01
FR1.65	The Contractor's System will record the date, time, and name of Users viewing Member information	R1.01
FR1.66	The Contractor's System will allow a system administrator to manage and update code tables through a User interface	R3

FR1.67	The Contractor's System will use industry standard taxonomy(ies) including but not limited to: a. CMS' Health Plan Identifier (HPID) and Other Entity Identifier (OEID) b. National Provider Identifier	R1.01
FR1.68	The Contractor's System will provide online access to clinical guidelines and protocols approved by the State a) The State will have the ability to select homegrown, national and/or commercial (regularly updated) clinical guidelines and protocols (e.g., PubMed) to allow for different departments to view or use b) The Contractor's System will have the capability to protect commercial Contractors intellectual property	R1 FINAL
FR1.69	The Contractor's System will have the ability to support cataloging/indexing of all imaged documents	R3
FR1.70	The Contractor's System will allow more than one User to be logged in to and enter data in the same case, at the same time	R1 FINAL
FR1.71	The Contractor's System will provide a real-time view of all Users accessing a case	R1 FINAL
FR1.72	The Contractor's System will provide menus that are understandable by non-technical Users and provide secure access to all functional areas	R1.01
FR1.73	The Contractor's System will provide the ability to incorporate a non-restrictive environment for experienced Users to directly access (direct call) a screen or to move from one screen to another without reverting to the menu structure	R1.01
FR1.74	The Contractor's System will provide an online help system, available from any screen and any screen field, that provides a description of and the processing performed by a screen or window, data entry format and restrictions, explanation of error messages and other information helpful to the User	R1
FR1.74-1	The Contractor's System will provide an online help system, available from any screen	R1 FINAL
FR1.75	The Contractor's System will provide the ability to generate drop-down lists to identify options available, valid values, and code descriptions, by screen field	R1.01
FR1.76	The Contractor's System will allow Users, with appropriate access levels, to edit drop-down list options	R1 FINAL
FR1.77	The Contractor's System will have the ability to utilize the following standards for all system screens, windows, and reports: a) All headings and footers standardized b) Current date and local time displayed c) All references to dates displayed consistently throughout The Contractor's System d) All data labels and definitions consistent throughout the Contractor's System and clearly defined in User manuals and data element dictionaries e) All generated messages should be clear and sufficiently descriptive to provide enough information for problem correction and be written in full English text f) Specify User (name) with associated data input g) All dropdown lists displayed consistently throughout the Contractor's System h) All search results displayed consistently throughout the Contractor's System (i.e., Name formats standardized)	R1 FINAL

FR1.77-1	The Contractor's System will have the ability to utilize the following standards for all system screens, windows, and reports: a) All headings and footers standardized b) Current date and local time displayed c) All references to dates displayed consistently throughout The Contractor's System as MM/DD/YYYY e) All generated messages should be clear and sufficiently descriptive to provide enough information for problem correction and be written in full English text f) Specify User (name) with associated data input g) All dropdown lists displayed consistently throughout the Contractor's System	R1.01
FR1.77-2	The Contractor's System will have the ability to utilize the following standards for all system screens, windows, and reports: a) All headings and footers standardized b) Current date and local time displayed c) All references to dates displayed consistently throughout The Contractor's System d) All data labels and definitions consistent throughout the Contractor's System and clearly defined in User manuals and data element dictionaries e) All generated messages should be clear and sufficiently descriptive to provide enough information for problem correction and be written in full English text f) Specify User (name) with associated data input g) All dropdown lists displayed consistently throughout the Contractor's System	R1 FINAL
FR1.78	The Contractor's System will display pertinent Member information on all Member screens. This includes but is not limited to: a) Member's date of birth b) Contact information (primary and alternative) c) Social security number	R1
FR1.79	The Contractor's System will pre-populate data fields based on previously entered data entry	R1
FR1.80	The Contractor's System will be flexible enough to allow role-based Users the ability to easily and quickly reconfigure based on changing business requirements (e.g., approved letter templates, updated fields in the electronic referral form)	R2
FR1.80. a FR1.80-1	The Contractor's System will be flexible enough to allow role-based Users to contact eQHealth in order to reconfigure based on changing business requirements (e.g., approved letter templates, updated fields in the electronic referral form). This will be done by following an easy-to-use, well-defined process and at no additional cost to the State.	R1 FINAL
FR1.81	The Contractor's System will have the ability to display free-form narrative notes in chronological or reverse chronological sequence, by timeline for specific medical condition, including but not limited to: a. Ability to review history of a case progress towards goal (e.g., note or pattern) without having to scroll through all notes from present to 'X' time back	R1 FINAL
FR1.82	The Contractor's System will have the ability to dial a phone number directly with a single (or double) mouse click on the browser page, within The Contractor's System	R4
FR1.83	The Contractor's System will associate an individual Member record with the Member's family in The Contractor's System for use in data look-up	R2
Centralized Mailing		

FR1.84	The Contractor's System will have the ability to generate mailing labels, print the address directly on the envelopes or use windowed envelopes, based on State policy.	R3
FR1.85	The Contractor's System will have an efficient method for preparing hard copy materials for insertion in a wide variety of envelopes	R4
FR1.86	The Contractor's System will maintain a system of recording: a) Date mailing was returned and reason b) Date re-mailed	R3
Establish Case Criteria		
Setup Criteria		
Requirement number	**Requirement**	**Planned Release**
FR2.1	The Contractor's System will provide step-by-step instructions on updating, adding, or deleting criterion to Users with appropriate access levels	R1 FINAL
FR2.1-1	The user will be able to submit a ticket to the Contractor to add or delete criterion. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user will be able to submit a ticket to the Contractor to add or delete criterion. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requests are limited to the approved eligibility rules framework of the application.	R1 FINAL
FR2.2	The Contractor's System will display active and inactive criterion	R1 FINAL
FR2.2-1	The user will be able to view active or inactive criterion after a request through the ticketing process. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user will be able to view active or inactive criterion after a request through the ticketing process. The request will be met for SoV in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 5 business days after the Contractor receives the request. The requests are limited to the current eligibility rules framework of the application.	R1 FINAL
FR2.3	The Contractor's System will allow for criterion to be selected as active or inactive	R1 FINAL
FR2.3-1	The user will be able to submit a ticket to the Contractor in order to change active or inactive criterion. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user will be able to submit a ticket to the Contractor in order to change active or inactive criterion. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requests are limited to the approved eligibility rules framework of the application.	R1 FINAL
FR2.4	The Contractor's System will allow for all, multiple, or single criterion to be selected at one time	R1 FINAL
FR2.4-1	The user will be able to submit a ticket to the Contractor in order to select all, multiple or single criterion. The ticket request will be resolved for SoV testing in an agreed upon timeframe	R1 FINAL

	The user will be able to submit a ticket to the Contractor in order to select all, multiple or single criterion. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requests are limited to the approved eligibility rules framework of the application.	
FR2.5	The Contractor's System will allow for definitions to be associated with each criterion	R1 FINAL
FR2.5-1	The user can associate definitions for the criterion by submitting a request through the ticketing process. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user can associate definitions for the criterion by submitting a request through the ticketing process. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requests are limited to the approved eligibility rules framework of the application.	R1 FINAL
FR2.6	The Contractor's System will associate accepted values with each criterion. Accepted values may include but are not limited to: a) Range of numbers b) Set of values c) Text d) Letters	R1 FINAL
FR2.6-1	The user can submit a ticket request to the Contractor in order to associate accepted values with each criterion. Accepted values may include but are not limited to: a) Range of numbers b) Set of values c) Text d) Letters. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user can submit a ticket request the Contractor in order to associate accepted values with each criterion. Accepted values may include but are not limited to: a) Range of numbers b) Set of values c) Text d) Letters. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after eQ receives requirements. The requests are limited to the approved eligibility rules framework of the application.	R1 FINAL
FR2.7	The Contractor's System will display definitions associated with each criterion within the same window	R4
FR2.8	The Contractor's System will allow for capturing of multiple criteria in order to identify various population groups, including but not limited to: a. VCCI b. Hi-Tech c. High-Risk Pregnancy d. Pediatric Palliative Care Program e. Others as defined by the State f. Pregnant/post-partum women g. Children up to age 6	R4
Setup Eligibility Rules		
FR2.9	The Contractor's System will provide step-by-step instructions on updating, adding, or deleting eligibility rules, for Users with appropriate access rights	R4
FR2.9-1	The user will be able to submit a ticket to the Contractor to update, add, delete, eligibility rules for users with appropriate access rights. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user will be able to submit a ticket to the Contractor to update, add, delete, eligibility rules for users with appropriate access rights. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requirements. The requests are limited to the approved eligibility rules framework of the application.	R1 FINAL
FR2.10-1	The user will be able to submit a ticket to select all, multiple or single eligibility rules. The ticket request will be resolved for SoV	R1 FINAL

	testing in an agreed upon timeframe The user will be able to submit a ticket to select all, multiple or single eligibility rules. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requests are limited to the approved eligibility rules framework of the application.	
FR2.10*	The Contractor's System will allow for all, multiple, or single eligibility rules to be selected at one time	R4
FR2.11-1	The user will be able to submit a ticket to select rules as active or inactive. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user will be able to submit a ticket to select rules as active or inactive. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requests are limited to the approved eligibility rules framework of the application.	R1 FINAL
FR2.11*	The Contractor's System will allow for eligibility rules to be selected as active or inactive	R4
FR2.12-1	The user will be able to submit a ticket in order to sequence program eligibility rules. The ticket request will be resolved for SoV testing in an agreed upon timeframe The user will be able to submit a ticket in order to sequence program eligibility rules. The update will be released for SoV testing in a timeframe mutually agreed upon by the State of Vermont and the contractor, but shall not exceed 15 business days after the Contractor receives requirements. The requests are limited to the approved eligibility rules framework of the application.	R1 FINAL
FR2.12*	The Contractor's System will allow flexibility in sequencing program eligibility rules	R4
FR2.13	The Contractor's System will allow for capturing of multiple sets of eligibility rules in order to determine program eligibility for various AHS care management programs, including but not limited to: a. VCCI b. High-Risk Pregnancy c. Pediatric Palliative Care Program d. Others as defined by the State	R4
FR2.14	The Contractor's System will maintain a record (e.g., audit trail) of all changes made. This must include but is not limited to: a) The User ID of the person who made the change b) The date and time of change c) The information that was changed d) The data before and after it was changed	R1.01
Risk Stratification and Eligibility Determination		
FR2.15	The Contractor's System will conduct risk stratification to identify the specific intervention populations (e.g., top 5%, populations with gaps in care, specialty groups) including by geographic area	R1.01
FR2.16	The Contractor's System will utilize clinically relevant predictive risk modeling tools and gaps in care analysis for early screening and case identification of Members	R1
FR2.17	The Contractor's System will identify candidates that meet the predefined criteria	R1 FINAL
FR2.18	The Contractor's System will accept data from multiple sources to validate program eligibility including but not limited to: a) Claims b) Clinical/Bio-Medical Data c) Data from Eligibility systems	R1

FR2.18-1	The Contractor's System will accept data from multiple sources to validate program eligibility including but not limited to: a) Claims c) Data from Eligibility systems	R1 FINAL
FR2.19	The Contractor's System will accept and automatically screen all electronic referrals for program eligibility	R2
FR2.20	The Contractor's System will automatically screen Candidates, in real-time, against applicable program eligibility rules and determine program eligibility	R2
FR2.21	The Contractor's System will provide supporting information and/or documentation as to why a Candidate was deemed ineligible	R2
FR2.22	The Contractor's System will provide the ability for a User to review supporting information and/or documentation of the criteria and/or eligibility rules that a Candidate did not meet at any point in time. The Contractor's System will not redirect a User to another screen to review the information	R1 FINAL
FR2.23	The Contractor's System will allow a User, with appropriate access rights, to override the Contractor's System's eligibility determination. For example, additional information gathered outside of the Contractor's System became available to overturn System's determination	R1 FINAL
FR2.24	The Contractor's System will allow a User to scan and associate documentation to support the User's overriding of the Contractor's System's eligibility determination	R1 FINAL
FR2.25	The Contractor's System will flag Candidates that have not been screened for eligibility (i.e., referred case has incomplete information and cannot be screened) and send electronic referral back to source for missing information	R4
FR2.26	The Contractor's System will log the date and time the Member was determined to be eligible	R2
FR2.27	The Contractor's System will have the ability to support flexible rules-based logic to determine care management program eligibility criteria for: a) Individual Member b) Target populations c) Others as identified by the State during requirements validating and accepted via formal change control	R1 FINAL
FR2.28	The Contractor's System will have the ability to use historical data to identify potential participants for specific programs, including but not limited to historical data from the following programs: a) Pediatric Palliative Care Program b) High Risk Pregnancy c) Department of Mental Health d) Children with Special Health Needs e) Alcohol and Drug Abuse Program f) Inpatient and Emergency Services g) Concurrent review h) Clinical Operations Unit i) Inpatient Psychiatry j) Substance Abuse	R4
FR2.29	The Contractor's System will notify appropriate User when, based on policy, a Member's program eligibility needs to be re-determined (e.g., annual redetermination, clinical change occurred)	R3
FR2.30	The Contractor's System will provide Users a step-by-step process for program eligibility re-determination	R1
Establish Case		
Conduct Outreach		

Requirement number	Requirement	Planned Release
FR3.1	The Contractor's System will support member outreach services (e.g., initiating contact with program-eligible Members, conducting intake assessments) provided by User (Case Manager or third party)	R2
FR3.1.a FR3.1-1	The Contractor's System will support member outreach services (e.g., initiating contact with program-eligible Members, conducting intake assessments) provided by User (Case Manager)	R1.01
FR3.2	The Contractor's System will automatically route Eligible Member's contact information to User (Case Manager or third party) for outreach for non-direct referrals (i.e., an electronic referral through The Contractor's System)	R2
FR3.3	The Contractor's System will notify User of the need for outreach or intervention based on established criteria, including but not limited to: a) Gaps in immunizations b) Clinical measures c) Other prescribed or preventive care d) Missed schedules	R3
FR3.4	The Contractor's System will allow Users (Case Manager or third party) to log each contact made and method used (e.g., electronic communication, phone call) during outreach efforts	R2
FR3.4.a FR3.4-1	The Contractor's System will allow Users (Case Manager) to log each contact made and method used (e.g., electronic communication, phone call) during outreach efforts	R1.01
FR3.5	The Contractor's System will allow Users (Case Manager or third party) to log the outcome of each contact made during outreach efforts	R2
FR3.5.a FR3.5-1	The Contractor's System will allow Users (Case Manager) to log the outcome of each contact made during outreach efforts	R1.01
FR3.6	The Contractor's System will provide a predetermined list (e.g., dropdown menu) of contact outcomes which may include but is not limited to: a) Contact made b) Left a voicemail c) Unable to leave voicemail d) Met with Member in hospital, facility, etc.	R1.01
FR3.7	The Contractor's System will send alerts / notifications to User (responsible party) based on predetermined time intervals if the User has not acknowledged the case and taken action	R3
FR3.8	The Contractor's System will escalate the case if the User has not acknowledged the case and taken action, based on program policy	R3
FR3.9	The Contractor's System will allow User (Case Manager or third party) to acknowledge outreach assignment	R3
FR3.10	The Contractor's System will track the time before outreach assignment is acknowledged	R3

FR3.11	The Contractor's System will display Member's contact information	R1.01
FR3.12	The Contractor's System will allow Users to edit and/or add to Member's contact information and indicate type (e.g., home, office, mobile) such as but not limited to: a) Primary phone number b) Secondary phone number c) Email address	R1.01
FR3.13	The Contractor's System will allow Users to add additional contacts (e.g., Member's care taker, legal guardian) and associated contact information to Member's case. Information includes but is not limited to: a) Primary phone number (e.g., home, office, mobile) b) Secondary phone number (e.g., home, office, mobile) c) Email address d) Relationship to Member	R1.01
FR3.14	The Contractor's System will allow Users to send electronic communication if an email address is available	R2
FR3.15	The Contractor's System will record all electronic communication and associate it with the Member's case	R2
FR3.16	The Contractor's System will allow Users to document Member's decision to accept or decline services of any and all programs Member is eligible for	R1.01
FR3.17	The Contractor's System will provide a predetermined list (e.g., dropdown menu) of reasons for declining services	R1.01
FR3.18	The Contractor's System will allow Users to flag Candidates that have requested or are going through a fair hearing (appeals)	R4
FR3.19	The Contractor's System will allow a Case Manager to reassign outreach efforts to an appropriate party	R2
FR3.20	The Contractor's System will allow a User to create a Member case record (e.g., Member has accepted program-specific services) for each new case	R1.01
FR3.21	The Contractor's System will allow a User to close a program-specific case and have the Contractor's System automatically notify (via email or hard copy letter) appropriate parties (including Authorized Representative, Member, Community Provider/Partner, and referral source) if the Member chooses not to enroll in the care management program	R2 – R3
Assign Case Manager		
FR3.22	The Contractor's System will store Case Manager profiles which include but is not limited to: a) Skill set / scope of practice b) Geographic location c) Caseload d) Schedule / availability e) Co-management team	R1
FR3.22-1	The Contractor's System will store Case Manager profiles which include but is not limited to: a) Competency/ Scope of practice b) Geographic location c) Caseload d) Schedule / availability	R1 FINAL
FR3.23	The Contractor's System will allow Users, with appropriate access levels, to edit Case Manager profiles	R1 FINAL

FR3.24	The Contractor's System will have the capability to automatically and/or allow Users to manually assign an appropriate Case Manager, as determined by specific program, based on alignment of Case Manager's profile with Member's needs / profile Automatic assignment will exclude behavioral health conditions for R1.02 and will be achieved in R1.03	R1.01 R1 FINAL
FR3.25 -1	The solution must have the ability to route a case to a staff member.	R2 – R4
FR3.25-2	The solution must have the ability to assign a case to a staff member.	R2 – R4
FR3.26	The Contractor's System will notify appropriate Case Manager of case assignment	R1.01
FR3.27	The Contractor's System will send reminders / alerts to Case Manager, based on predetermined time intervals, if the Case Manager has not acknowledged the assignment	R4
FR3.28	The Contractor's System will escalate the case if the Case Manager has not acknowledged the assignment and taken action within predetermined timeframe, based on program policy	R2 – R4
FR3.29	The Contractor's System will have access to Case Managers schedules (e.g., vacation time) and will not assign or escalate if the Case Manager is scheduled to be out of office	R2 – R4
FR3.30	The Contractor's System will allow Case Manager to document decision to accept or decline the case assignment	R1.01
FR3.31	The Contractor's System will provide a list of applicable Case Managers for case reassignment in the event the originally assigned Case Manager declines assignment. The list may be based on but is not limited to: a) Geographic location / neighboring county b) Telephonic community partnerThe Contractor's System will provide a list of applicable Case Managers for case reassignment in the event the originally assigned Case Manager declines assignment. The list may be based on but is not limited to: a) Geographic location / neighboring county b) Telephonic community partner c) Conflict of interest (e.g., family member)	R1 FINAL
FR3.31-1	The Contractor's System will provide a list of applicable Case Managers for case reassignment in the event the originally assigned Case Manager declines assignment. The list may be based on but is not limited to: a) Geographic location / neighboring county b) Telephonic community partner	R1.02
Assign Additional Staff to Case		
FR3.32	The Contractor's System will allow originally assigned Case Manager to assign additional Staff (DVHA Employees) and Internal Units/AHS partner programs (e.g., Care Team, DCF) and role type	R4
FR3.33	The Contractor's System will allow authorized User to document assignment of additional care team members (and roles) who do not have access to the Contractor's System	R2
FR3.34	The Contractor's System will display a list of all Users who are currently or were previously involved in Member's case	R1 FINAL

FR3.35	The Contractor's System will display a list of all current or previous programs a Member is involved in	R2
FR3.36	The Contractor's System will display a list of Staff roles (e.g., Nurse) and Internal Units for a User to select from	R2
FR3.37	The Contractor's System will display a list of Users, based on role selected, in alphabetical order beginning with the last name	R1.01
FR3.38	The Contractor's System will display a list of Internal Units in alphabetical order	R3
FR3.39	The Contractor's System will allow for Case Manager to search for a User (e.g., Care Manager) and/or Internal Unit based on multiple search parameters, such as but not limited to: a) Begins with b) Ends with c) Exact match	R2
FR3.40	The Contractor's System will allow for all, multiple, or single options to be selected	R4
FR3.41	The Contractor's System will allow for Case Manager to select reason for additional case assignment from a predetermined list (e.g., dropdown menu)	R1
FR3.42	The Contractor's System will have access to Staff email addresses	R2
FR3.43	The Contractor's System will send a notification to the newly assigned Staff and/or Internal Units	R2
FR3.43.a FR3.43-1	The Contractor's System will send a notification to the newly assigned Staff	R1FINAL
FR3.44	The Contractor's System will allow for newly assigned Staff and/or Internal Unit to accept or decline case assignment	R2
FR3.44.a FR3.44-1	The Contractor's System will allow for newly assigned Staff to accept or decline case assignment	R1.01
FR3.45	The Contractor's System will allow newly assigned Staff and/or Internal Unit to select from a predefined dropdown list of answers to accept or decline case assignment	R2
FR3.45.a	The Contractor's System will allow newly assigned Staff to select from a predefined dropdown list of answers to accept or decline case assignment	R1
FR3.46	The Contractor's System will allow Users to document and save case assignment decision	R1.01
FR3.47	The Contractor's System will allow Case Manager to assign a specific Member Problem, Goal, and/or Intervention to newly assigned Staff and/or Internal Unit from defined drop down list	R4
FR3.47.a	The Contractor's System will allow Case Manager to assign a specific Member Problem, Goal, and/or Intervention to newly assigned Staff from defined drop down list	R1

FR3.47-1	The Contractor's System will allow Case Manager to assign a specific Member including the components of the case (IGI) to newly assigned Staff from defined drop down list	R FINAL
FR3.48	The Contractor's System will allow newly assigned Staff and/or Internal Unit to assign specific Member Problem, Goal, and/or Intervention from defined drop down list	R4
FR3.48.a	The Contractor's System will allow newly assigned Staff to assign specific Member Problem, Goal, and/or Intervention from defined drop down list	R1
FR3.48-1	The Contractor's System will allow newly assigned Staff to assign a specific Member including the components of the case (IGI) from defined drop down list	R1 FINAL
FR3.49	They System will send a notification to the Case Manager of newly assigned Staff and/or Internal Unit's decision	R4
FR3.49.a FR3.49-1	They System will send a notification to the Case Manager of newly assigned Staff's decision	R1.01
General		
FR3.50	The Contractor's System will have the ability to support supervisory operations for the management of workflow including: a) Assignments/re-assignments and priorities b) Status querying and monitoring of individual documents and other work steps or products c) Work allocation and load balancing d) Approval for work assignments and work deliverables via a tiered approach e) Ability to take necessary action or provide notification when corrective action is needed, including the ability to modify or abort a workflow process f) Monitoring of key information regarding a process in execution, including: i. Estimated time to completion ii. Staff assigned to various process activities iii. Any error conditions	R1.01
FR3.51	The Contractor's System will allow Users to skip and return to screens outside of the workflow process	R1.01
FR3.52	The Contractor's System will allow Users to create a case for a Member who has not yet been determined eligible	R2
FR3.53	The Contractor's System will have the ability to establish a case for a Member, a Worker (e.g., child care worker) or an organization (e.g., child care organization) receiving or providing services to the State	R2 – R4
Perform Screening and Assessments		
Member's Profile Summary		

Contract# 28739 Require-ment number	Requirement	Planned Release
FR4.1	The Contractor's System will display an easy-to-read summary of Member's profile, based on User's role and access level and state and federal policy, (health background and needs) which includes but is not limited to: a) Basic demographics (e.g., need for interpretation services) b) Risk acuity c) Allergies d) Code status e) Involved Community Providers/Partners f) Most recent lab data g) Most recent appointments and upcoming appointments h) Prior history i) Previous case workers j) Reenrollment or new case k) Clinical triggers l) Notes m) Completed assessments n) Gaps in care (e.g., Member with elevated A1c, Member with 4 ED visits in past 6 weeks, Member with medication fill gaps) o) Advanced care directives p) COLST / POLST q) Date of last successful contact with Member r) socio economic indicators of health s) other insurance sources	R1
FR4.1-1	The Contractor's System will display an easy-to-read summary of Member's profile, based on User's role and access level and state and federal policy, (health background and needs) which includes but is not limited to: a) Basic demographics (e.g., need for interpretation services) b) Risk acuity c) Allergies d) Code status f) Most recent lab data g) Most recent appointments and upcoming appointments h) Prior history i) Previous case workers j) Reenrollment or new case k) Clinical triggers l) Notes m) Completed assessments n) Gaps in care (e.g., Member with elevated A1c, Member with 4 ED visits in past 6 weeks, Member with medication fill gaps) o) Advanced care directives q) Date of last successful contact with Member r) socio economic indicators of health s) other insurance sources	R1.01
FR4.1-2	The Contractor's System will display an easy-to-read summary of Member's profile, based on User's role and access level and state and federal policy, (health background and needs) which includes but is not limited to: a) Basic demographics (e.g., need for interpretation services) b) Risk acuity c) Allergies d) Code status e) Involved Community Providers/Partners f) Most recent lab data g) Most recent appointments and upcoming appointments h) Prior history i) Previous case workers j) Reenrollment or new case k) Clinical triggers l) Notes m) Completed assessments n) Gaps in care (e.g., Member with elevated A1c, Member with 4 ED visits in past 6 weeks, Member with medication fill gaps) o) Advanced care directives q) Date of last successful contact with Member r) socio economic indicators of health s) other insurance sources Additional fields identified during JAD session will be available in R1.03 o Risk factors o Management Type	R1 FINAL R1 FINAL
FR4.2	The Contractor's System will allow Users, with appropriate access levels, to generate and print a Member's profile summary	R1.01
FR4.3	The Contractor's System will auto-populate a Member's medication list in real-time. Information includes but is not limited to: a) Amount of pills b) Date filled c) Pharmacy and Prescriber	R2

FR4.4	The Contractor's System will allow Case Managers to reconcile Member's medication list to monitor use and continuity of care	R1 FINAL
FR4.5	The Contractor's System will allow for printing of Member's medication list	R1.01
FR4.6	The Contractor's System will provide a history of the AHS programs a Member is enrolled in. This includes but is not limited to programs: a. Previously applied to b. Currently eligible for c. Previously part of	R4
Perform Screening and Assessments		
FR4.7	The Contractor's System will allow Users, based on role, access to completed screenings and assessments. Information includes but is not limited to: a) Results b) Date completed c) Scores, as appropriate	R1.01
FR4.8	The Contractor's System will auto-fill data fields in screenings and assessments as much as possible and where applicable. This may include but is not limited to Member information such as: a) Demographics b) Clinical data c) Previous pregnancy history d) Primary Care Provider e) Obstetrics (OB) Provider f) Dental Provider g) Dental history	R4
FR4.9	The Contractor's System will use branching logic to determine assessment questions	R1.01
FR4.10	The Contractor's System will display assessment questions in a logical order, but will allow for User to move among questions	R1.01
FR4.11	The Contractor's System will allow for quick and easy responses to assessment questions (e.g., dropdowns, radio buttons, freeform text)	R1.01
FR4.12	The Contractor's System will save in progress based on preset intervals	R1 FINAL
FR4.13	The Contractor's System will flag incomplete assessments for follow-up	R1 FINAL
FR4.14	The Contractor's System will alert point-in-time Case Manager if assessment is incomplete	R1 FINAL
FR4.15	The Contractor's System will save completed assessments and associate it with Member's Plan of Care	R1.01
FR4.16	The Contractor's System will maintain a record (e.g., audit trail) of all parties involved in conducting an assessment. This must include but is not limited to: a) The User ID of the person who initiated the assessment b) The User ID of the person(s) who updated / edited the assessment (Users with edit rights to be identified by State) c) The date and time of changes and assessment completion d) The information that was changed e) The data before and after it was changed	R1.01
FR4.17	The Contractor's System will provide nationally recognized screening and assessment tools for chronic conditions, psycho-social, behavioral, substance abuse, mental health, etc. with branching logic to prevent redundancy and inform the Plan of Care	R1.01

FR4.18	The Contractor's System will notify Case Managers and/or appropriate care team members when an assessment is due / needs to be redone (e.g., PHQ9 assessments are done quarterly, High Risk Pregnancy Follow-up), as defined by program policy	R2 – R3
FR4.19	The Contractor's System will allow registered Community Providers/Partners, with appropriate access levels, to complete applicable assessments (e.g., psycho-social needs) for Members, and send an alert/notification to appropriate User when completed	R4
FR4.20	The Contractor's System will have the ability to add new assessment tools, based on State approval	R1 FINAL
Manage Treatment Plan and Outcomes		
Create Plan of Care		
Contract# 28739 Require-ment number	**Requirement**	**Planned Release**
FR5.1	The Contractor's System will pre-populate and generate a logical and evidence-based, integrated Plan of Care (POC) and document date of creation. Common POC fields may include but is not limited to: a) Problem (must be case relevant/specific and measureable) b) Problem status i) Stages of change c) Priority d) Goal(s) e) Barrier(s) f) Intervention(s) g) Status h) Self-management i) Plan Type	R1
FR5.1-1	The Contractor's System will pre-populate and generate a logical and evidence-based, integrated Plan of Care (POC) and document date of creation. Common POC fields may include but is not limited to: a) Problem (must be case relevant/specific and measureable) b) Problem status i) Stages of change c) Priority d) Goal(s) e) Barrier(s) f) Intervention(s) g) Status h) Self-management	R1.01
FR5.2	The Contractor's System will generate evidence-based, disease-specific interventions based on standard nursing Dx and be case management specific. Interventions are program-specific and support evidence-based care.	R1.01
FR5.3	The Contractor's System will provide a recommendation as to which services are applicable, based on answers submitted to program-specific assessments. For example, for the Pediatric Palliative Care Program (PPCP), the following services are provided: a) Care Coordination b) Family Training c) Expressive Therapy d) Skilled Respite e) Anticipatory Grief Counseling / Bereavement Counseling	R2 – R3
FR5.4	The Contractor's System will allow for Case Manager to edit / modify the details of a System-generated POC from a predefined list (e.g., dropdown menu) that includes but is not limited to:	R1.01

	a) Problem (e.g., medication non-adherence, missing action plan(s), potential knowledge deficit) b) Relevant Goals (e.g., medication adherence, Member understands how, when, and why he or she needs to take medication) c) Relevant Interventions (e.g., phone call, review medication education, coaching, face-to-face, care coordination)	
FR5.5	The Contractor's System will display list of problems, relevant goals and interventions in an organized way, i.e., evidence-based by disease, by condition, by readiness for change	R1.01
FR5.6	The Contractor's System will allow for a User, with appropriate access rights, to update the dropdown list of Problems, Interventions, and Goals	R1 FINAL
FR5.7	The Contractor's System will consolidate Problems, Goals, and Interventions if more than one disease is being addressed (i.e., redundant problems, goals, and interventions will not show up if applicable to multiple diseases) and link back to each problem as appropriate (LDL level link to both diabetes and CAD)	R1.01
FR5.8	The Contractor's System will allow for Case Manager to assign target dates to Member's Goals and Interventions	R1.01
FR5.9	The Contractor's System will auto-populate target dates, where appropriate and based on program policy	R1 FINAL
FR5.10	The Contractor's System will provide options for Case Manager to select alerts on when target dates are approaching (e.g., one week before, one day before)	R3
FR5.11	The Contractor's System will save Plan of Care and associate it with Member's case	R1.01
FR5.12	The Contractor's System will allow Case Manager to enter additional comments (freeform text) in defined sections for provider communication	R1 FINAL
FR5.13	The Contractor's System will display prior summaries for Users to modify (e.g., to update PCP)	R2
FR5.14	The Contractor's System will provide an easy-to-document and effective method to track Member's progress and outcomes (e.g., goal addressed, intervention occurred)	R1.01
FR5.15	The Contractor's System will allow for printing of a Member's entire POC	R1.01
FR5.16	The Contractor's System will provide a printable summary of Member's POC that highlights pertinent information based on evidence-based best practice to be shared with PCP (hard copy or electronically)	R1.01
FR5.17	The Contractor's System will allow for the POC to be saved and emailed electronically from within The Contractor's System	R2
FR5.17.	The Contractor's System will allow for internal users to send and receive messages regarding the POC within The Contractor's System.	R1

FR5.17-1	System will allow for the POC to be exported as a PDF so it can be emailed or printed	R1.01
FR5.18	The Contractor's System will allow registered Community Providers/Partners to comment on and add to Member's POC via the Community Provider/Partner portal	R4
FR5.19	The Contractor's System will have the ability to provide role-based access to Member's POC	R1
FR5.20	The Contractor's System will display Member's authorized services and referred services as part of the Member's Care Plan	R1
FR5.20	The Contractor's System will display Member's authorized services as part of the Member's Care Plan	R4
FR5.21	The Contractor's System will provide Users, with appropriate access rights, a real-time view of Member information entered by registered Community Providers/Partners. This includes but is not limited to information found in: a) Completed / in-progress assessments b) Member's Care Plan	R4
FR5.22	The Contractor's System will allow registered Community Providers/Partners to create and update a Member's Care Plan, and send an alert/notification to corresponding to Case Manager when completed	R4
FR5.23	The Contractor's System will display the services a Member (e.g., adult, child) is authorized for within the Member, Authorized Representative, and Community Provider/Partner portal	R4
FR5.24	The Contractor's System will display community-based support services and resources within the Member, Authorized Representative, and Community Provider/Partner portal	R4
FR5.25	The Contractor's System will capture electronic signature of authorized User when creating a Member's PoC based on State program guidelines	R3
Develop Action Plans		
FR5.26	The Contractor's System will automatically display condition-specific Action Plan templates applicable to Member's Plan of Care	R1 FINAL
FR5.27	The Contractor's System will allow for Case Manager to select Action Plan(s)	R1 FINAL
FR5.28	The Contractor's System will allow for all, multiple, or single Action Plan(s) to be selected at one time	R1 FINAL
FR5.29	The Contractor's System will auto-populate Action Plan(s) with available information, where appropriate (e.g., Member contact information)	R1 FINAL
FR5.30	The Contractor's System will allow for Case Managers (with appropriate rights) to edit / modify Member's Action Plan(s). Action Plans must be in simple, clear, concise language at an appropriate reading level for Member understanding	R1 FINAL

FR5.31	The Contractor's System will allow for Community Providers/Partners (with appropriate rights) to edit / modify Member's Action Plan(s). Action Plans must be in simple, clear, concise language at an appropriate reading level for Member understanding	R2
FR5.32	The Contractor's System will save Action Plan(s) and associate it with Member's Plan of Care	R1 FINAL
FR5.33	The Contractor's System will allow for printing of Action Plan(s)	R1 FINAL
FR5.34	The Contractor's System will allow for Action Plan(s) to be saved and emailed electronically from within The Contractor's System	R3
FR5.34.	The Contractor's System will allow for internal users to send and receive messages regarding Action Plan(s) within The Contractor's System."	R1
FR5.35	The Contractor's System will support multi-language functionality, as defined by the State, for Action Plans. This functionality may include, but may not be limited to, French, Spanish, Bosnian, Burmese, Nepali, Somali and Swahili	R2 – R3
Provide Education Materials		
FR5.36	The Contractor's System will have a repository of accepted, up-to-date and nationally recognized electronic education materials for Case Managers to provide to Members, that are written at an appropriate reading level (6th grade) for Member understanding	R FINAL
FR5.37	The Contractor's System will maintain a repository of Contractor and state-provided accepted, up-to-date and nationally recognized electronic education materials for Users (e.g., health coaches, case managers)	R2
FR5.38	The Contractor's System will recommend education materials applicable to Member's Plan of Care. List of educational materials germane to the condition will be searchable and automatically displayed for User consideration.	R2
FR5.39	The Contractor's System will allow Case Manager to select appropriate education materials	R2
FR5.40	The Contractor's System will allow for all, multiple, or single education materials to be selected at one time	R3
FR5.41	The Contractor's System will support multi-language functionality, as defined by the State, for educational material. This functionality may include, but may not be limited to, French, Spanish, Bosnian, Burmese, Nepali, Somali and Swahili.	R2 – R3
FR5.42	The Contractor's System will allow for education materials to be emailed electronically from within the Contractor's System	R2
FR5.43	The Contractor's System will allow for education materials to be saved and attached to emails	R1
FR5.44	The Contractor's System will allow for printing of education materials	R1 FINAL
FR5.45	The Contractor's System will allow for batching and mailing of education materials	R2 – R4
FR5.46	The Contractor's System will save the selected education materials and associate it with Member's Plan of Care	R1
FR5.46-1	The Contractor's System will save the selected education materials and associate it with Member's record by uploading it in the Attachments section and document in session notes.	R1 FINAL

FR5.47	The Contractor's System will allow for education materials to be posted on the Member portal	R3
Manage Case Information		
Case Documentation		
Contract# 28739 **Require-ment number**	**Requirement**	**Planned Release**
FR6.1	The Contractor's System will provide the flexibility for a User to modify target dates of Member's goals	R1.01
FR6.2	The Contractor's System will display list of all Problems, Goals, Outcomes and Interventions associated with Member	R1.01
FR6.3	The Contractor's System will allow Users to hide and unhide completed Interventions and Goals	R1 FINAL
FR6.4	The Contractor's System will allow Users to sort by components of the POC, including but not limited to: Interventions, Problems, Goals and Outcomes (e.g., intervention due date, condition)	R1.01
FR6.5	The Contractor's System will allow Users to select by components of the POC, including but not limited to: Interventions, Problems, Goals and Outcomes (e.g., intervention due date, condition)	R1.01
FR6.6	The Contractor's System will allow for all, multiple, or single interventions to be selected	R1
FR6.6-1	The System will allow for interventions to be selected and edited	R1.01
FR6.7	The Contractor's System will display a structured and standard form to document completed Interventions that includes but is not limited to: a) Date b) Mode (e.g., telephone, electronic community, face-to-face, letter) c) Duration (in minutes) d) Outcome e) Notes	R1.01
FR6.8	The Contractor's System will provide a dropdown list of outcome types for Interventions	R1.01
FR6.9	The Contractor's System will allow for freeform text entry (notes)	R1.01
FR6.10	The Contractor's System will save updates and associate it with Member's Plan of Care	R1.01
FR6.11	The Contractor's System will maintain a record (e.g., audit trail) of all changes made. This must include but is not limited to: a) The User ID of the person who made the change b) The date and time of change c) The information that was changed d) The data before and after it was changed	R1.01
FR6.12	The Contractor's System will allow Users, with appropriate access rights, to update or augment Member's contact information	R1.01
FR6.13	The Contractor's System will allow Users to designate a primary mode of contact	R1.01

FR6.14	The Contractor's System will be able to connect the mother's case information with the newborn's case information	R3
FR6.15	The Contractor's System will have the ability to monitor Member data to determine if referred and/or authorized services are provided	R2
FR6.16	The Contractor's System will support follow-up actions as needed to identify services delivered (claims payment information), issues impeding delivery of service and/or Member's progress	R2
FR6.17	The Contractor's System will have the ability to update a Member's case history with possible revisions including but not limited to: a) Needs assessment b) Plan of Care c) Associated Community Provider/Partner list d) Case file information (e.g., contact dates and times)	R4
FR6.18	The Contractor's System will accept electronic Critical Incident reports, which will include but is not limited to: a) Date of incident b) Time of incident c) Subject Name d) Incident location	R4
FR6.19	The Contractor's System will notify appropriate User when a Critical Incident Report has been electronically submitted	R4
FR6.20	The Contractor's System will allow Users to enter freeform text to communicate supervisory review / comments	R2
FR6.21	The Contractor's System will save Critical Incident reports and associate it with Member's case	R4
FR6.22	The Contractor's System will accept claims data in both ICD-9 and ICD-10 formats	R1 FINAL
FR6.23	The Contractor's System will support a family-centered care management model with flexible and User-defined definitions of family	R4
FR6.24	The Contractor's System will support a family-centered care management model while maintaining Member-level records	R4
Scheduling		
FR6.25	The Contractor's System will display a calendar with options for different views (e.g., work week, full week, day, month)	R2
FR6.26	The Contractor's System will provide a structured and standard calendar form that includes but is not limited to: a) Appointment category (e.g., Employee PTO, Member intervention, services) b) Meeting type (e.g., phone call, in-person) c) Start and end date d) Start and end time e) Attendee list f) Meeting location g) Meeting instructions h) Reminder / alert schedule (e.g., one week before, one day before, 2 hours before)	R3
FR6.27	The Contractor's System will allow for multiple attendees to be added to an appointment	R3
FR6.28	The Contractor's System will allow email addresses to be manually entered	R2
FR6.29	The Contractor's System will provide a directory to store contact information	R2

FR6.30	The Contractor's System will allow meeting creator to attach documents	R3
FR6.31	The Contractor's System will have access to Member calendars based on appointments previously / currently scheduled in the Contractor's System	R2
FR6.32	The Contractor's System will have access to User's calendar outside of The Contractor's System (e.g., Microsoft Outlook) and sync appointments	R4
FR6.33	The Contractor's System will alert meeting creator of scheduling conflicts based on attendee list	R4
FR6.34	The Contractor's System will allow Users to specify confidential/private meetings so that a meeting description will only be visible to meeting attendees	R4
FR6.35	The Contractor's System will specify meetings created in the Contractor's System versus meetings created in User's calendar outside of the Contractor's System (e.g., Microsoft Outlook)	R4
FR6.36	The Contractor's System will save appointment invites	R3
FR6.37	The Contractor's System will electronically deliver appointment invites to attendees listed (email address)	R3
FR6.38	The Contractor's System will allow attendees RSVP options which include: a) Accept b) Tentative c) Decline d) New time proposed	R4
FR6.39	The Contractor's System will track attendee RSVPs	R3
FR6.40	The Contractor's System will allow attendees to include a message to RSVP	R3
FR6.41	The Contractor's System will notify appointment creator of RSVP responses	R3
FR6.42	The Contractor's System will allow appointment creator to modify meeting details	R2
FR6.43	The Contractor's System will electronically deliver updated appointment invites to attendees listed	R3
FR6.44	The Contractor's System will highlight the changes made to the appointment details (e.g., location, date, time) as part of the updated invite	R4
FR6.45	The Contractor's System will allow appointment creator to cancel an appointment	R2
FR6.46	The Contractor's System will electronically deliver a notification that an appointment has been cancelled to attendees listed	R3
FR6.47	The Contractor's System will delete a cancelled appointment from calendars	R2
FR6.48	The Contractor's System will log the time, date, and User ID of the User who cancelled the appointment	R2
FR6.49	The Contractor's System will provide a map of the appointment location	R4

FR6.50	The Contractor's System will provide attendees the option to retrieve directions to meeting location	R4R3
FR6.51	The Contractor's System will pre-populate the destination address based on the appointment 'location' detail when attendees opt to retrieve directions	R4R3
FR6.52	The Contractor's System will display miles to location	R4R3
FR6.53	The Contractor's System will allow for appointment creator to export attendee list and responses in multiple file formats (.xls, .csv, .pdf, .doc)	R4
FR6.54	The Contractor's System will allow for appointment creator to grant other User(s) access to modify / cancel appointment details	R4
FR6.55	The Contractor's System will allow for appointment creator to grant other User(s) access to modify / cancel appointment details on behalf of creator	R4
FR6.56	The Contractor's System will allow for appointment creator to set appointments as a recurrence, with overall start and end dates	R2
FR6.57	The Contractor's System will allow Members and Community Providers/Partners to view scheduled appointments via respective portal account	R3
FR6.58	The Contractor's System will allow Members and Community Providers/Partners to respond to meeting invites via respective portal account	R2
Document Case Disposition		
FR6.59	The Contractor's System will provide a simple and efficient method for documenting a case's disposition status. The method may include a structured and standard form that will include areas such as but is not limited to: a) Member's progress towards achieving Goal(s) (improvement made, no improvement, etc.) b) Risk level (high, medium, low) tied to a program or Goal c) Opportunities available d) Case in transition e) Death (including date) f) Incarcerated g) Aged out	R1FINAL
FR6.60	The Contractor's System will provide a pre-determined list (e.g., dropdown menu) of dispositions for each of the areas being addressed	R 1FINAL
FR6.61	The Contractor's System will provide a brief definition/description for added clarification for each of the predetermined list (e.g., dropdown menu) of disposition options	R1 FINAL
FR6.62	The Contractor's System will not move the User away to another window when the definition/description is accessed	R1 FINAL
FR6.63	The Contractor's System will provide a section to allow Users to enter freeform text (notes)	R1.01

FR6.64	The Contractor's System will save case disposition and associate it with Member's Plan of Care	R1.01
FR6.65	The Contractor's System will maintain a record (e.g., audit trail) of all changes made. This must include but is not limited to: a) The System as the entity that made the change b) The date and time of change c) The information that was changed d) The data before and after it was changedThe Contractor's System will maintain a record (e.g., audit trail) of all changes made. This must include but is not limited to: a) The User ID of the person who made the change b) The date and time of change c) The information that was changed d) The data before and after it was changed	R1.01
Transition		
FR6.66	The Contractor's System will provide a structured and standard method to initiate a referral	R1 FINAL
FR6.67	The Contractor's System will pre-populate the referral form with the profile of the User logged into the Contractor's System (e.g., Case Manager). Information includes but is not limited to: a) First and last name b) Title c) Department d) Contact information (email address, phone number, etc.)	R1 FINAL
FR6.68	The Contractor's System will pre-populate the referral form with the referral date	R1 FINAL
FR6.69	The Contractor's System will pre-populate the referral form with the profile of the Member that is being referred. Information includes but is not limited to: a) First and last name b) Date of birth c) Language(s) spoken d) Residential address e) Contact information (email address, phone number, etc.) f) Diagnosis	R1 FINAL
FR6.70	The Contractor's System will allow User to enter freeform text to communicate notes / comments such as but not limited to: a) Reason for referral b) Referral urgency c) Explanation of attached documents	R1.01
FR6.71	The Contractor's System will allow User to request referral acknowledgement	R2
FR6.72	The Contractor's System will allow electronic documents to be attached to the referral	R2
FR6.73	The Contractor's System will display a pre-developed list of available Community Providers/Partners, including but not limited to: a) Substance Abuse Treatment Facility b) Food Bank	R2
FR6.74	The Contractor's System will allow User to search for appropriate Community Provider/Partner based on multiple combinations, such as but not limited to: a) Services / programs provided b) Community Providers capacity c) Proximity to Member's residential address d) Proximity to public transportation e) Language(s) spoken	R2
FR6.75	The Contractor's System will display a list of qualified Community Providers/Partners that meet the search criteria	R1.01

FR6.76	The Contractor's System will allow User to further refine or expand criteria based on results	R1
FR6.77	The Contractor's System will allow for all, multiple, or single Community Providers/Partners to be selected at one time	R1
FR6.78	The Contractor's System will save and associate referral with Member's Plan of Care	R1.01
FR6.79	The Contractor's System will allow for printing of a referral	R1 FINAL
FR6.80	The Contractor's System will allow for batching and mailing of referrals	R4
FR6.81	The Contractor's System will allow a User to send the referral electronically to identified Community Provider(s)/Partner(s)	R2
FR6.82	The Contractor's System will send a secure notification to Community Provider(s)/Partner(s) that a referral has been made	R2
FR6.83	The Contractor's System will provide a method for Community Provider/Partner to acknowledge receipt of referral if requested by the User. The method may include but is not limited to a structured and standard form that includes: a) Community Provider/Partner's first and last name (main point of contact) b) Community Provider/Partner's contact information (email address, phone number, etc.) c) Status of referral (accepted, waitlisted, declined)	R2
FR6.84	The Contractor's System will allow Community Provider/Partner to enter freeform text to communicate notes / comments to referral acknowledgement	R3
FR6.85	The Contractor's System will allow Community Provider/Partner to attach files to referral acknowledgement	R2
FR6.86	The Contractor's System will send a notification to User that Community Provider/Partner has acknowledged referral	R4
FR6.87	The Contractor's System will allow for printing of referral acknowledgement	R3
FR6.88-1	The Contractor's System will display a list of referrals that have been made as well as capture/display referral outcome such as - a) Referral Successful b) Referral in Progress, c) Referral withdrawn, d) Referral Unsuccessful	R1 FINAL
FR6.89	The Contractor's System will display a summary of information regarding a submitted referral, which may include but is not limited to: a) Date and time of referral b) User who submitted referral c) Member information d) Community Provider/Partner information e) Service / program requested f) Referral status	R1
FR6.89-1	The Contractor's System will display a summary of information regarding a submitted referral within the system, which may include but is not limited to: a) Date and time of referral b) User who submitted referral c) Member information d) Community Provider/Partner information e) Service / program requested f) Referral status	R1 FINAL
FR6.90	The Contractor's System will allow for referrals to be searched by multiple filters, such as but not limited to: a) Date and time of referral b) User who submitted referral c) Member information	R1 FINAL

FR6.91	The Contractor's System will allow original referrer to modify a submitted referral	R1 FINAL
FR6.92	The Contractor's System will save and associate modified referral to Member's Plan of Care	R1 FINAL
FR6.93	The Contractor's System will maintain a record (e.g., audit trail) of all changes made. This must include but is not limited to: a) The User ID of the person who made the change b) The date and time of change c) The information that was changed d) The data before and after it was changed	R1.01
FR6.94	The Contractor's System will allow a User to send the modified referral electronically to identified Community Provider(s)/Partner(s)	R2
FR6.95	The Contractor's System will send a notification to Community Provider/Partner and highlight the changes made to the referral since the previously submitted referral	R4R3
FR6.96	The Contractor's System will allow for printing of a modified referral	R1 FINAL
FR6.97	The Contractor's System will allow for batching and mailing of modified referrals	R4
FR6.98	The Contractor's System will allow User to document and save reason for withdrawal, and associate it with Member's Plan of Care	R1 FINAL
FR6.99	The Contractor's System will send a cancellation notice to Community Provider/Partner that referral has been withdrawn	R2
FR6.100	The Contractor's System will maintain a record (e.g., audit trail) of withdrawn referrals. This must include but is not limited to: a) The User ID of the person who withdrew the cancellation b) The date and time cancellation notice was sent	R1 FINAL
FR6.101	The Contractor's System will have the ability to track transitions between levels of care and Community Provider/Partners and alert Users when transitions occur	R3
Close Program Enrollment		
FR6.102	The Contractor's System will display Problems in the Plan of Care that have not been met. The Contractor's System will hide Problems that have been met, but will provide the option for a User to view at any time	R1.01
FR6.103	The Contractor's System will provide a simple and efficient method for closing a case for a Program enrollment	R1.01
FR6.104	The Contractor's System will allow for all, multiple, or single Problems to be selected and updated with the same status, which can include but is not limited to: a) Resolved b) Unresolved c) Partially resolved	R1.01
FR6.105	The Contractor's System will allow for all, multiple, or single Goals to be selected and updated with the same status, which can include but is not limited to: a) Met b) Unmet c) Partially met	R1.01

FR6.106	The Contractor's System will automatically close outstanding Interventions that are associated with a Goal that has been statused as 'Met'	R1 FINAL
FR6.107	The Contractor's System will save changes and associate it with Member's Plan of Care	R1 FINAL
FR6.108	The Contractor's System will allow for User to select reason for case closure from a predetermined list (e.g., dropdown menu)	R1.01
FR6.109	The Contractor's System will provide a section to allow User to enter freeform text (notes)	R1.01
FR6.110	The Contractor's System will alert User of future appointments that are currently scheduled for Member	R2
FR6.111	The Contractor's System will allow User to modify and/or cancel appointments	R2
FR6.112	The Contractor's System will allow User to designate the case as 'closed'	R1.01
FR6.113	The Contractor's System will update and save case status and associate it with Member's Plan of Care	R1.01
FR6.114	The Contractor's System will maintain a record (e.g., audit trail) of all changes made. This must include but is not limited to: a) The User ID of the person who made the change / closed case b) The date and time of change / closed case c) The information that was changed d) The data before and after it was changed	R1.01
FR6.115	The Contractor's System will allow Users to set alerts / notifications for certain Goals and/or Problems to follow-up on, along with appropriate contact information, after a case has been statused as closed	R1
FR6.116	The Contractor's System will allow for all, multiple, or single components of the record to be selected and updated with the status of "Death" and the date of death when the reason for Case Program enrollment closure is death	R3
Care Coordination		
FR6.117	The Contractor's System will have the ability to support care coordination across community health teams (including Home Health Agencies), Medicaid community providers, hospitals, VT agencies and departments and other stakeholders/providers to determine and document multidisciplinary needs and best approach to a Member's complex health and psycho-social care management	R4
FR6.118	The Contractor's System will provide role-based access to Internal Units based on need to view Member details	R2
FR6.119	The Contractor's System will display Internal Units that are involved in a Member's Plan of Care	R2
FR6.120	The Contractor's System will display contact information of Internal Units (main point of contact) that is involved in a Member's Plan of Care	R4

FR6.121	The Contractor's System will support both the in-state and out-of-state Concurrent Review process, which includes but is not limited to: a) Notifying appropriate User when a Member has been admitted to an out-of-state hospital or in-state hospital, within respective and predetermined timeframe, based on program policy b) Providing Users, with appropriate access levels, access to patient cases and the ability to send approval notifications to Case Manager c) Allowing Users, with appropriate access levels, to document case management notes and associate it with Member's case d) Providing ongoing feedback to Community Providers/Partners on what is being authorized	R4
General		
FR6.122	The Contractor's System will have the ability to search care management data (according to role-based access defined by the State) by any of the following: Member name, Member ID, and/or Community Provider/Partner ID	R1.01
FR6.123	The Contractor's System will have the ability to provide role-based access (as assigned/decided by the State) to case management data, including but not limited to: a) Program data and imaged documentation b) Member information (e.g., hospitalization, LTC facility, pharmacy, PA information , State Plan services) c) Claims data, including pharmacy claims d) Historical case, claims and enrollment data e) Eligibility information f) Benefit packages g) Community Provider/Partner information h) Case notes i) Case activity codes j) Others as identified by the State and accepted via formal change control	R2
FR6.124	The Contractor's System will have the ability to monitor member adherence to prescribed drugs	R1.01
Manage Population Health Outreach		
Manage Population Health Outreach		
Contract# 28739 **Require-ment number**	**Requirement**	**Planned Release**
FR7.1	The Contractor's System will have the ability to pull various Panel reports based on a preset schedule and using near real-time data, to be determined by the State/Department, as well as on an ad-hoc basis. Panel report parameters may include but is not limited to: a) Disease b) Population age range c) Provider (including office location when multiple locations)	R1 FINAL
FR7.2	The Contractor's System will store profiles of Users, which includes but is not limited to geographic location	R1.01
FR7.3	The Contractor's System will automatically assign an appropriate User based on geographic location	R1 FINAL
FR7.4	The Contractor's System will have the ability for User to capture contact information of Clinical Leads at Provider sites including but not limited to: a) Office address b) Contact information (email address, phone number, etc.) c) Specialty area(s)	R1 FINAL
FR7.5	The Contractor's System will allow Users to log contacts with Clinical Leads at Provider sites	R1 FINAL
FR7.6	The Contractor's System will allow Users to schedule appointments with Clinical Leads at Provider sites	R4
FR7.7	The Contractor's System will save log of contacts	R1 FINAL

FR7.8	The Contractor's System will allow Users to track conversation history and action items with Community Partners around Population-Based Health Reports (Registry/Gap-in-Care Reports)	R1
FR7.9	The Contractor's System will have a repository of appropriate, electronic education materials	R1 FINAL
FR7.10	The Contractor's System will allow Users to select appropriate education materials based on program protocol	R1 FINAL
FR7.11	The Contractor's System will allow Users to select all, multiple, or single educational materials at one time	R1
FR7.11-1	The Contractor's System will allow Users to select educational materials for the member	R FINAL
FR7.12	The Contractor's System will allow Users to electronically send educational materials to Clinical Leads at Provider sites	R1
FR7.13	The Contractor's System will allow for education materials to be saved and associated with Population Health Management record	R1
FR7.14	The Contractor's System will allow for printing of education materials	R1
FR7.15	The Contractor's System will allow for batching and mailing of education materials	R4
FR7.16	The Contractor's System will allow the User to document and update Program performance measures based on an agreement with Clinical Leads for population or practice	R1
FR7.17	The Contractor's System will provide the ability to use MMIS data to support population health analyses	R1 FINAL
FR7.18	The Contractor's System will have the ability to receive population data from various external entities. Data should include but not be limited to: a) Census data b) Vital statistics c) Public health data d) Vermont Health Information Exchange e) eHealth Exchange f) Other as identified by the State during requirements validation and accepted via formal change control	R4
FR7.19	The Contractor's System will have the ability to track and maintain detail for population health initiatives including but not limited to: a) Originator / source of inquiry b) Data source(s) used c) Strategy (or strategies) developed in response to data analysis d) Trends (ED/IP) by Hospital Service Area e) Others as identified by the State during requirements validation and accepted via formal change control	R1
FR7.20	The Contractor's System will monitor Emergency Department admissions, re-hospitalizations, short stays and re-admissions for recidivism, and opportunities for intervention	R1 FINAL
FR7.21	The Contractor's System will allow authorized User to capture attendance at workshops and targeted group sessions	R3
Manage Registry		
Manage Registry		

Contract# 28739 Require-ment number	Requirement	Planned Release
FR8.1	The Contractor's System will have the ability to receive a Member's health outcome information from multiple registries	R4
FR8.2	The Contractor's System will have the ability to prepare updates for a specific registry (e.g., immunization, cancer, disease)	R4
FR8.3	The Contractor's System will have the ability to respond to inquiries with specific information	R4
FR8.4	The Contractor's System will have the ability to track information as needed for measuring performance	R1 FINAL
FR8.5	The Contractor's System will have the ability to create a patient health registry with information about Members who may be experiencing a clinical gap in adherence to clinical standards and barriers	R1
FR8.6	The Contractor's System will have access to up-to-date Community Provider/Partner registry data through MMIS and 2-1-1	R3
Authorization Determination		
Referral Management		
Contract# 28739 Require-ment number	**Requirement**	**Planned Release**
FR9.1	The Contractor's System will accept electronic referrals, which will include but is not limited to: a) Date and time of referral b) Referring party name and contact information (e.g., email address, phone number, etc.) c) Member name and contact information d) Reason for referral e) Preferred outcome f) Referral condition (new referral, resubmission) g) Office notes h) Recent, relevant labs i) Medication list j) Clinical documentation (e.g., PPCP) k) Primary diagnosis and code demonstrating limited life-expectancy (e.g., PPCP) l) assessments (if applicable) m) coordinated services plan (if applicable) n) consent was obtained	R4
FR9.2	The Contractor's System will allow documents to be attached to both incoming and outgoing electronic referrals.	R2
FR9.3	The Contractor's System will automatically screen electronic referrals against the eligibility rules upon receipt and make a determination (eligible versus ineligible)	R3
FR9.4	The Contractor's System will notify Users of electronic referrals that were determined to be ineligible for AHS care management programs or services, which include but is not limited to Chronic Care, Pediatric Palliative Care, or High-Risk Pregnancy services	R3
FR9.5	The Contractor's System will display a list of electronic referrals, determined to be ineligible for AHS care management programs or services, which include but is not limited to Chronic Care, Pediatric Palliative Care, or High-Risk Pregnancy services, that require referral acknowledgment	R4

FR9.6	The Contractor's System will allow Users to acknowledge electronic referrals and notify Referring Party of Candidate's eligibility or ineligibility	R2
FR9.7	The Contractor's System will allow Users to notify Referring Party of referral status	R2
FR9.8	The Contractor's System will allow User to enter freeform text to communicate notes / comments to referral acknowledgement	R1 FINAL
FR9.9	The Contractor's System will allow User to attach files to referral acknowledgement	R1 FINAL
FR9.10	The Contractor's System will allow for inter-agency referrals, which will include but is not limited to: a) Date and time of referral b) Referring party name, contact information (e.g., email address, phone number), and role / department c) Member name and contact information d) Reason for referral e) Preferred outcome f) Referral condition (new referral, resubmission) g) Notes	R2
FR9.11	The Contractor's System will pre-populate inter-agency referrals with User's contact information, which may include but is not limited to: a) First name b) Last name c) Role/Title d) Department	R1
FR9.12	The Contractor's System will have a search feature to direct inter-agency referrals to a User based on geographic location	R4
Prior Authorization		
FR9.13	The Contractor's System will have access to the Prior Authorization functionality in the MMIS systems	R4
FR9.14	The Contractor's System will support authorized Users in preparing and submitting Prior Authorization requests in the MMIS systems	R4
FR9.15	The Contractor's System will have the ability to receive notifications on Prior Authorization request status (e.g., Pending, Denied, Approved, Modified) from the MMIS systems	R4
Reporting		
Reporting		
Contract# 28739 Require-ment number	**Requirement**	**Planned Release**
FR10.1	The Contractor's System will be capable of pulling reports in different file formats (.pdf, .xls, .csv)	R1 FINAL
FR10.2	The Contractor's System will allow different access levels of viewing and analyzing reports versus running queries	R1 FINAL
FR10.3	The Contractor's System will save previously pulled reports for quick and easy future access	R2
FR10.4	The Contractor's System will create and maintain an auditable list of all Users that accessed reports and which reports they accessed	R1 FINAL

FR10.5	The Contractor's System will provide a mechanism to archive and delete reports in order to prevent a proliferation of reports	R2
FR10.6	The System will provide the ability to upload external data sets within the BI/Analytics area of the vendor product.The Contractor's System will provide the ability to upload external data sets	R1
FR10.7	The Contractor's System will have the ability to produce charts, graphs, etc. in order to show progress, trends, etc.	R1 FINAL
FR10.8	The Contractor's System will have access to multiple data sources including but not limited to: a) Claims b) Surveys c) Clinical/Bio-Medical Data	R1 FINAL
FR10.8-1	The Contractor's System will have access to multiple data sources including but not limited to: a) Claims	R1 FINAL
FR10.9	The Contractor's System will provide reporting tools, set-up and configured by the Contractor, such as but not limited to: a) Statistical tools i. regression ii. predictive modeling iii. risk stratification b) Comparing c) Filtering d) Sorting	R1 FINAL
FR10.10	The Contractor's System will have the capability for a User to select specific data parameters, including but not limited to Member, Provider, and metrics and allow drilling down to view more detailed information, where available	R1 FINAL
FR10.11	The Contractor's System will allow saving and attaching reports to a Member's Plan of Care or Population Health Management record	R1 FINAL
FR10.12	The Contractor's System will allow printing of reports	R1 FINAL
FR10.13	The Contractor's System will provide reports, set-up and configured by the Contractor, to be automatically generated based on a predefined schedule and distributed to subscribed Users on a periodic basis. Distribution may be as an electronic attachment or a notification, alerting User that the report is ready to be downloaded	R2-R4
FR10.14	The Contractor's System will have the capability for Users to specify certain parameters for standard reports	R1
FR10.14-1	The Contractor's System will have the capability for Users to specify certain parameters for standard reports through the ticketing process. The following CC Reports will be included in R1.02: • Resource Utilization Breakdown (RUB) – Overall, By Age, By Gender • Utilization Measures – Hospitalization, ED Visits, Chronic Condition Prevalence • Clinical – Chronic Condition Registry, Pharmacy Measures • Predictive – Chronic Condition Registry, Pharmacy Measures, Actuarial Cost Projections • Program Recommendations – Care Coordination Program Profiles, Care Coordination Program Projections • Population Reports (Program Metrics) – Standard Report, Provider Report, Productivity Report, Program Assessment Report • Population Reports - Encounters Report The following BI Data Models will be included: ACG, GIC, Program Metrics, and Encounters	R1 FINAL
FR10.15	The Contractor's System will display a template for the User to specify report parameters, which includes but is not limited to: a) Reporting period (last month, last quarter, customized date range, etc.) b) Population characteristics c) Geography d) Member e) Community Provider/Partner f) Practice g) Community h) State (both cost and clinical results)	R1 FINAL
FR10.16	The Contractor's System will allow Users to specify one or multiple parameters	R1 FINAL
FR10.17	The Contractor's System will allow queuing of reports to limit interruption of other System processes	R2-R4

FR10.18	The Contractor's System will pull detailed reports, set-up and configured by the Contractor, such as but not limited to: a) Cost reports (i.e., significant changes in spending per member, cost savings) b) Hospital admissions (based on claims data) c) ED usage (based on claims data) d) Emergency Department visits e) Provider visits f) Case duration g) Individual (e.g., Members with Diabetes Assessment completed, Members without lab data, date of last visit, etc.) g) Hospital Service Area i) Dx Specific (Members with Diabetes on Problem list, even if not primary) j) Urinalysis completed for substance abuse patients k) Case Manager's progress toward goal achievement l) Case management effectiveness (i.e., measure reduced or no ED visits, measure reduced or no ambulatory sensitive IP admission)	R1
FR10.19	The Contractor's System will leverage HEDIS for program performance measurement	R1
FR10.20	The Contractor's System will produce Panel reports that include gaps in care for specific conditions and provider groups	R1
FR10.21	The Contractor's System will be able to track and measure outreach performance	R1
FR10.22	The Contractor's System will be able to create a clinical metrics dashboard	R1
FR10.23	The Contractor's System will have the ability to interface with the Utilization Management and Concurrent review processes	R2 – R4
FR10.24	The Contractor's System will have the ability to collect, track, and report on outcome measures	R1
FR10.25	The Contractor's System will have the ability to generate reports to monitor quality and cost of care provided to members	R1
FR10.26	The Contractor's System will provide the ability to access and report on encounter data for the purpose of monitoring appropriateness of care	R1 FINAL
FR10.27	The Contractor's System will provide multi-dimensional, flexible, ad hoc reports across business functions, set-up and configured by the Contractor, which meet but are not limited to the following reporting needs: a) Financial reporting b) Budget forecasting c) Fiscal planning and control d) Cash flow e) Recipient cost and User of services f) Cost/benefit analysis g) Prescription drug policy h) Cost and User of prescription drugs i) Recipient participation j) Eligibility and benefit design k) Geographical analysis l) Program planning m) Policy analysis n) Program performance monitoring o) Medical assistance policy development p) Capacity Planning q) Provider participation r) Service delivery patterns s) Adequacy of and access to care t) Quality of care u) Outcomes assessment v) Disease management w) External reporting x) Public information	R2-R4
FR10.28	The Contractor's System will provide the ability to generate a listing of all standard on-line reports available, the description of each report, and provide a link to the most recent report	R1
FR10.29	The Contractor's System will provide a process by which reports may be delivered by email in accordance with HIPAA rules	R2
FR10.30	The Contractor's System will provide the ability for Users to extract data, manipulate the extracted data, and specify the desired format and media of the output	R1 FINAL
FR10.31	The Contractor's System will provide the ability to track and store detailed information regarding all reporting requests including but	R1

	not limited to: a) Who requested the information b) Date c) Time d) What the report included e) Report storage upon completion f) Route the entire history on-line	
FR10.32	The Contractor's System will be able to collect, track, and report on individual staff performance	R1
FR10.33	The Contractor's System will provide the ability to generate a high-cost member report to determine potential participation in care management program	R1 FINAL
FR10.34	The Contractor's System will have the ability to query both clinical and claims data for Members in order to analyze performance of current programs and to conduct "what-if" analyses	R3
FR10.35	The Contractor's System will have the ability to access and query data from other governmental entities including the State's Health Information Exchange, CMS and the HBE	R4
FR10.36	The Contractor's System will have the ability to query data and extract reports to analyze effectiveness of Medicaid dollars granted to Medicaid programs and other agencies in support of care management goals	R4
FR10.37	The Contractor's System will support the entry of free-form text field (number of characters as approved by the State during requirements validation) associated with each request/analysis, including identification of User and date/time entered	R4
FR10.38	The Contractor's System will have access to Body Mass Index (BMI) data, both by System calculation (based on height and weight) and from medical records	R2
FR10.39	The Contractor's System will allow for ad hoc reporting of inpatient facility admission data	R3
FR10.40	The Contractor's System will collect and report on appropriate High-Risk Pregnancy data elements, set-up and configured by the Contractor. This includes but is not limited to: a) Gestational age at referral b) Date of contact with member c) Amount and type of contact (e.g., phone call, office visit, home visit) d) Date closed e) Last Menstrual Period (LMP) f) Final Expected Due Date g) Date of initial prenatal visit h) Number of prenatal visits i) Maternal complications j) Date of postpartum visit k) Birth weight l) NICU stay m) Height n) Weight at LMP o) BMI p) Progesterone screening q) Tobacco use screening r) Post-partum depression screening s) Prenatal visits	R4
FR10.41	The Contractor's System will allow Users to pull ad hoc reports. Parameters and data elements may include but are not limited to: a) Geographic location b) Staff engagement c) Clinical metrics d) Financial metrics e) Family satisfaction f) Unplanned utilization (i.e., Emergency Department visits for hard-to-manage pain) g) Cost expenditure comparison (children with comparable illness enrolled in PPCP versus not enrolled in PPCP) h) Diagnostic coupling i) Causation / correlation (e.g., do the interventions lead to reduced costs, what interventions specifically) j) Cost-benefit analysis	R1
FR10.42	The Contractor's System will allow an authorized User to design a survey instrument for Members, family members, and Community Providers/Partners. The survey instrument must be highly configurable depending on the needs of the surveyor	R2

FR10.43	The Contractor's System will allow an authorized User to distribute the electronic survey to Members, appropriate family members, and Community Provider/Partners. The survey can be distributed via multiple channels, including but not limited to: a) Phone b) Mail c) Online (i.e., Community Provider/Partner Portal) d) Email	R4
FR10.44	The Contractor's System will allow an authorized User to schedule predefined surveys as a recurrence (e.g., every 3 months post intervention for up to 12 months)	R2
FR10.45	The Contractor's System will accept User entered survey results (online) and manually entered results by an authorized User	R4
FR10.46	The Contractor's System will update the Survey Response data stores	R4
FR10.47	The Contractor's System will have analysis tools for authorized Users to review survey responses	R2
FR10.48	The Contractor's System shall have the capability to generate and display population, program and member-based dashboard reports, set-up and configured by the Contractor, based on claims and intervened data. Population and program-based dashboard reports may include but is not limited to: a) Characteristics of a population (e.g., Number and percentage of program participants by program type, percentage of participants enrolled in multiple programs / services, highest-cost diseases, geographic conditions) b) Program and collaboration caseload information (e.g., Number of cases by program, by case manager worked on in a day, status (active / inactive), aggregate view of alerts and notifications, referrals received, new messages / shared notes, defined case milestone and outcome objectives) c) System performance and quality assurance reports (e.g., Data quality, System performance) d) Program performance (e.g., correlation between program interventions and cost, deeper cost diseases) Member-based dashboard reports may include but is not be limited to: a) Member's program participation compared to Member population participation and overall population participation b) Member's health profile compared to Member population profile and overall population profile	R2
FR10.49	The Contractor's System will have the ability to automatically or manually populate, maintain and display multiple indicators at the Member level (e.g., disease management, TBI)	R1 FINAL
FR10.50	The Contractor's System will have the ability to conduct analysis of Member services rendered and its direct impact on Member's condition	R2
FR10.51	The Contractor's System will collect and report on geographic data sets to include high use and high cost patterns (i.e. diabetes gaps in care and associated care costs by county, by provider in the county, etc.)	R1
FR10.52	The Contractor's System will collect and report on geographic data sets to include but is not limited to: a) High risk families b) Children in custody for Department for Children and Families	R4
FR10.53	The Contractor's System will provide geographic mapping / hot spotting for predefined high-risk Members and populations (e.g., zip code mapping of high ED Users)	R1

FR10.54	The Contractor's System will have the ability to generate federally/state required reports for Care Management as determined by the State.	R4
Consent Management		
Consent Management		
Contract# 28739 **Require-ment number**	**Requirement**	**Planned Release**
FR11.1	The Contractor's System will have the capability to allow a User to record consent that is given by a Member in order to share his/her information between two or more agency programs and associated Community Providers/Partners. Agency can include other parts of state government.	R2
FR11.2	The Contractor's System will support security controls to limit the entry of consent information to those with appropriate System-level access	R1
FR11.3	The Contractor's System will notify Users if there is no consent on file for a Member when a User attempts to view the Member record	R4
FR11.4	The Contractor's System will allow Users to view basic Member information (in accordance with existing policies) when Member consent is not on file. Basic Member information may include, but is not limited to: a) First, middle and last name b) Date of birth (or age) c) Gender d) Address e) Phone number	R4
FR11.5	The Contractor's System will allow Users to see additional Member information, beyond the basic information, when Member consent is on file. Additional information may include, but is not limited to: a) Active collaboration in The Contractor's System (e.g., secure messages, case notes, etc. that have not expired) b) Active programs enrolled in c) Detailed information on types of programs (e.g., Chronic Care, Pediatric Palliative Care, Children with Special Health Needs) d) Detailed information from programs and services e) Case notes f) Referral information g) Notification pertinent to the Member	R2-R4
FR11.6	The Contractor's System will record the consent and associated updates in a central location. The consent may contain but is not limited to: a) Entity obtaining the consent from Member (pre-populated from User information) b) Specific Providers and / or entities contained in the consent (e.g., agencies, departments, program, services or providers who can share information) to allow two-way sharing of information c) Specific individuals contained in the consent to allow two-way sharing of information d) Type and focus of the information covered (granularity and parameters to be determined by Vermont policy) e) Types of information (e.g., benefit and eligibility information, medical records, assessments, test results, claims and payments) f) Areas of sharing (e.g., behavioral health, mental health, Chronic Care, High-Risk Pregnancy) g) Purpose of the sharing of information (e.g., congruency and coordination of care, continuity of care) h) Expiration conditions of the consent: i. Period of time from date consent is given ii. Specified end date iii. Specific event (e.g., end of required collaborative service delivery, end of treatment) iv. Other conditions	R2-R4
FR11.7	The Contractor's System will automatically populate information related to the Member providing consent. Member information may include, but is not limited to: a) First and Last Name b) Date of Birth	R3

FR11.8	The Contractor's System will provide the option to indicate if a third party is providing consent on behalf of a Member (conservatorship, parent, other authorized third party, etc.)	R1 FINAL
FR11.9	The Contractor's System will allow a User to capture verbal consent from a Member in order for Member to participate in the program and/or for Case Manager to speak to Member's Authorized Representative	R1 FINAL
FR11.10	The Contractor's System will store the data elements of the consent in order to manage User access rights (e.g., restrict, allow) to specific elements of the Member's information and System functionality	R4
FR11.11	The Contractor's System will provide a printer-friendly version of the consent as well as the canned forms for printing	R1.01
FR11.12	The Contractor's System will allow Members and Users to save the consent	R3
FR11.13	The Contractor's System will create and send notifications to Users (both releasing and receiving) if: a) Consent Expiration Date is approaching b) Member has deceased c) Resident has moved outside of the State temporarily or permanently	R4
FR11.14	The Contractor's System will have the capability to attach a soft copy of the consent to a Member record. Note: The benefit of attaching a soft copy of the consent is the ability to store Member signature. Access rights within The Contractor's System cannot be enforced until the data is entered.	R2
FR11.15	The Contractor's System will maintain an auditable record of all consents recorded, accessed and access attempts as well as additions, changes and deletions to the consent	R3
FR11.16	The Contractor's System will allow Users to capture a Member revoking consent at any time and will notify authorized Users who will take appropriate action	R2
FR11.16-1	The System will allow Users to A) capture a Member revoking consent at any time	R1.01
FR11.17	The Contractor's System will allow Users to capture a Member modifying consent at any time	R1.01
FR11.18	The Contractor's System will notify Members by electronic or physical means (e.g. Postal mail) when a consent is recorded for their information	R3
FR11.19	The Contractor's System will allow Users to search for a Member's consent record	R2
FR11.20	The Contractor's System will display a list of all consent records matching the search criteria	R2
FR11.21	The Contractor's System will allow a User to update the Member consent record	R2
FR11.22	The Contractor's System will automatically populate the information of the person updating the consent record. Information that is automatically populated may include but is not limited to: a) User's first and last name b) Role c) Agency, Program or Service d) Date/time of update	R4

FR11.23	The Contractor's System will allow Users to print or email a copy of the updated consent record to the Member or another User, as appropriate and within policy	R2
FR11.24	The Contractor's System will enable the configuration of multiple consent models and management associated with different Programs and applicable federal and state regulations	R2 – R3

State of Vermont - Care Management Reporting Requirements

	Reporting Requirement	Description	Data Source	Report or Query	Audience	Frequency
1	**Staff Performance**	Provides details on Staff productivity over a predefined timeframe. Staff parameters may include the individual, departments, etc.	Contractor's System	Report Query	VCCI Management and VCCI Staff	On demand
2	**Capacity Planning**	Provides details on caseload by staff over a predefined timeframe	Contractor's System	Report Query	VCCI Management	On demand
3	**VCCI Member Population Count**	NE10.15 Provides count of total (unduplicated) VCCI members enrolled in the Program over a predefined timeframe as well as total count of members by condition, location, provider (R1)	Contractor's System	Report Query	VCCI Management	On demand
4	**Geographic Variability by Chronic Disease including chronic disease prevalence by practice**	Provides details on population report on geographic variability of chronic diseases - "hot spotters" by geography and practice (prevalence of condition(s) by a) region, b) provider practice)	Contractor's System MMIS	Report Query	VCCI Management and VCCI Staff	On demand
5	**Member Adherence**	Provides details on member adherence to medication for a specific condition as well as percentage of enrolled members with completed assessments and medication adherence issues	Contractor's System PBM System	Needs to be point in time, and able to pull at any time.	VCCI Management and VCCI Staff	Near real time
6	**Member's Gap in Care**	NE10.18 Identifies possible members with gaps in care based on their condition (R1)	Contractor's System MMIS	Needs to be point in time, and able to pull at any time.	VCCI Management and VCCI Staff	Near real time
7	**Regional Snapshot**	NE10.19 Provides program information for specific geographical areas (R1)	Contractor's System	Report Query	VCCI Management and VCCI Staff	On demand

8	**Clinical outcomes by Member**	Provides overview of clinical outcomes achieved by member such as improved AIC (A1C), less ED utilization, etc.	Contractor's System	Report Query	VCCI Management and VCCI Staff	Near real time
9	**Clinical outcomes by Plan of Care**	Provides overview of clinical outcomes achieved by different plans of care for specific conditions	Contractor's System	Report Query	VCCI Management and VCCI Staff	On demand
10	**Plan of Care Metrics**	NE10.22 Provides a summary of the plan of care metrics by condition, etc. (R1)	Contractor's System	Report Query	VCCI Management and VCCI Staff	On demand
11	**VCCI Operational Metrics both on individual and team basis**	Provides Program-specific operational metrics including but not limited to: - Percentage of caseload capacity, those with SNA, etc. based on given metrics re: staff.	Contractor's System	Report Query	VCCI Management and VCCI Staff	Near real time
12	**Emergency Department Visits**	Provides a count of total Emergency Department visits by Member for a predefined time frame and hospital; review of utilization of hospital services versus setting up predefined hospital; during specified timeframe --i.e. 3 months prior to CM intervention, then 3 month s/p CM intervention.	Contractor's System MMIS	Report Query	VCCI Management and VCCI Staff	On demand
13	**Referral Sources**	NE10.25 Provides information on external referral sources The Contractor's System has captured (R1)	Contractor's System	Report	VCCI Management and VCCI Staff	On demand
14	**Assessments by Condition, Acuity**	NE10.26 Provides the number and type of assessment by condition, acuity (R1)	Contractor's System	Report	VCCI Management and VCCI Staff	On demand
15	**Member Dashboard**	Provides Member's health profile compared to Member population profile and overall population profile	Contractor's System MMIS/ enterprise	Dash-board	VCCI Management and VCCI Staff	On demand
16	**Clinical Metrics Dashboard**	Provides a dashboard with clinical metrics, including but not limited to - - Asthma, Prescription Adherence - CHF, ACEI/ARB Adherence - CHF, Preferred Beta Blocker Adherence - Diabetes, Annual Lipid Panel (1 or more) - Achievement of goals/intervention or	Contractor's System MMIS	Report Query	VCCI Management and VCCI Staff	On demand

		progress toward goals - Social needs				
17	**Member reports**	NE10.29 Provides cost of service for each member for a predefined timeframe (6 month look back) (R1)	Contractor's System MMIS	Report Query	VCCI Management and VCCI Staff	Near real time
18	**Provider reports**		Contractor's System	Report or Query	VCCI Management and VCCI Staff	On demand
19	**SASH Dashboard Reports**	Provide a point of reference for population and individual health of SASH participants through a visual representation of the number of participants within a specific SASH site, or for all SASH sites, with a focus on key data points and measures collected by SASH	Contractor's System	Report	SASH wellness nurses, care coordinators, and operations managers	On demand
20	**Blueprint PCP Performance Reports**	Provide performance information on PCPs in terms of measures for keeping patients with chronic conditions within goal/range for those conditions to include drill-down into outreach reports, specific patient data and visit planners, and trending over time (such as 12-month look back). These reports would provide comparative analyses on providers against other providers within a practice, within the HSA, and across the State.	Contractor's System	Report	Blueprint PCPs	On demand
21	**FQHC UDS Reports**	Clinical measure reports required by HRSA for FQHCs. For example, patients ages 18 - 75 with a diagnosis of diabetes, who meet all the numerator targets of this composite measure: A1c < 8.0, LDL < 100, Blood Pressure < 140/90, Tobacco non-User and for patients with diagnosis of ischemic vascular disease daily aspirin use unless contraindicated.	Contractor's System	Report	FQHCs, Bi-State	On demand

22	**To Do List Reports**	NE10.34 List those items that have become due (based on a previously entered date) for the User to work on. For example, a tobacco counselor may indicate follow up with a patient who wasn't ready to be contacted to quit smoking until after the holidays. (R1)	Contractor's System	Report`	All Users	On demand
23	**Visit Comment report**	NE10.35 Print a chronological summary of interactions and outreach for a patient record for sharing with other providers not using The Contractor's System. (R1)	Contractor's System	Report	All Users	On demand

APPENDIX II – Non-Functional Requirements

Contract 28739 includes four (4) non-functional requirements categories and nineteen (19) sub-categories. The requirements in each category and sub-category appear in a separate tab in this workbook. The categories and sub-categories are:

ID	Section Title
G	**Generalized System Behavior Requirements**
G1	Usability
G2	Audit / Compliance
G3	Service Level Requirements (SLRs)and Performance
G4	Interface List
G5	General
T	**Technology Requirements**
T1	Interoperability / Interfaces
T2	Scalability and Extensibility
T3	Regulatory and Security
T4	Health and Human Services Enterprise (HSE) Platform Alignment
I	**Change Process Requirements - Implementation**
I1	Project Management
I2	Environment Installation and Configuration
I3	Knowledge Transfer & Training
I4	Design, Development & Customization
I5	Deployment
I6	Quality Management
O	**Change Process Requirements - Operations**
O1	Production Support & Transition
O2	Defect Resolution and Solution Acceptance
O3	System Administration
O4	System Management

Usability Requirements		
Number	**Requirement Description**	**Planned Release**
G1.1	The Contractor's System will provide a User interface that will be simple and consistent throughout all areas and functions of the Contractor's System	R1 FINAL
G1.2	The Contractor's System will minimize the number of mouse clicks / User interaction to complete any action	R1 FINAL
G1.3	The Contractor's System will use a Graphical User Interface (GUI) to help the User navigate to the next logical step in the workflow, or freely navigate to other parts of The Contractor's System functionality, and then allow the User to return to complete the in-process task	R1.01
G1.4	The Contractor's System will speak the Users' language, with words, phrases and concepts familiar to the User, rather than System-oriented terms	R1.01
G1.5	The Contractor's System will accommodate diverse populations of Users including those with disabilities and limited English proficiency as defined in section 504 of the Rehabilitation Act of 1973	R3-R4
G1.6	The Contractor's System will follow real-world Vermont terminology and conventions, making information appear in a natural and logical order	R1.01
G1.7	The Contractor's System will allow the Users to easily navigate to a variety of functions available to them without having to move sequentially through excessive menus and screens	R1.01
G1.8	The Contractor's System will include at minimum the following features and capabilities: a) Drill down and look up functionality to minimize re-entry of information across multiple screens b) Multi-tasking and multiple window capability, including split screens c) Search capabilities to allow retrieval by Provider, Member, procedure code, NDC or others as defined by the State d) Ability to tab and mouse through data fields and screens and to change tab order	R1.01
G1.9	The Contractor's System will support undo and redo, or provide onscreen confirmation/acceptance to the User to confirm a change that is permanent and cannot be "undone"	R1.01
G1.10	The Contractor's System will provide Users with a clearly marked "emergency exit" for the instances when a User mistakenly chooses a function and such "emergency exit" must be simple with minimal dialogue	R1 FINAL
G1.11	The Contractor's System will follow standardized conventions and limit the use of words, situations, or actions that have multiple meanings	R1 FINAL
G1.12	The Contractor's System will eliminate error-prone conditions or check for them and present Users with a confirmation option before they commit to the action	R1.01
G1.13	The Contractor's System will minimize the User's memory load by making objects, actions, and options visible	R1 FINAL

G1.14	The Contractor's System will provide the option to have rollover / tooltip help or context messages and provide the option to turn off this option in the User preferences profile	R2
G1.15	The Contractor's System will provide all User instructions in a visible or easily retrievable location, when appropriate	R1 FINAL
G1.16 G1.16-1	The Contractor's System will cater to both inexperienced and experienced Users and will provide accelerators (e.g. onscreen short cuts, alternate workflows, etc.) to speed up the interaction for the expert User.	R1 FINAL R1 FINAL
G1.17	The Contractor's System will allow Users to create shortcuts (e.g. onscreen short cuts, etc.) for frequent actions."	
G1.18	The Contractor's System's error messages will be expressed in plain language, precisely indicate the problem, and constructively suggest a solution	R1.01
G1.19	The Contractor's System will use colors to enhance User experience and System usability while complying with all disability requirements notated elsewhere in these requirements	R3-R4
G1.20	The Contractor's System will allow the User to navigate to any functional component from a client landing page	R1 FINAL
G1.21	The Contractor's System will alert the User with information relevant to required next steps	R1.01
G1.22	The Contractor's System will provide drop down and list boxes for all key entry, and text entry will display existing values for selection (system based auto fill) (but specifically disallow User browser based autofill)	R1.01
G1.23	The Contractor's System will accommodate point and click selection and check box entry for all relevant data entries to ensure that the User does not have to enter textual data that may already be available to the Contractor's System	R1.01
G1.24 G1.24-1	The Contractor's System will facilitate data entry and will contain pop-up list boxes for all code fields in all processing windows and allow selection of the entry."	R1.01
G1.25	The Contractor's System will provide field level on-screen edits with limited User override capabilities	R1.01
G1.26	The Contractor's System will provide the ability to make fields visible/invisible depending on parameters, User rights, consent, and access controls	R1 FINAL
G1.27	The Contractor's System will not show fields not accessible to a given User based on access rights, member consent, nor will The Contractor's System show fields not in use	R1.01
G1.28	The Contractor's System cursor will automatically advance to the next logical input field when the maximum allowed numbers of characters have been entered for the keyed field or when the User presses the "Enter" key	R1.01
G1.29	The Contractor's System will provide the option of having a selection from the drop down boxes automatically take the User to the next field	R1.01

G1.30	The Contractor's System will provide validation checks at the time of each field entry as the default mechanism	R1.01
G1.31	The Contractor's System will identify invalid entries to the User as immediately as possible	R1.01
G1.32	The Contractor's System will provide the ability to suggest or automatically change entries that do not conform to data entry standards, to be defined in the detailed system design and meta data models in collaboration with the State	R1.01
G1.33	The Contractor's System will be designed to include only the necessary information and functionality on screens and will be based on the User's access level and the User's configuration	R1.01
G1.34	The Contractor's System will be designed to include logical transitions between screens and level of detail during navigation	R1.01
G1.35	The Contractor's System will provide templates for data entry with identified mandatory and optional data fields	R1.01
G1.36	The Contractor's System will allow incomplete data sets to be saved for completion of the workflow at a later time	R1.01
G1.37	The Contractor's System will highlight and flag required and incomplete data fields	R1.01
G1.38	The Contractor's System will include a graduated system of alert levels to allow Users to determine urgency and relevancy	R1 FINAL
G1.39	The Contractor's System will allow configuration of alerts by a User, for a User by a supervisor, and for a User by a System administrator	R3-R4D
G1.40	The Contractor's System will allow for the request of or entry of data from external devices (e.g. tablets)	R1.01
G1.41	The Contractor's System will notify the User when a source system is unavailable / inoperable and notify User that any available information about the subject being viewed is as of certain time and date	R2
G1.42	The Contractor's System will not require Users to reenter data due to validation errors if the Contractor's Systems can auto-correct based on the entered data or the User can navigate to the entry error to correct the entry	R1.01
G1.43	The Contractor's System will enable central workflow alerts and transactional status. The Contractor's System will centralize pending work items for the User as in a "work queue"	R1.01
G1.44	The Contractor's System will have the capability to push messages to the intended workers without requiring them to specifically inquire for the data	R1 FINAL
G1.45	The Contractor's System will provide a hover option over state defined fields to generate a description of the data element	R3-R4
G1.46	The Contractor's System will provide linked access to help functions which contain the appropriate information and search of all help information from every window, based on User profiles	R1.01
G1.47	The Contractor's System will push or link alerts / notifications to mobile devices	R2

G1.48	The Contractor's System will utilize standard web browser-based Thin-Client Technology that supports centralized software distribution and implementation. This must be available on commonly used browsers including, but not limited to, Chrome and Firefox and Microsoft Internet Explorer 9 or later versions with the ability to provide data over a web browser interface (i.e. HTML over HTTP), and will include the capability to encrypt the data communicated over the network via SSL (HTML over HTTPS)	R2
Audit and Compliance Requirements		
Number	**Requirement Description**	**Planned Release**
G2.1	The Contractor's System will maintain a record (e.g. audit trail) of all additions, changes and deletions made to data in the system. This should be readily searchable by user ID or member ID. This must include, but is not limited to: a) User ID of the person who made the change, b) date and time of the change, c) Physical, software/hardware and/or network location of the person while making the change, d) Information that was changed, e) Outcome of the event, f) Data before and after it was changed, and g) Which screens were accessed and used	R1.01
G2.2	The Contractor's System will allow an authorized administrator to set the inclusion or exclusion of auditable events based on organizational policy & operating requirements/limits	R3-R4
G2.2-1	The Contractor's System will allow an authorized administrator to request the inclusion or exclusion of auditable events based on organizational policy & operating requirements/limits	R1.01
G2.3	The Contractor's System will support logging to a common audit engine using the schema and transports specified in Audit Trails and Audit Log specifications. (	R1 FINAL
G2.4	The Contractor's System will be able to detect security-relevant events (as defined in NIST 800-53 moderate baseline, rev 4) that it mediates and generate audit records for them. At a minimum the events will include, but not be limited to: a) Start/stop b) User login/logout c) Session timeout d) Account lockout e) Member record created/viewed/updated/deleted f) Scheduling g) Query h) Order i) Node-authentication failure j) Signature created/validated k) Personally Identifiable Information (PII) export l) PII import m) Security administration events n) Backup and restore o) Audit Event Types listed in IRS 1075	R1.01
G2.5	The Contractor's System will provide authorized administrators with the capability to read all audit information from the audit records in the following two ways: 1) The Contractor's System will provide the audit records in a manner suitable for the User to interpret the information. The Contractor's System will provide the capability to generate reports based on ranges of System date and time that audit records were collected. 2) The Contractor's System will be able to export logs into text format in such a manner as to allow correlation based on time (e.g. Coordinated Universal Time [UTC] synchronization)	R1.01
G2.6	The Contractor's System will be able to perform time synchronization using NTP/SNTP, and use this synchronized time in all security records of time	R1.01

G2.7	The Contractor's System will have the ability to format for export recorded time stamps using UTC based on ISO 8601	R1 FINAL
G2.8	The Contractor's System will prohibit all Users read access to the audit records, except those Users that have been granted explicit read access	R1.01
G2.9	The Contractor's System will protect the stored audit records from unauthorized deletion. The Contractor's System will prevent modifications to the audit records	R1.01
G2.10	The Contractor's System will prevent modifications to the audit records	R1.01
G2.11	The Contractor's System will provide logging, reporting and accessing errors and exceptions	R1.01
G2.12	The Contractor's System will provide capability for integrating consent audit trails and data access audit trails in a consolidated searchable system for search/report to support consent rule enforcement or investigation including audit trails based on deprecated rules or policies	R1.01
G2.13	The Contractor's System will generate and protect consent audit events at the same or better levels as other data access audit records	R1.01
SLRs and Performance Requirements		
Number	**Requirement Description**	**Planned Release**
G3.1	The Contractor's System response time during operations will be 5 seconds or less for 95 percent of the search and lookup queries (does not include ad hoc queries and analytics). Maximum response time for search and lookup queries will not exceed 15 seconds except for agreed to exclusions. The Contractor shall investigate tickets from SoV that report response times exceeding the maximum response time and provide an analysis to SoV The system response time is defined as the time it takes for the server to service a request.(	R1 FINAL
G3.2	The Contractor's System shall return each Dashboard report (main, patient, provider, etc.) within 5 seconds or less, 95% of the time (	R1 FINAL
G3.3	The Contractor's System will return a Static Standard report within 5 seconds or less, 95% of the time (	R1 FINAL
G3.4	The Contractor's System will return a parameter-based report within 20 seconds or less, 95% of the time.	R1 FINAL
G3.5	The Contractor's System will achieve performance for interactive transactions other than the reporting-related transactions above, conforming to the minimum acceptable performance standard of 5 seconds response time, for 95% of interactions	R1 FINAL
G3.6	The components of the Solution under Contractor control as delivered into production shall be available 99.75%. The availability percentage will be verified with evidence from the Contractor. Scheduled maintenance will be allowed with the prior approval of the State of Vermont (SoV). An ongoing monthly maintenance schedule requires just one approval. Additional scheduled maintenance requires SoV approval at least 2 business days in advance. Scheduled maintenance should occur outside normal business hours.	R1 FINAL
G3.7	The Contractor's System will be architected with no single point of failure, supporting a high-availability enterprise	R1.01
G3.8	The Contractor's System's hours of operations will be 24 hours per day, 7 days per week, and 365 days a year (	R1 FINAL

G3.9	The Contractor's System will have the ability to support session replication and transparent failover using high-availability architectural options	R1.01
G3.10	The Contractor's System will be designed to support the planned Vermont systems and any anticipated expansion in scope of connectivity	R1.01
G3.11	The Contractor's System Administration staffing requirements and workload should be minimally impacted with expanded system usage	R1 FINAL
G3.12	The Contractor's System must be built so that there is a near linear relationship between each additional server added, and the additional load that can be accommodated (load vs. capacity added), up to specified limit	R1.01
G3.13	The Contractor's System's Recovery Time Objective (RTO) will be within 4 hours. In case of a disaster that effects the Care Management operations, the entire service will be restored within 4 hours	R1 FINAL
G3.14	The Contractor's System's Recovery Point Objective (RPO) will be no more than 1 hour of data loss. In case of a disaster that effects the Care Management operations, 1 hour of data inputs to the Contractor's System (but no more) may be lost and need to be re-entered	R1.01
G3.15	The Contractor's System will use fully redundant network and hardware. Hardware components (such as processor and memory) should have built-in redundancy to allow a second component to take over in the event of a failure in the primary component. Similarly, redundant paths should also exist for networks	R1.01
G3.16	The Contractor's System will leverage virtualization to expedite disaster recovery. Virtualization enables system owners to quickly reconfigure system platforms without having to acquire additional hardware	R1.01
G3.17	The Contractor's System will have the ability to support either a Production and hot (real time replication) disaster recovery design or a multi host site Production design that would allow one site to seamlessly be offline and the other site would maintain service without interruption	R1.01
G3.18	The Contractor's System will include a disaster recovery plan and provide contingency plans for State lookup capabilities and online collaboration in the event of a disaster	R1.01
G3.19	The Contractor's System will provide the ability to recover from data loss due to end User error and end application error (	R1 FINAL
G3.20	The Contractor's System will provide the ability to perform archival/incremental backups and the ability to perform open/closed database backups	R1.01
G3.21	The Contractor's System will provide tools for managing an environment that supports both high availability and disaster recovery	R1.01

G3.22	The Contractor's System will include the capability to maintain all data according to state defined records retention guidelines (i.e. record schedule). General schedules can be found at: http://vermont-archives.org/records/schedules/general/. Specific retention disposition orders can be found at: http://vermont-archives.org/records/schedules/orders/. In general, document retentions range from 3 to 10 years. In addition to the above, note that case records including Child Support-related data must be retained for a minimum of 3 years after Case closure and the youngest child in the case is 18 years old.	R1.01
G3.23	The Contractor's System will include the capability to maintain all images and electronic documents according to state defined document retention guidelines (i.e. record schedule). General schedules can be found at: http://vermont-archives.org/records/schedules/general/. Specific retention disposition orders can be found at: http://vermont-archives.org/records/schedules/orders/. In general, document retentions range from 3 to 10 years.	R1.01
G3.24	The Contractor's System will provide on-line access of all active cases and up to 12 months for closed cases	R1.01
G3.25	All software developed and delivered by the Contractor must be free of viruses, malware, backdoors	R1.01
G3.26	The service provider must resolve Severity 1 Maintenance requests within 4 clock hours (R1.01)	R1.01
G3.27	The service provider must resolve Severity 2 Maintenance requests within 24hours	R1 FINAL
G3.28	Severity 2 Maintenance requests are to be prioritized (see Priority Level definitions) jointly by SoV and the Contractor and scheduled accordingly for investigation, correction and deployment into production.	R1 FINAL
G3.29	All priority 3 or higher defects (testing defects) resulting from software development activities shall be resolved by the Contractor prior to the software being delivered for User Acceptance Testing and prior to deployment to production	R1 FINAL
G3.30	The Contractor must resolve priority 1 test defects within an average of 2 (two) days, but no more than a maximum of 4 (four) days. Defects with Severity levels of 1 through 5 shall be responded to within 4 (four) hours of defect notification. Response is defined as the identification of a fix and an estimate of the time frame for UAT to begin.	R1.01
G3.31-1	The Contractor must resolve priority 2 test defects within an average of 3 (three) days, but no more than a maximum of 5 (five) days. Defects with Severity levels of 1 through 5 shall be responded to within 8 (eight) hours of defect notification. Response is defined as the identification of a fix and an estimate of the time frame for UAT to begin	R1.01
G3.32-1	The Contractor must resolve priority 3 test defects within an average of 4 (four) days, but no more than a maximum of 7 (seven) days. Defects with Severity levels of 1 through 5 shall be responded to within 8 (eight) hours of defect notification. Response is defined as the identification of a fix and an estimate of the time frame for UAT to begin.	R1.01
G3.33-1	The Contractor must resolve priority 4 test defects within an average of 5 (five) days, but no more than a maximum of 8 (eight) days. Defects with Severity levels of 1 through 5 shall be responded to within 8 (eight) hours of defect notification. Response is defined as the identification of a fix and an estimate of the time frame for UAT to begin.	R1.01
G3.34-1	The Contractor must resolve priority 5 test defects within an average of 6 (six) days, but no more than a maximum of 10 (ten) days. Defects with Severity levels of 1 through 5 shall be responded to within 8 (eight) hours of defect notification. Response is defined as the	R1.01

	identification of a fix and an estimate of the time frame for UAT to begin.	
Interface List		
Number	**Requirement Description**	**Planned Release**
G4.1	The Contractor's System will draw data from the current MMIS system to confirm beneficiary eligibility on a monthly schedule. The Contractor's System will interface with the future Integrated Eligibility System to confirm beneficiary eligibility in real-time	R1 FINAL
G4.2	The Contractor's System will obtain beneficiary demographics from the current MMIS system on a monthly schedule. The Contractor's System will obtain beneficiary demographics from the new EMPI and future MMIS systems on a monthly schedule	R1.01
G4.3	The Contractor's System will obtain medical and pharmacy paid claims details from the current MMIS system on a weekly schedule. The Contractor's System will obtain medical and pharmacy paid claims details from the new MMIS system on a daily schedule.	R1.01
G4.4	The Contractor's System will interface with the current MMIS system to obtain surgical procedure codes on a weekly schedule and from the new MMIS system on a daily schedule	R2
G4.5	The Contractor's System will include a bi-directional interface with the future MMIS system for the processing of requests for Prior Authorization (PA) for certain medical services. This interface will support the submission of requests as they are created and the receipt of PA status messages as they become available.	R2
G4.6	The Contractor's System will obtain the master list of Providers and their demographics from the current MMIS System on a weekly basis. The Contractor's System will interface with the future MPI system and new MMIS system as necessary to obtain the master list of Providers and their demographics in real-time.	R1.01
G4.7	The Contractor's System will interface with the current MMIS system on a weekly schedule and the future MMIS system in real-time to obtain third party liability information	R1 FINAL
G4.8	The Contractor's System will interface with the Vermont HIE system (VHIE) to obtain details of interactions with and services provided to beneficiaries by the provider in real-time	R2
G4.9	The Contractor's System will interface with the State's future MMIS business analytics infrastructure to provide detailed data from the Care Management system for various analytic purposes on a weekly schedule	R3-R4
G4.10	The Contractor's System will draw census data (including Emergency Department Visits and In-patient Stays) from a number of hospital systems on a mixture of weekly and daily schedules and will interface to receive this information in real-time in the future. Hospital systems include, but are not limited to: Fletcher-Allen, Copley, Central VT, Northwestern Med Center, NVRH, Bennington, and Rutland.	R3-R4

G4.11	The Contractor's System will obtain lab results in real-time from the statewide HIE system supported by Vermont Information Technology Leaders	R3-R4
G4.12	The Contractor's System will interface with the current PBM Contractor to obtain medication data for use in case management and "gap analysis" on a weekly schedule. The Contractor's System will interface with the future PBM Contractor to obtain medication data for use in case management and "gap analysis" on a daily schedule.	R3-R4
G4.13	The Contractor's System will draw data from the Breast and Cervical Cancer Registry	R4
G4.14	The Contractor's System will draw data from the Immunization Registry	R4
G4.15	The Contractor's System will draw data from the Vital Statistics Registry	R4
G4.16	The Contractor's System will, in the future, draw data regarding Community Provider/Partner details and resources maintained by the United Ways of Vermont 211 organization on a monthly schedule	R2
G4.17	The system will create an extract of episode date for VHCURES.	R2
General Requirements		
Number	**Requirement Description**	**Planned Release**
G5.1	The Contractor's System will uniquely identify each Program, Member, Provider, and Authorized Representative	R1.01
G5.2	The Contractor's System will authenticate Users before allowing access to functionality requiring a login	R1.01
G5.3	The Contractor's System will provide a mechanism to limit access to view/update information, based on User role, access rights, member consent, and program rules	R1.01
G5.4	The Contractor's System will have access to User calendars outside of The Contractor's System (e.g., Microsoft Outlook) and will automatically synch up both calendars	R2
G5.5	The Contractor's System will support multiple calendar types (e.g., Microsoft Outlook)	R2
G5.6	The Contractor's System will link the services received by a Member to the: a) Prior authorization b) Billing provider c) Plan of care	R1.01
Interoperability / Interfaces Requirements		
Number	**Requirement Description**	**Planned Release**
T1.1	The Contractor's System's interfaces will secure and protect the data and the associated infrastructure from a confidentiality, integrity and availability perspective.	R1.01

T1.2	The Contractor's System will be able to support Application to Application (A2A) synchronous and asynchronous messaging using web services. The messaging capabilities will be able to support a wide variety of A2A patterns including, but not limited to, the following: - Data look-up and retrieval - Data look-up with services provided by other applications - Simple bulk data transfer to/from other Systems.	R2
T1.3	The Contractor's System's interface infrastructure will continue to operate despite failure or unavailability of individual technology components such as a server platform or network connection.	R1.01
T1.4	The Contractor's System's interfaces must be scalable to accommodate changes in scale including changes in User population, transaction volume, throughput and geographical distribution. The Contractor's System will be capable of making any changes to the interface data elements/layouts easily, and to test those changes.	R3-R4
T1.5	The Contractor's System will implement, at a minimum, interfaces (both real-time or batch) with the applications and data sources listed in the section "G4 Interface List". These interfaces will be implemented using Vermont's Health Services Enterprise integration middleware, Oracle SOA Suite and Service Bus.	R2
T1.6	The Contractor's System will provide the capability to perform source to destination file integrity checks for exchange of data and alert appropriate parties with issues	R1.01
T1.7	The Contractor's System's components will be committed to an advanced approach to interoperability using web services and Service Oriented Architecture (SOA) aligned with State standards and vision for interoperability.	R1.01
T1.8	The Contractor's System will integrate with VT HSE using a Service Oriented Architecture by using an Enterprise Service Bus, responsible to monitor and control routing of message exchange between services, resolve contention between communicating service components, control deployment and versioning of services and marshal use of redundant services.	LR2
T1.9	The Contractor's System will support creation and extension of service interfaces through the use of Web Services Description Language (WSDL)	R2
T1.10	The Contractor's System will develop/integrate services using standardized Web Services formats.	R2
T1.11	The Contractor's System will provide the ability to publish services and related data to be used by different types and classes of service consumers.	R3-R4
T1.12	The Contractor's System will provide the capabilities for a Real-Time (or near real-time) Integrated Enterprise where common data elements about the customers served (e.g. beneficiaries) and services rendered are easily shared across organizational units with appropriate adherence to security and privacy restrictions.	R2
T1.13	The Contractor's System will have the capability to implement synchronous and asynchronous program-to-program communication, moving messages between SOA service consumer modules and service provider modules at runtime. The ESB component may also move files, database rows and other data.	R2

T1.14	The Contractor's System's ,message and data formats will be based on logical representations of business objects rather than native application data structures	R1.01
T1.15	The Contractor's System's data transformations will be to and from normalized formats. Normalized data formats facilitate composition and reduce the number of transformations that must be created and maintained. A canonical data representation that spans the enterprise can be used but is not required. A federated approach to data normalization is also possible	
T1.16	The Contractor's System will avoid point-to-point integrations. Application integration, both internal and external, will go through the central ESB.	R2
T1.17	All System services will be classified with one of the following values: Presentation, Process, Business, Data, Access, or Utility	R1.01
T1.18 a)	All software architecture documents and artifacts (views/viewpoints) will be modeled per ISO/IEC/IEEE 42010 Architecture Description Template as part of the Vermont Enterprise Architecture Program Requirements	R1.01
T1.18 b)	All SOA Services will be reviewed classified and cataloged prior to use. The documentation Artifacts and Templates will be provided to the Contractor by the State of Vermont Enterprise Architecture SOA Governance Team. Duplicate services will be rationaled and retired appropriately.	R2
T1.19	All System services will have key stakeholder/owners identified following the ADM Architecture Model. Role Matrix should include s/w developers, integrationists, technologists, Enterprise Architects, Business Leads, Testing teams, UAT Teams.	R2
T1.20	All WSDLs developed for Vermont will conform to the WSDL Development Standards (R2)	R2
T1.21	The Contractor's System's SOA-related messages will be formally defined with XSD (preferable) or DTDs. SOA artifacts will be stored in the State of Vermont's SOA Repository.	R2
T1.23	The Contractor's System's implemented services will rely on WS-Policy configurations for message reliability (WS-Reliable Messaging)	R2
T1.24	The following metadata attributes will be tracked for all services in the services catalog: {name, lifecycle status, class, description, owner, version, revision history, release frequency, versioning policy, deprecation policy, message exchange patterns, compensating transaction support, availability requirements, volume, max message size, security attributes, SLA, logging requirements}	R2
T1.25	The Contractor's System's SOA services will be attributed with one of the following SOA Lifecycle Status values: Candidate, Justified, Defined, Designed, Implemented, Operational, or Retired. The SOA Architecture Repository is required to be hosted on the Health and Human Services Enterprise Platform using the Oracle WebCenter Content (ECM) components.	R2

T1.26	The Contractor's System will be designed, built and deployed with enterprise architecture best practices including substantial reliance on highly configurable SOA components. The Contractor's System will undergo, at a minimum, 2 iterations integrated with HSEP development environment. Each iteration will have a maximum period of 10 days. The Contractor's Systems will have an alpha deployment on HSEP staging Environment and also will have, at a minimum, three weeks of UAT Testing by Business SMEs on the HSEP Staging Environment	
T1.27	The Contractor's System will provide reliable, once-only delivery of messages (guarantee of reliable and non-repetitive delivery).	R2
T1.28	The Contractor's System will have the capability to integrate with the VT ESB technology to perform syntactic and semantic hub-based transformation of messages, including: ' Support of taxonomy ' Support of ontology ' Reusable transformation maps ' Built-in transformation functions ' Extending the transformation function with custom-coded logic ' Support B2B project translation including Electronic Data Interchange (EDI), RosettaNet, HL7, etc.	R2
T1.29	The Contractor's System will provide the functionality that provides reliability for applications, services or message flows: ' Load balancing ' High availability ' Fault tolerance ' Failover ' In-order delivery ' Transaction support ' Execution prioritization ' Message prioritization. Tests for High Availability and Failover must be completed prior to the release to UAT.	R1.01
T1.30	The Contractor's System will provide the technology that manages the metadata and provides the features needed to support the reliable operation of services. Examples include: ' Online catalog of services and associated artifacts such as WSDL files, XSDs, BPEL files ' A single point of controlled access for cataloging, promoting, publishing and searching for information about managed assets ' Metadata that enables an Enterprise Service Bus (ESB) to find, bind to and invoke the execution of a service implementation ' Support for extending existing asset types and defining and populating custom asset types	R2
T1.31	The Contractor's System will provide support for integrating with applications with SOA and event-driven architectures in a manner that supports the following implementation strategies: ' Web Services: Web Services Interoperability (WS-I) Organization-compliant implementation of basic Web services standards, including SOAP, WSDL and Universal Description, Discovery and Integration (UDDI), as well as higher-level Web services standards, such as WS-Security. 'Representational State Transfer (REST): Support for XML-based messages, processing and HTTPS, and XHTML.	R2
T1.32	The Contractor's System will have the ability to track a message from its origin to its destination (inside a firewall), inquire on the status of that message and address exceptions (for example, resend the message if a target times out). Usually implemented via a warehouse for archiving messages together with the associated tracking and logging data.	R2
T1.33	The Contractor's System will have the ability to use standards-based communication protocols, such as TCP/IP, HTTP, HTTP/S and SMTP. 'Protocol bridging: The ability to convert between the protocol native to the messaging platform and other protocols, such as Remote Method Invocation (RMI), IIOP and .NET remoting.	R1.01
T1.34	The Contractor's System will seamlessly work with the technology and programs that act as glue, transforming among protocols, connecting to databases and linking pre-SOA Application Programming Interfaces (APIs) to the SOA backplane	R1.01
T1.35	The Contractor's System will have the capability to work with Oracle OFM Service Registry that serves as an integration point for runtime tooling	R2

T1.36	The Contractor's System will have the capability to work with security policy manager for Web services that allows for centrally defined security policies that govern Web services operations (such as access policy, logging policy, and load balancing)	R2
T1.37	The Contractor's System will have the capability to integrate with the VT MDM technology for Enterprise Master Person Index (EMPI) implemented as part of the HSE Platform in a centralized or registry style implementation. The State of Vermont has invested in enterprise licenses for Oracle MDM and strongly prefers that it is used however if the bidder cannot leverage this functionality initially it must provide for a probabilistic person index or person record matching function.	R2
T1.38	The Contractor's System will include the telephony integration required to satisfy the ability to dial a phone number directly from data within the Contractor's System based on User request, and provide the capability to automatically bring up the caller's record upon the receipt of an incoming call	R2
Scalability and Extensibility Requirements		
Number	**Requirement Description**	**Planned Release**
T2.1	The Contractor's System will be designed for ease of maintenance and readily allow future functional enhancements. This will be accomplished through use of modern design principles for Service Oriented Architecture, applying principles of modularity, interface abstraction, and loose coupling. (	R1.01
T2.2	The Contractor's System will be adequately flexible to keep up with ever changing technology and regulatory changes. This will be accomplished by separating workflow and business rules into their own separate tiers.	R1 FINAL
T2.3	The Contractor's System will be scalable and adaptable to meet future growth and expansion/contraction needs such that The Contractor's System can be expanded on demand and be able to retain its performance levels when adding additional Users, functions, and data	R1 FINAL
T2.4	The Contractor's System will provide screens that are highly re-configurable, providing ability to reposition and rename field labels / data fields, remove or "turn-off" unused fields, maintain data, and allow addition of custom-defined fields	R1.01
T2.5	The Contractor's System will enable the State to modify the labels and arrangement of information in the data model documentation templates and can create custom data fields (	R1.01
T2.6	The Contractor's System will provide the ability to create and/or modify edits and business rules which determine the correctness/integrity of data	R1.01
T2.7	The Contractor's System will provide the ability for on-line access by any site connected to the organization Wide Area Network (WAN)	R1.01
T2.8	The Contractor's System will provide the capability for remote access in compliance with existing State / Federal connectivity/security policies	R1.01
Regulatory & Security Requirements		
Number	**Requirement Description**	**Planned Release**

T3.1	The Contractor's System will, at a minimum, provide a mechanism to comply with security requirements and safeguard requirements of the following Federal agencies / entities: - Health & Human Services (HHS) Center for Medicare & Medicaid Services (CMS) - Administration for Children & Families (ACF) - NIST 800-53r4, MARS-E - Federal Information Security Management Act (FISMA) of 2002 - Health Insurance Portability and Accountability Act (HIPAA) of 1996 - Health Information Technology for Economic and Clinical Health Act (HITECH) of 2009 - Privacy Act of 1974 - e-Government Act of 2002 - Patient Protection and Affordable Care Act of 2010, Section 1561 Recommendations - Vermont Statute 9 V.S.A. § 2440. Social security number protection (http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=09&Chapter=062&Section=02440) - Vermont Statute 9 V.S.A. § 2435. Notice of security breaches (http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=09&Chapter=062&Section=02435)	R1.01
T3.2	The Contractor will provide all their corresponding NIST 800-53 procedures and policies to the State security officer	R1.01
T3.3	The Contractor's System will be in compliance with all applicable State and Federal laws and regulations, including 42 CFR Part 2 and Health Insurance Privacy and Accountability Act (HIPAA) including privacy and member consent for release requirements (As per CR014 to be excluded from R1.01) (	R1 FINAL
T3.3-1	The contractor's System will be in compliance with all applicable State and Federal laws and regulations, including 42 CFR part 2 and Health Insurance Privacy and Accountability Act (HIPAA) (HIPAA language only for MVP)	R1.01
T3.4	The Contractor's System will follow HIPAA 278 standard for the electronic exchange of prior authorization information between Providers and AHS	R2
T3.5	The Contractor's System will accommodate diverse populations of Users including those with visual and hearing impairments, persons with low and moderate educational levels, and the elderly	R3-R4
T3.6	The Contractor's System will conform with the sub-parts of Section 508 of the Americans with Disabilities Act (ADA), and any other appropriate State or Federal disability legislation	R3-R4
T3.7	The Contractor's System will conform and support the Medicaid Information Technology Architecture (MITA) v3.0 or later, and be compliant with CMS Seven Standards and Conditions	R1.01
T3.8	The Contractor's System will comply with all applicable State security policies and adhere to all legal, statutory, and regulatory requirements, as determined by Vermont leadership	R1.01
T3.9	The Contractor's System will implement security controls in accordance with all Federal and State security policy and regulations	R1.01
T3.10	The Contractor's System will comply with accessibility requirements described in 45 CFR 85 and with State of Vermont accessibility requirements located at http://dii.vermont.gov/Policy_Central and included in the set of policies and standards recently created for the Vermont Health Connect systems - in the procurement library - an equivalent set of policies and standards for the new Medicaid Operations systems including Care Management and MMIS will be created in the near future.	R3-R4

T3.11	The Contractor's System will adhere to the accessibility standard as outlined in the web guidelines and based on the W3C level 2 accessibility guidelines: (http://www.w3.org/TR/WCAG10/full-checklist.html).	R3-R4
T3.12	The Contractor's System will comply with Vermont branding standards as defined by the state	
T3.13	The Contractor's System will meet: - NIST 800-53 rev4 Moderate baseline - IRS pub 1075, which points back to NIST 800-53 rev 3 - CMS requirements, which points back to NIST 800-53 rev3 moderate baseline - Guidance from CMS including MITA Framework 2.0 and Harmonized Security and Privacy Framework	R1.01
T3.14	The Contractor will adhere to the principle of "Fail Safe" to ensure that a system in a failed state does not reveal any sensitive information or leave any access controls open for attacks	R1.01
T3.15	The Contractor's System will allow for controlled access to participant records. Users will be able to view participant data within The Contractor's System at the State-defined levels of access based on User security privileges.	R1.01
T3.16	The Contractor's System will maintain a level of security that is commensurate with the risk and magnitude of the harm that could result from the loss, misuse, disclosure, or modification of information	R1.01
T3.17	Information security will be built into The Contractor's System from its inception rather than "bolted on" after the Contractor's System has been implemented	R1.01
T3.18	The Contractor's System will support security at the object level (e.g. Table, View, Index)	R1.01
T3.19	The Contractor's System will support security at the row and column level	R1.01
T3.20	The Contractor's System will support auditing at the object level (i.e. Table, Column)	R1.01
T3.21	The Contractor's System will provide the ability for concurrent Users to simultaneously view the same record, documentation and/or template	R1.01
T3.22	The Contractor's System will provide protection to maintain the integrity of data during concurrent access	R1.01
T3.23	The software used to install and update The Contractor's System, independent of the mode or method of conveyance, will be certified free of malevolent software ("malware"). Contractor may self-certify compliance with this standard through procedures that make use of commercial malware scanning software.	R1.01
T3.24	The Contractor's System will be configurable to prevent corruption or loss of data already accepted into the Contractor's System in the event of a System failure (e.g. integrating with a UPS, etc.) (	R1.01
T3.25	The Contractor's System will support protection of confidentiality of all Protected Health Information (PHI) delivered over the Internet or other known open networks via encryption using Advanced Encryption Standard (AES) and an open protocol such as Transport Layer Security (TLS), Secure Sockets Layer (SSL), Internet Protocol Security (IPsec), XML encryptions, or Secure/Multipurpose Internet Mail Extensions(S/MIME) or their successors. This System will be subject to external Audit checks.	R1.01

T3.26	The Contractor's System, when storing PHI on any device intended to be portable/removable (e.g. smartphones, portable computers, portable storage devices), will support use of a standards based encrypted format using AES or their successors	R2
T3.27	The Contractor's System, prior to access to any PHI, will display a State-approved configurable warning or login banner (e.g. "The Contractor's System should only be accessed by authorized Users"). In the event that a System does not support pre-login capabilities, the Contractor's System will display the banner immediately following authorization.	R1.01
T3.28	The Contractor will review and analyze the key risks to the important assets and functions provided by The Contractor's System to certify that the CWE/SANS Top 25 Most Dangerous Software Errors (http://cwe.mitre.org/top25) have been mitigated and document the mitigation.	R1.01
T3.29	The Contractor will review The Contractor's System and certify that the code and any new development meets or exceeds the OWASP Application Development Security Standards outlined on the www.OWASP.org site (currently https://www.owasp.org/images/4/4e/OWASP_ASVS_2009_Web_App_Std_Release.pdf) and document in writing that they have been met.	R1.01
Identity and Access Management		
Number	**Requirement Description**	**Planned Release**
T3.30	The Contractor's System will support a form of User authentication	R1.01
T3.31	The Contractor's System upon detection of inactivity of an interactive session will prevent further viewing and access to the Contractor's System by that session by terminating the session, or by initiating a session lock that remains in effect until the User reestablishes access using appropriate identification and authentication procedures. The inactivity timeout will be configurable.	R1.01
T3.32	The Contractor's System will enforce a limit of (configurable) consecutive invalid access attempts by a User. The Contractor's System will protect against further, possibly malicious, User authentication attempts using an appropriate mechanism (e.g. locks the account/node until released by an administrator, locks the account/node for a configurable time period, or delays the next login prompt according to a configurable delay algorithm).	R1.01
T3.33	The Contractor's System will provide the capability to prevent database administrators from seeing the data in databases they maintain (R1.01)	R1 FINAL
T3.34	The Contractor's System will support grouping Users by Roles, functional departments or other organization to simplify security maintenance	R1.01
T3.35	The Contractor's System will provide the ability to maintain a directory of all personnel who currently use or access the Contractor's System/IVR/SQL database	R1.01
T3.36	The Contractor's System will provide the ability to create and maintain a directory of external providers to facilitate communication and information exchange	
T3.37	The Contractor's System will provide the ability to identify certain information as confidential (e.g. PII, PHI, etc.) and only make that accessible by appropriately authorized Users	R1.01

T3.38	The Contractor's System will restrict access to summarized information according to organizational policy, scope of practice, and jurisdictional law	R1.01
T3.39	The Contractor's System must be able to associate permissions with a User using one or more of the following access controls: 1) Role-Based Access Controls (RBAC; Users are grouped by role and access rights assigned to these groups) 2) context-based (role-based with additional access rights assigned or restricted based on the context of the transaction such as time-of-day, workstation-location, emergency-mode, etc.)	R1.01
T3.40	The Contractor's System will provide the ability to prevent specified User(s) or groups from accessing confidential information such as a beneficiary's SSN, medication information and other confidential data	R1.01
T3.41	The Contractor's System will provide the ability to limit access to certain confidential information such as a beneficiary's SSN and other confidential data to providers directly involved in service of the patient, or providers involved in review of the service	R1.01
T3.44	The Contractor's System will enforce the most restrictive set of rights/privileges or accesses needed by Users/groups or processes acting on behalf of Users, for the performance of specified tasks	R1.01
T3.45	The Contractor's System will provide the ability for authorized administrators to assign restrictions or privileges to Users or groups	R1.01
T3.46	The Contractor's System will support removal of a User's privileges without deleting the User from the Contractor's System to ensure history of User's identity and actions	R1.01
T3.47	The Contractor's System will be able to support RBAC in compliance with the HL7 Permissions Catalog	R1 FINAL
T3.48	The Contractor's System will be capable of operating within an RBAC infrastructure conforming to ANSI INCITS 359-2004, American National Standard for Information Technology – Role Based Access Control	R1.01
T3.49	The Contractor's System will provide more-advanced session management abilities such as prevention of duplicate logins, remote logout and location-specific session timeouts	
T3.49 -1	The Contractor's System will provide more-advanced session management abilities such as prevention of duplicate logins	R1 FINAL
T3.50	The Contractor's System will provide the ability to perform System administration functions such as reference table maintenance and adding / removing Users from the Contractor's System	R1.01
T3.51	The Contractor's System will allow Users access based on their roles irrespective of their geographical location	R1 FINAL
T3.52	The Contractor's System will provide the capability to integrate with existing authentication and authorization mechanisms	R2
T3.53	The Contractor's System will provide the capability to create temporary and emergency accounts and terminate those accounts automatically after a User defined period of time	
T3.54	The Contractor's System will provide the capability to override a role and restrict access to information by Users or groups of Users	R1.01

T3.55	The Contractor's System will provide the capability to monitor events on the information system, detect attacks, and provide identification of unauthorized use of the Contractor's System	R1.01
T3.56	The Contractor's System will provide the capability to identify and report on inappropriate access to information in the Contractor's System, based on User defined criteria	R1.01
T3.57	The Contractor's System will enforce minimum password requirements compliant with State-provided security policies	R1.01
T3.58	The Contractor's System will allow User to change his or her password at any time	R1.01
T3.59	The Contractor's System will have mandatory security questions for the User to answer for Username and password validation in case of any User requested changes	R1.01
T3.60	The Contractor's System will allow for online automated password reset	R1.01
T3.61	The Contractor will monitor, alert, and protect against web application attacks of internet-facing applications. Solution/hosting provider will install, configure, and manage a web application firewall on Vermont's internet-facing Solution/hosting provider ePHI Environments. Alerts and/or reports will be provided to Security officers at specified intervals	R1.01
T3.62	The Contractor will conduct and provide a risk assessment based upon NIST 800 - 30 guidance and methodology	R1.01
T3.63	The Contractor will conduct quarterly scans of Vermont's externally accessible web services in the Production Environment, and provide reports on the scans to VT Information Security officer / representative, including the severity of the vulnerabilities and remediation recommendations.	R1.01
T3.64	The Contractor will provide third-party conducted penetration tests on production releases of the externally accessible web application as requested by the change control board entity. The reports shall be provided to the security officer upon request.	R1.01
T3.65	The Contractor will not transmit or store any Personally Identifiable Information (PII) using publically available storage over the Internet or any wireless communication device, unless: 1) the PII is "de-identified" in accordance with 45 C.F.R § 164.514(b) (2); or 2) encrypted in accordance with applicable law, including the American Recovery and Reinvestment Act of 2009 and as required by policies and procedures established by VT Information Security Officer.	R1.01
T3.66	The Contractor will perform Security Impact Assessments prior to releasing solutions into production	R1.01
T3.67	The Contractor's System will include the same security provisions for the development, system test, acceptance test and training environment as those used in the production environment (R1.01) (	R1 FINAL
T3.68	The Contractor will complete and supply to VT Information Security Officer all CMS Security required documentation to include but not limited to System Security Plan (SSP), Risk Assessment (RA), Contingency Plan (CP)	R1.01
T3.69	The Contractor must pass the Privacy/security and FTI data handling training provided by the State. FTI training is required regardless of the presence of absence of FTI data	R1.01
T3.70	The Contractor will ensure that all servers have hardened operating systems by eliminating any unnecessary system services, accounts, network services, and limited User access rights throughout all of the environments	R1.01

T3.71	The Contractor will review and monitor logs for forensic purposes and security Incidents, and any anomalous activities are incorporated into the Incident management process. In the event of a security incident, the Contractor will be responsible for collecting and retaining evidence related to the incident. A detailed report must be provided to the State Security Officer	R1.01
T3.72	The Contractor will ensure that high severity patches will be applied within seven (7) calendar days; Medium severity patches will be applied within fifteen (15) calendar days; and all others within thirty (30) calendar days. The Contractor will further ensure that required IT security notices and advisories are distributed to appropriate personnel	R1.01
HSE Platform Alignment Requirements		
Number	**Requirement Description**	**Planned Release**
T4.1	The Contractor will utilize the frameworks and concepts documented in the following documents: * HSE VEAF HSEP Strategy and Overview Level 0 FINAL_DIIEA.pdf * HSEP_Platform_Reuse_Guidance_for_MMIS_v1.pdf	R2
T4.2	The Contractor, when proposing a capability in each of the functions below, will respond as follows: * Mandatory: The proposed solution must use the software product that has been purchased by the State (listed below) which satisfies this function. * Preferred: The proposed solution may use the software product that has been purchased by the State (listed below) which satisfies this function or a different product which satisfies this function. If proposing a different product, the Contractor will provide an explanation and justification for proposing the different product	R2
Secure Email System		
T4.2.70	Mandatory: Voltage Secure Email (hosted by State)	N/A
CRM/Case Management Products		
T4.2.71-1	Must Interface with SoV enterprise applications: Siebel Public Sector CRM- implemented in Siebel Open UI, Siebel Base CRM, Siebel Public Sector Partner Portal, Siebel Public Sector eService, Siebel Partner Manager	N/A
Project Management Requirements		
Number	**Requirement Description**	**Planned Release**
I1.1	The Contractor will employ, maintain, and execute a project management methodology that complies with the Project Management Institute (PMI) standards or equivalent.	R1.01
I1.2	The Contractor will describe the project management approach and methodology to be used for all System project life cycles.	R1.01

I1.3	The Contractor will develop a Project Management Plan (PMP) conforming to the Project Management Body of Knowledge (PMBOK). The PMP will incorporate the following PMBOK knowledge areas: (Project Integration Management- Project Scope Management - Project Time Management - Project Cost Management- Project Quality Management - Project Human Resource Management - Project Communications Management - Project Risk Management - Project Procurement Management	R1 FINAL
I1.4	The Contractor will develop a Project Charter.	R1 FINAL
I1.5	The Contractor will develop a Project Governance Plan. The project governance plan will take into account and leverage the existing AHS governance structure. (R1	R1 FINAL
I1.6	In collaboration with the State, the Contractor will develop a Business Process Change Management Plan. The State envisions significant process change during the development and implementation of The Contractor's System. The Contractor will provide plans for a change readiness assessment, gap analysis, and recommendations for organizational and process changes. The Change Control Board will be managed by the State.	R1.01
I1.7	The Contractor will document the business process management activities and outcomes described in the Business Process Change Management Plan. Additionally, the Contractor will document Operational and System Changes in the Technical Change Management Plan.	R1.01
I1.8	Where available and agreed between the Contractor and the State, the Contractor will use State templates for project management deliverables. State templates listed in EPMO templates from the link: http://dii.vermont.gov/pm/pmtemplates	R1.01
I1.9	The Contractor will develop a PMI compliant Communications Management Plan. The Communications Management Plan must describe participant's roles and responsibilities, internal communications, external communications, other communications and information management including communications protocols.	R1.01
I1.10	The Contractor will leverage DII EPMO Project Log template as applicable to establish an issues and action items process and tracking document that must ensure that unanticipated issues, action items and tasks are assigned to a specific person for action and are tracked to resolution. DII EPMO Project Log Template can be found in http://dii.vermont.gov/sites/dii/files/pdfs/EPMO-Project-Log-Template.pdf The issue and action item tracking document must include the following: - Issue description - Issue priority - Issue status - Plan for resolution - Individual responsible for resolution - Targeted resolution date - Actual resolution dates - Resolution action.	R1.01
I1.11	The Contractor must electronically provide project management documents (e.g., Project Management Plan, Project Schedule, Work Breakdown Structure, etc.) using Microsoft software products and/or pdf. The software version must be no less than a version still available on the common market and that is still supported by the manufacturer. The State will work with the Contractor in approving specific versions to assure that the application is synchronized with the State's plans.	R1.01

I1.12	The Contractor will advise the State and Contractor management of progress in meeting goals and schedules contained in the work plans as well as any risks and issues during weekly progress meetings attended by the Contractor and the State. These may include walkthroughs of selected deliverables as requested by State staff.	R1.01
I1.13	The Contractor will develop weekly progress reports. Weekly written progress reports will be provided by the Contractor to the State one working day before each weekly meeting, and containing items to be discussed at the meeting, including: - Progress of each task/activity. - Action items and decisions from the previous meeting. - Problems encountered, proposed resolutions, and projected completion dates for problem resolution. - Planned activities for the next two reporting periods. - Status of contractually defined deliverables, milestones, and walkthroughs scheduled in the project schedule. - Updating of information on a weekly basis in the State project and portfolio management tool. - Other information as needed (per Contractor or the State). Frequency of periodic reports can be adjusted during the course of project as agreed by the State and Contractor.	R1.01
I1.14	The Contractor will develop monthly progress reports. The progress report will include deliverables, milestones, walkthroughs, the State approvals, and lessons learned and will be used by the Contractor and the State in measuring the Contractor's progress and performance. The report will also contain: - Issues, problems, and corrective actions, steps, and assignments. - Risks and mitigations. - Total budget and cost variance reporting - Lessons learned - Percentage complete - Resources and time required to completion	R1.01
I1.15	If the Contractor must substitute key staff during the project, the Contractor will submit to the State, in writing, the reason for the change and provide a completed staff experience reference form and resume for the substitute personnel. The State will either approve or reject the substitution.	R1.01
I1.16	The Contractor will provide contract close-out plans and manage project close-out activities in accordance with the plan.	R1.01
I1.17	As part of the proposal, the Contractor will describe the staffing approach and methodology used for the project, which will include: - Estimated number of Contractor's resources needed per each phase of the project. - The number of staff resources within the following categories: Management, Business, and Technical. - The number of staff resource onsite vs. remote per the phase of the project - A description of the methodology used for releasing and adding staff to the project and managing staff PTOs - Outsourcing staff if applicable - Types and number of resources that State needs to provide per the phase of the project and expected hours from those resources - Providing a project organization chart.	R1.01

I1.18	The Contractor will describe issue escalation process to settle matters of dispute as it relates to roles, responsibilities, or unmatchable level of service (i.e. what is their escalation chain) and this will be aligned with the State's escalation plan.	R1.01
I1.19	The Contractor will describe their approach to remediate and realign the project and project plan in the event that the Contractor or the State decides that any aspect necessitates immediate attention and/ or State/Contractor management intervention.	R1.01
I1.20	The Contractor will provide a minimum of one full time assigned PMI Certified project manager.	R1.01
I1.21	The Contractor will describe their approach regarding the project documentation repository. The Contractor is recommended to align with the State's document repository. In case the Contractor cannot, they must provide justification as to why their proposed repository works well in the best interests of the State	R1.01
Environment Installation and Configuration Requirements		
Number	**Requirement Description**	**Planned Release**
I2.1	The Contractor will submit to the State as part of their proposal, specifications for all necessary hardware, software and tools for the seven (7) environments listed here. The Contractor can propose to combine certain environments, where appropriate. The seven (7) environments include: 1. Production 2. Disaster Recovery 3. Staging (QA) 4. Training 5. UAT 6. Test 7. Development Contractor will submit as a component of proposal specifications for all software, hardware, and tools that would be inclusive of a full SDLC, including environment to support the following needs: Prod, QA, Staging, Development, Test, Training, Disaster Recovery	R1.01
I2.2	The Contractor will develop a technical infrastructure document which describes all of the hardware, system software and tools necessary for each of the environments proposed	R1.01
I2.3	The Contractor will develop an environment configuration manual that describes the environment installation and configuration necessary for each of the environments	R1.01
I2.4	The Contractor is responsible for installing and configuring all hardware, software and tools purchased under the contract until System acceptance for the proposed environments	R1.01
I2.5	The Contractor is responsible for maintaining all hardware, software and tools purchased under the contract until System acceptance for all proposed environments	R1.01

I2.6	The Contractor will provide the State with well documented, readable source code and object (executable) code, documentation for all functionality developed by the Contractor outside of COTS configuration, licenses to readable source code and object (executable) code, and documentation for all COTS functionality and escrow of source code for the custom developed or integration related code. All new software functionality built on top of COTS software will be owned by the State.	R1.01
I2.7	The Contractor will provide a data dictionary, data models, data flow models, process models and other related planning and design documents to the State (R1.01)	R1.01
I2.8	The Contractor will provide an exit plan and strategy in the Contractor's System Implementation Plan deliverable addressing portability of solution in case the State wants to bring the solution back in-house (R1.01)	R1.01
Knowledge Transfer & Training Requirements		
Number	**Requirement Description**	**Planned Release**
I3.1	The Contractor will develop (in cooperation with the State) and execute a Knowledge Transfer and Training Plan that describes roles and responsibilities of the State and Contractor and the approach for bringing managers, end Users, and technical personnel to an appropriate level of understanding with the Contractor's System	R1.01
I3.2	The Knowledge Transfer and Training Plan will address and describe, at a minimum - Training goals/standards and the specific plan for training technical personnel and end Users. - Size of population and types of roles that need training - Strategy for providing training early in the project to allow the training goals to be implemented throughout the project life Phase. - Tasks, deliverables and resources necessary to complete the training effort and identify tools and documentation that will be necessary to support proposed effort. - Types of training, the specific courses and course materials, the training approach for both technical personnel and end Users, and how training effectiveness will be measured and addressed. - Deliverables to support initial and ongoing training including User manuals, System manuals, and on-line help and training materials for technical/non-technical personnel. - Knowledge Transfer to enable the State personnel to operate, maintain, configure and modify The Contractor's System including operation of the testing tools, supporting infrastructure, and security as agreed between the State and Contractor. - Metrics for tracking progress in achieving training and knowledge transfer objectives. - Reporting progress of training and knowledge transfer activities. - Additional training for technical staff on development, reporting and maintenance including processes and tools as needed	R1.01
I3.3	The Contractor will provide train-the-trainer and end User training documentation (including User manuals, online content, reference cards, etc.)	R1.01
I3.4	The Contractor will provide the State a training course outline for review and acceptance at least thirty (30) calendar days prior to the beginning of scheduled training	R1.01

I3.5	The Contractor will submit all training packages to the State for review and acceptance at least twenty-one (21) calendar days prior to the beginning of scheduled training	R1.01
I3.5-1	The Contractor will submit all training packages to the State for review and acceptance at least seven (7) calendar days prior to the beginning of scheduled training	
I3.6	The Contractor will provide (customized as required) training manuals for all classroom training they provide (	R1 FINAL
I3.7	The Contractor will provide all training materials developed for The Contractor's System to the State. Those materials will become the property of the State and may be modified and duplicated by the State	R1.01
I3.8	The Contractor will provide electronic copies of all training materials (end-User, technical, trainee and instructor) in a format that can be easily accessed, updated and printed by State staff using software for which the State owns licenses, prior to deployment onto the staging platform. This includes but not limited to CDs/DVDs, and online.	R1.01
I3.9	The Contractor will provide updated training documentation for all departments and agencies using the platform, as necessary, to incorporate new processes or functionality due to system releases, upgrades, or changes throughout the contract term	R1 FINAL
I3.10	The Contractor will schedule all training during regular work hours as approved by the State, unless the Contractor receives advance approval from the State for specific training at other times (R1.01)	R1.01
I3.11	The Contractor will provide all training within the State of Vermont at locations convenient to the attendees of the training, unless the Contractor receives advance approval from the State for specific training at other locations	R1.01
I3.12	The Contractor will schedule staff training in a manner that is least disruptive to the normal business operations	R1.01
I3.13	The Contractor will provide instructions to the State on Contractor tools and procedures used to support the training	R1.01
I3.14	The Contractor will ensure that Contractor staff members are not assigned to train State staff and work on critical path development tasks concurrently	R1.01
I3.15	The Contractor will assist the State in developing end-User training on The Contractor's System business functionality	R1.01
I3.15-1	Contractor will work with state in developing end-User training on The Contractor's System business functionality	R1.01
I3.15-2	The State will assist the Contractor in developing end-User training on The Contractor's System business functionality	R1 FINAL
I3.16	The Contractor will provide both end-User classroom training/Train-the-trainer sessions and on-line, interactive training as agreed with the State for all end-Users	R1.01
I3.17	The Contractor will develop and perform train-the-trainer training sessions, as appropriate	R1.01

I3.18	The Contractor will identify the number of staff necessary for maintenance and operations of the Contractor's System as well as the skill sets necessary, with the State's agreement	R3-R4
I3.19	The Contractor will develop and provide training for the technical support staff including State staff and contractors	R2-R4
I3.20	For the duration of the contract, the Contractor will continue to provide training to the technical staff if system upgrades have been installed and there is a change in System components functionality	R2-R4
I3.21	The Contractor will create a training approach and needs analysis early in each project Phase which will determine the training requirements. The State of Vermont has invested in the Oracle User Productivity Kit (UPK) and has a strong preference to use this investment to provide training to end Users.	R1.01
Solution Design, Development & Customization Requirements		
Number	**Requirement Description**	**Planned Release**
I4.1	The State utilizes a structured Software Development Life Phase (SDLC) that is consistent with industry-standard best practices as well as State requirements for Information Technology projects. The Contractor must use a structured SDLC process, including an iterative software development methodology and incremental deployment of functionality to the production environment. This includes software and database design, Solution configuration management plan and procedures, and User interface standards.	R1.01
I4.2	The Contractor will develop an System Software Development Life Cycle Plan	R1.01
I4.3	The Contractor must submit a narrative describing the design and development approach and methodology with their proposal	R1.01
I4.4	All change request cost estimates must include the use of a cost analysis tool	R1.01
I4.5	The Contractor will incorporate the design and development approach into a comprehensive Design and Development Plan	R1.01
I4.6	The Contractor will apply consistent development standards for all development works as described in offertory's SDLC such as coding convention, database and field naming convention	R1.01
I4.7	The Contractor will provide the State access to both source/object codes for software components and documentation	R1.01
I4.8	The Contractor will acquire authorization from the State for the use of production System resources (legacy data or source files), or data derived from the State's production resources	R1.01
I4.9	The Contractor will describe the overall testing approach and methodology used for The Contractor's System deployment. The Contractor will work with the State's Business Units in fine tuning the testing approach and get the State's approval before starting the testing phase	R1.01

I4.10	The Contractor will incorporate the testing approach into a comprehensive Test Plan. The Test Plan will include the procedures for documenting the completion of each test phase, test scripts, test conditions, test cases, and test reports. Detailed test plans will be created for the following testing areas: - Integration Testing - Security Testing - Performance Testing - User Acceptance Testing - Operations Acceptance Testing All Integrated System Testing will be performed on the Enterprise Testing platform while the UAT will be performed on the Staging platform. No testing may be conducted on the production platform and all testing must be completed prior to deployment.	R1.01
I4.11	The Test Plan must, at a minimum, include the following areas: - Test philosophy (including objectives, required levels or types of testing, and basic strategy (developing, testing and release of major subsystems/components). - Procedures and approach to ensure the testing will satisfy specific objectives and demonstrate that the requirements are met. - Procedures and approach to ensure that each phase of the testing is complete, and how formal reports/debriefings will be conducted for each phase of testing. - Approach to define tested workload types (performance testing) and test data - Overview of testing facilities, environment and specific testing tools to be used. - Overview of processes and procedures that will be used by the Contractor for releasing testing results and review of test results. - Process and procedures for tracking and reporting for results/variances/defects will be tracked and reported. - State resources required for testing during the development life cycle for each testing area. - Method for review of test cases and procedures - Configuration management of the test environment - Describe User Acceptance Testing and User Sign-Off - Plan and deliverables for each testing area described above - Contractor is responsible for providing detailed instructions in modifying any desktop configuration settings prior to the commencement of System testing.	R1.01
I4.12	The Test Plan will provide a detailed description of each test required to ensure that all of The Contractor's System components, interfaces, and components comply with the requirements and specifications	R1.01
I4.13	Testing and Development will have their own environments, separate from Production. Testing or development will not be performed in the production environment.	R1.01
I4.14	The Contractor will repeat the test life cycle when a failure occurs at any stage of testing (e.g., a failure in Acceptance Testing that necessitates a code change will require the component to go back through Unit Testing, Integration Testing, and so forth)	R1.01
I4.15	The Contractor will be responsible for building test plans, executing test plans, and creating reports. The State will evaluate the Contractor test plans, and Contractor test results, and may validate the testing done by augmenting it with State testing.	R1.01

I4.16	The Contractor will document the testing tools, test configurations and related documentation. The Contractor will provide all necessary performance testing scripts with input from the State's Business Units. The State will have the final say on what is an acceptable performance.	R1.01
I4.17	The Contractor will provide the State with the test scripts, test results and quality reports	R1.01
I4.18	The Contractor will provide staff to the State to answer questions and address any problems that may arise during testing conducted by the State	R1.01
I4.19	The Contractor will refine the test documents, procedures, and scripts throughout development and through full System acceptance to reflect the as-built design and current requirements	R1.01
I4.20	The Contractor will allow the State to run validation and testing software against externally facing Internet applications to help identify potential security issues, and must agree to repair any deficiencies found during this testing	R1.01
I4.21	As System events contain date and time-sensitive elements, the testing infrastructure must provide a method of altering and synchronizing the Contractor's System date throughout each test phase. This requires the ability to change the Contractor's System date and time in some scenarios.	R1.01
I4.22	The Contractor must develop a comprehensive Defect Resolution Management Plan that describes the approach to be taken in managing all problems discovered during any testing phase and in production	R1.01
I4.23	The Contractor will install and test a single Defect Resolution Tracking System that the Contractor and the State will use collaboratively for the tracking of System defects, security, and System issues	R1.01
I4.24	The Defect Resolution Tracking System must, at a minimum, include: - All defects in The Contractor's System identified during any testing phase must be recorded, prioritized, tracked, and resolved in a timely manner. Each must be assigned a "Defect Level" based on the following definitions: 1. Critical - Results in a complete System outage and/or is detrimental to the majority of the development and/or testing efforts. There is no workaround. 2. Serious - System functionality is degraded with severe adverse impact to the User and there is not an effective workaround. 3. Moderate - System functionality is degraded with a moderate adverse impact to the User but there is an effective workaround. 4. Minor - No immediate adverse impact to the User. - The Contractor will allow the State full access to the Defect Resolution Tracking System. - The Defect Resolution Tracking System will be designed in a manner to allow for the transfer of ownership to the State following contract completion. - The processes and management of the Defect Resolution Tracking System will be addressed as part of the Quality Management Plan. - The Contractor will address defect as such: Critical and serious defects will require remediation and retesting before The Contractor's System enters production. Moderate and Minor defects will be fixed and tested to the State' satisfaction prior to System acceptance.	R1.01
14.25	All components of the Contractor's System will accommodate leap year processing and daylight savings time start/end dates	R1.01

I4.26	The Contractor will compare and contrast the design of System components to CMS architectural standard. The Contractor will apply a documented and structured Architecture Development Methodology (ADM) for the design of System components. The Contractor will provide all necessary performance testing scripts with input from the State's Business Units. The State will have the final say on what is an acceptable performance.	R1.01
Deployment Requirements		
Number	**Requirement Description**	**Planned Release**
I5.1	The Contractor will describe the implementation approach and methodology to be used for the Contractor's System	R1.01
I5.2	The Contractor will incorporate the implementation approach into a comprehensive Implementation Plan which will be added to other PM plans as part of the PMO. The State requires incremental deliveries of functionality to the production environment. The State anticipates considerable collaboration with the Contractor in the plan's construction, with particular attention to high complexity components of the existing the State systems as well as the proposed System.	R1.01
I5.3	The Implementation Plan must include information on technical challenges, deployment schedule phasing. The Implementation Plan will: - Deliver Systems that include a significant portion of the technical infrastructure early in the schedule, without compromising the quality or inherent security of The Contractor's System. This should also validate the design and architecture. - Expose technically challenging areas of the project as soon as possible. - Deliver customized functionality to the State in incremental pieces that are in logical business application sequence.	R1.01
I5.4	The Contractor will develop a Capacity Plan to include, at minimum, the following areas: - System workload assumptions - A description of how System capacity and capacity requirements were calculated, including all formulas and calculations used in capacity planning for the State. - A description of how System capacity requirements will be met. - How capacity issues will be managed for all components of the State project. - Descriptions of how capacity utilization will be monitored and capacity thresholds will be established. - A description of corrective and escalation processes that will be used in the event any capacity thresholds are reached.	R1.01

I5.5	Disaster recovery requirements relative to the physical System components and planning for recovery from operational failures are the responsibility of the Contractor. The Contractor will develop an Operational Recovery Plan that addresses the following: - Areas of the most susceptible to failure or disaster that would result in downtime. - Recommendations for System recovery processes, or steps to take in the event of a downtime event. - Recommendations for the State on how to comprehensively and effectively mitigate the risk of a downtime event. - Recommendations for securing The Contractor's System components during a period of emergency operation. - Testing Failover and DR while on Staging Platform after testing has concluded and prior to deployment on Production Platform. - DR requirements must include networking DR for Datacenter access.	R1.01
I5.6	The Contractor will describe the interface management approach and methodology used for The Contractor's System Project	R1.01
I5.7	The Contractor will incorporate the interface management approach into a comprehensive Interface Management Plan for all interface mechanisms used for System (e.g. batch, ESB/web services). The Interface Management Plan will be used by the State to document the plan for integrating The Contractor's System with all systems internal and external to the State. The Interface Management Plan will, at a minimum, document the following areas: - The approach to developing and managing internal and external System interfaces. - Technical tools that will be used for data transformation, transport and error recovery. - A description of how the Contractor's development standards will be reconciled, to reflect use of ESB and web services as wrappers to legacy systems. The Contractor should produce example scenarios for integration reflecting their infrastructure components and toolset. - Tasks, deliverables and resources necessary to complete interface development and implementation. - Description of how The Contractor's System development and test systems will work with the external interfaces. - References to applicable sections in the relevant design documents that describe how The Contractor's System will be synchronized with the specific internal and external interfaces. - References to applicable sections in the detailed design that describe the mappings between internal and external System data and The Contractor's System data. - Descriptions of the process for managing changes to the interfaces, both in the production and non-production environments - Interface(s) needed for maintaining data synchronization between an interim production System and the final production implementation. - System interfaces, data format, frequency of updates and expected data volume. - Process for interfacing and collaborating with interface partners, including roles, responsibilities, deliverables and timelines. - How the State development and test systems will work with the external non-production interfaces. - Interface tools	R1.01
I5.8	The Contractor will validate that each interface is working correctly. The Contractor will repair all interface-related problems caused by Contractor-developed interfaces.	R1.01
I5.9	The Contractor will assist the State in identifying root causes for all System interface related problems	R1.01
I5.10	The Contractor will develop a Software Configuration Management Plan	R1.01

I5.11	The Contractor will provide a software configuration management System to store, control, and track instances (baselines during the construction life cycle) of all software configuration items that will be developed for the Contractor's System	R1.01
I5.12	The Contractor must use a widely used "industry standard" software configuration management tool	R1.01
I5.13	The Contractor will describe the requirements management approach and methodology used for The Contractor's System Project	R1.01
I5.14	The Contractor will incorporate the requirements management approach into a comprehensive Requirements Management Plan. The Requirements Management Plan will be used by the project to assure that requirements are met. The Requirements Management Plan will, at a minimum, address the following areas: - Establishment of a baseline for existing requirements. - Management of versions of requirements. - Establish and maintain the State's requirements traceability matrix that will be used for requirements management, and will map where in the software a given requirement is implemented. - A requirements change control process. - A methodology for managing requirements in an iterative development life cycle. - Procurement, installation, and administration of requirements management tools. - A description of the relationship between the requirements management role and the other roles (i.e. test management, quality assurance management) on the project. - Publishing of standard reports related to requirements management.	R1.01
I5.15	When functionality is ready to be delivered to the State for User Acceptance Testing (UAT), it will be delivered in the form of a pre-production release (defined as ready for production in every respect but just not yet in production). Since the State will approve all releases into production, a pre-production release is equivalent to a production release and requires the rigor associated with a production release. Upon successful completion of UAT, the State will schedule a release to be moved to the production environment. Each pre-production release will include the following: - Release-specific hardware and software System components. - Release description including architecture or design updates, new functionality introduced, defects fixed, modifications to interfaces with other systems, other changes to existing code, and any software and hardware configuration changes. - Release contents including a description of the release structure and contents and instructions for assembling and/or configuring the components of the release. - Test Plan and test execution results. - Detailed hardware and software configuration information including any software and hardware dependencies and instructions at a level of detail that will enable administration staff to rebuild and configure the hardware environment without outside assistance. - Database documentation conforming to industry standards. - Detailed configuration information for any 3rd party hardware and software. The Contractor will provide updated documentation when System upgrades to software or equipment occurs through the life of the contract.	R1.01

I5.16	Deployment will be iterative from both a business process and applied technology perspective and will be accepted by the State through application of the acceptance criteria in testing plans	R1.01
I5.17	The Contractor will deliver to the State a requirements traceability matrix for all delivered functionality, showing all testing activities tracing to delivered functionality, and all delivered functionality tracing to requirements in the requirements repository	R1.01
I5.18	The Contractor will assist the State with testing and release preparation in the pre-production environment (R1.01)	R1.01
I5.19	The Contractor must produce and execute an Implementation Support Plan	R1.01
I5.20	The Contractor must provide support staffing information such as the proposed number, ratios, duration, and roles/responsibilities for on-going support (as identified in previously submitted implementation approach and plan)	R1.01
I5.21	The Contractor must assess the pre-implementation readiness of each part of the organization and will document the status in a pre-implementation readiness assessment. The Contractor will conduct an implementation readiness review ten days prior to cutover at each part of the organization.	R1.01
I5.22	Upon successful completion of the pre-production testing, the Contractor will, in coordination with the State, create a Production Release Plan that will consist of an updated Pre-Production Release notification to assist the State in successfully releasing and maintaining The Contractor's System in the Production environment. It must include, but not be limited to, the following components: - Updated Configuration Information required satisfying The Contractor's System production configuration management requirements. - Updated System Architecture. - Updated Detailed Design, including detailed system, technical, and User documentation. - Deployment schedule - Blackout plan (complete/incremental)	R1.01
15.23	The Contractor will provide data conversion from legacy systems to new System	R1.01
Quality Management Requirements		
Number	**Requirement Description**	**Planned Release**
I6.1	The Contractor will describe the quality management approach and methodology used for the Contractor's System with input from the Business Units	R1.01

6.2	The Contractor will develop a Quality Management Plan to describe the approach they will use to ensure the quality of The Contractor's System and the~~y~~ work they perform. The Plan will include at least the following items: • The State's management of the requirements. This includes the identification of inconsistencies between the requirements, and the project's plans and work products. • The State's requirements traceability matrix that will be used for requirements management, and will map where in the software a given requirement is implemented. • The State's configuration management activities that include: baseline control, and monitoring the software library. Approved changes to baseline software and/or documentation should be made properly and consistently in all products, and no unauthorized changes are to be made. • The practices and procedures that will be followed for reporting, tracking, and resolving problems or issues identified in software development, System transition, and System maintenance. • The business process changes resulting from The Contractor's System. • A change readiness assessment of the State's organization. This may include a gap analysis and recommendations for organization change required to support The Contractor's System. • The quality of work products developed and delivered by Contractor's sub-Contractors/partners, if applicable. • A metrics process that describes how measurements will be identified, collected, and analyzed to ensure that quality goals, including management and The Contractor's System goals, are being met. It should also describe the types of project metrics used. • The Contractor's organizational structure, and the roles and responsibilities of Contractor staff as they relate to quality management. • Description of the processes and management of the Defect and Issue Tracking System for resolution of items and, if applicable, how corrective action plans will be developed to address more significant issues.	R1.01

Production Support and Transition Requirements

Number	Requirement Description	Planned Release
O1.1	The Contractor will describe the production support and transition approach and methodology for the Contractor's System as agreed between the Contractor and the State	R1.01
O1.2	The Contractor will incorporate the production support and transition approach and readiness assessment into a comprehensive Production Support and Transition Plan complying with the System architectural design, that will describe how the Contractor intends to support the System and transition that support over to the entity responsible for on-going production operations and support	R1.01
O1.3	The Contractor will provide the State with regularly updated list of personnel, contact information, and their area of expertise of who will be performing System production support. Frequency of update will be agreed between the Contractor and the State.	R1.01
O1.4	The Contractor will identify the root cause of corrupted data, identify System for fix and repair corrupted data that is associated with a problem in the System	R1.01
O1.5	With concurrence from the State, the routine planned maintenance activities will be scheduled without disrupting the negotiated operational hours. Contractor will provide the State with a copy of the schedule at least 30 days in advance of the scheduled maintenance date for approval.	R1.01

O1.6	The testing tools and test configurations will be provided to the State and responsible entities and appropriate training to the State personnel will be provided as the System are transitioned into support	R1.01
O1.7	The Contractor will provide instructions and training for responsible entity support staff that may need to access and support the System remotely (e.g. through PDAs, tablet PC's through a VPN)	R1.01
O1.8	The Contractor will develop an automated process for purging production System files ad determined but the State data governance	R1.01
O1.9	Upon completion of any maintenance call, the Contractor will furnish a maintenance activity report to the State within 24 hours and provide any clarification to the questions as needed, which will include, at minimum, the following: - Date and time notified. - Date and time of arrival. - If hardware, type and serial number(s) of machine(s). - If software, the module or component name of the affected software code. - Time spent for repair. - List of parts replaced and/or actions taken. - Description of malfunction or defect. - Description of root cause of malfunction or defects - Description of fixes	R1.01
O1.10	The Contractor will produce a System Operation Manual, which will serve as an operator's instruction manual. It will include System administration procedures and describe the scheduled operations of the production system. It will include but not limited to specific instructions on things an operator needs to do to manage The Contractor's System on a daily basis, descriptions of administrative tasks, instructions on how to run the job, and what to do in abnormal situations.	R3
O1.11	The Contractor's System component documentation will include at a minimum: (- A Data Dictionary - Data Model(s) - Interface design specifications - Passwords & activation codes - A Developer's Manual outlining and detailing operating, maintenance, development, processes, standards, procedures, plus any other technical information required to fully support the application. - Operations Phases and procedures including batch or background process schedule, dependencies, sequencing, and timing. - Administrative Tasks including User's administration, System security administration, reference data maintenance, creation of report templates and maintenance of service provider data and contracts. - Other reference materials and presentations required to supplement the training and support activities.	R1.01
O1.12	The Contractor will develop a High Availability & Disaster Recovery Plan for the entire System driven by State's Recovery Time Objectives	R1.01
O1.13	The Contractor will provide documentation that describes the procedures for System administrators to add, update or remove User IDs and passwords	R1.01

O1.14	The Contractor will submit a Service Desk Support Plan for use by the responsible entity service desk addressing the item including but not limited to: - Overview of support strategy assuming that the State will provide tier 1 help desk support - Help and Service desk design - Help and Service desk operations (processes and procedures) - Incident management procedures and processes including escalation - Problem management procedures and processes - Reporting	R1.01
O1.15	The Contractor will provide the responsible entity with help and service desk scripts and decision trees for tier 1 help desk and tier 2+ service desk support	R1.01
O1.16	The Contractor will provide a Transition-Out Plan at minimum six months prior to production support contract expiration. The Plan must contain transition task descriptions for the transitioning services over to another Contractor or Vermont, an organization chart, and job descriptions for all support staff.	This is an M&O Deliverable
O1.17	The Contractor will provide instructions and training for responsible agency support staff that may need to access and support The Contractor's System remotely	R4
O1.18	The Contractor will agree to continue normal operations activities until completion of Transition-Out Plan activities and readiness assessment result is approved by the State	This is an M&O Deliverable
Defect Resolution and System Acceptance Requirements		
Number	**Requirement Description**	**Planned Release**
O2.1	During the maintenance period (when no design, development and implementation (DDI) is occurring), the maximum time to restore the functionality of The Contractor's System and resolve incidents will be within the timeframes listed below: • Severity Level One incidents will not exceed four (4) hours between the opening of an incident and final closure, unless a time extension is approved by the State. • Severity Level Two incidents will not exceed twenty four (24) hours between the opening of an incident and final closure; unless a time extension is approved by the State. • Severity Level Three , Four and Five incidents are prioritized and worked via the standard Defect Resolution process.	R1 FINAL

O2.2	Upon System acceptance, The Contractor's System will be considered completely transitioned to production within the State or the State's hosting partner (the responsible entity) environment and moved into the Maintenance and Operations (M&O) phase. To prepare the State for this transition, the Contractor, the State's hosting Contractor and the State will collaboratively integrate the M&O Plan into the State's M&O Plan. The Contractor will develop a formal methodology to be used by the State and its hosting Contractor to manage and operate The Contractor's System during M&O that is documented in the State M&O Plan(s). The M&O Plan will incorporate methodologies and practices which will assist the State and its hosting Contractor in successfully managing the M&O life cycle and will address at least the following areas: • Support Model • Triage Procedures • Tools • Identification of Roles and Responsibilities of support personnel • Release Management • Upgrades • Maintenance • On-going Operations • Customer Support • Specific support procedures for production • Deliverables - Requirement Traceability Matrix, Architecture and design, test procedure, case, and scripts • Resource Requirements (staff loading) • Capacity Management • Technology Refresh • System Security • Backup and Recovery • Disaster Recovery • Defect/Issue management	R1.01
System Administration Requirements		
Number	**Requirement Description**	**Planned Release**
O3.1	The Contractor's System will provide data archiving capabilities based on State defined criteria (R1.01)	R1.01
O3.2	The Contractor's System will provide the capability to move all historical, expired and/or unnecessary data to offline storage according to a set of business rules and schedule to be defined by the State as a part of the ongoing system operational decision making (R1.01)	R1.01
O3.3	The Contractor's System will maintain an archival process so that accumulated historical records and log files do not consume large amounts of disk space (R1.01)	R1.01
O3.4	The Contractor's System will provide an auto archive/purge of the log files to prevent uncontrolled growth of the log and historical records storage using administrator-set parameters (R1.01)	R1.01
O3.5	The Contractor's System will provide version control capabilities to ensure the integrity of all software releases (R1.01)	R1.01
O3.6	The Contractor's System will provide logging and reporting for accessing errors and exceptions (R1.01)	R1.01
O3.7	The Contractor's System will monitor and provide reports on any unauthorized access (R1.01)	R1.01
O3.8	The Contractor's System will provide User privilege reports on demand. The format shall minimally provide role, last login, date of account creation, account type. (R1 FINAL)	R1 FINAL
O3.8-1	The Contractor's System will provide User privilege reports on request. The format shall minimally provide role, last login, date of account creation, account type. (R1.01)	R1.01
O3.9	All System communications will be protected by at least 256-bit encryption (	R1.01
O3.10	The Contractor's System will be supported by public key/private key encryption Secure Socket Layer (SSL) certificates	R1.01

O3.11	The Contractor's System will provide admin tools and maintenance routines to change access rights quickly	R1.01
O3.12	The Contractor's System will use firewalls and Demilitarized Zones (DMZs) for external access and remote access	R1.01
O3.13	The Contractor's System will allow System administrators to create and manage User accounts	R1.01
O3.14	The Contractor's System will prevent creation of duplicate accounts	R1.01
O3.15	The Contractor's System will allow System administrators to assign status and permissions to User accounts	R1.01
O3.16	The Contractor's System will allow a system administrator to create new roles and profiles	R1.01
O3.17	The Contractor's System will allow system administrators to create and manage User roles	R1.01
O3.18	The Contractor's System will have the option to indicate the type of User to be set up (e.g. System Administrator, Case Manager)	R1.01
O3.19	The Contractor's System will allow the grouping of multiple roles for the purpose of assigning access rights to those roles.	R1.01
O3.20	The Contractor's System will create a User profile for the new User	R1.01
O3.21	The Contractor's System will assign a User the proper access roles and create a User name and temporary password (	R1.01
O3.22	The Contractor's System will have the capability to automatically deactivate a User account if there has been no log-in for a specified time (e.g., 90 days). The deactivation policy, related rules and final review requirements to be configurable by the State.	R1 FINAL
O3.23	The Contractor's System will lock out a User after a specified number of failed log-in attempts	R1.01
O3.24	The Contractor's System will provide an online mechanism to unlock Users	R1.01
O3.25	The Contractor's System will display all current User-specified preferences (if existing) or default preferences (if none exist)	R1.01
O3.26	The Contractor's System will allow Users to set up or modify User preferences with possible override by designated supervisor within each department. Preferences may include but are not limited to: a) Preferred method of communication (e.g., email, SMS, phone) b) Subscription to alerts and notifications (e.g., changes to member record, new messages, referral changes) c) Notification types desired	R3
O3.27	The Contractor's System will display the selected preferences and allow the User to confirm or modify preferences	R3

O3.28	The Contractor's System will send a notification to the User that the personal preferences have been updated	R1 FINAL
O3.29	The Contractor's System will have the ability to provide online role-based access (as assigned/decided by VT) to case management data, including but not limited to: a) Program data and imaged documentation b) Member information (e.g., hospitalization, LTC facility, pharmacy, PA information , State Plan services) c) Claims data (medical, pharmacy) d) Historical case, claims and enrollment data e) Eligibility information f) Benefit packages g) Provider information h) Case notes i) Case activity codes j) Others as identified by VT and accepted via formal change control	R1.01
O3.30	The Contractor's System will have the ability to provide Users role-based access (as assigned/decided by VT, roles to be determined) to case management data. Users can be defined as any of the following: a) VT staff b) Nurses c) Other State agencies d) Contractors e) Social workers f) Other entities as defined by VT	R1.01
O3.31	The Contractor's System will allow System administrators to create User groups to manage workflow	R2
O3.32	The Contractor's System will allow System administrators to assign Users to particular local offices	R4
O3.33	The Contractor's System will allow System administrators to assign Users to particular User groups / units	R1.01
O3.34	The Contractor's System will allow System administrators to assign Users to particular supervisors	R3-R4
O3.35	The Contractor will establish an automated maintenance routine that will at a minimum: (R1.01) - backup the User IDs and password data - identify expired IDs and related data	R1.01
O3.36	The Contractor will use offsite storage. Data backup should be stored offsite in the event of a physical disaster	R1.01

O3.37	The Contractor will provide a combination of disk and tape (or equivalent) backups to protect Vermont data. With procedures in place for regular backup protection with a defined timeline and scheduling. Backups of Vermont data will take place using dedicated backup servers and tape (or equivalent) libraries. Unless otherwise required by law, backup tapes will be encrypted, labeled, and shipped to a secure, fire-safe off-site storage vault facility managed by a Payment Card Industry (PCI) Data Security Standard certified Third Party Contractor where they will be retained in accordance with requirements. The backup tapes will be transported to the off-site facility on a daily basis by the third-party storage Contractor. The Contractor will provide documentation of processes for archiving and retrieving material from the off-site storage Contractor.	R1.01
System Management Requirements		
Number	**Requirement Description**	**Planned Releaase**
O4.1	The Contractor's System will have the ability to generate administrative alerts and warnings when statistics indicate an impact or potential limits on System component performance and availability. The specific alerts will be defined by the hosting services provider. The State has a preference for the Oracle Performance Management toolsets such as Oracle Enterprise Manager, Grid Control, etc.	R1.01
O4.2	The Contractor's System will allow for all changes/updates to the distributed components to be administered and completed centrally and available immediately to all source systems and sites	R1.01
O4.3	The Contractor's System will provide Service Level Agreement (SLA) monitoring and reporting capabilities. Service Level definitions will be drafted into a single document provided as an attachment.	R1.01
O4.4	The Contractor's System will securely support remote control access (i.e. support personnel ability to take over the User device for troubleshooting and support) capabilities deployed for any type of User workstation	R1.01
lO4.5	The Contractor's System will provide event management and monitoring functionality according to Information Technology Infrastructure Library version 3 (ITIL v3) or equivalent best practices	R1.01
O4.6	The Contractor's System will provide Application Performance Monitoring and Management capabilities (i.e. transaction monitoring, synthetic transactions, component root cause analysis (e.g. Application Server Management)	R1.01
O4.7	The Contractor's System will provide State searchable transaction tracking and log consolidation capabilities across all tiers of the application	R1.01

APPENDIX III– Non-Enumerated Functional Requirements

Appendix III. Non-Enumerated Functional Requirements	
Contract # 28739 **Non-Enumerated Functional Requirement Number**	**Section Title**
NE	**Non-Enumerated Functional Requirement**
NE1	General (includes Document Management; Member, Authorized Representative, and Community Provider/Partner Portal; Alerts and Notifications; Workflow Management; Centralized Mailing)
NE2	Establish Case Criteria (includes Rules Management; Candidate Identification / Risk Stratification; Eligibility Determination)
NE3	Establish Case (Intake: Outreach; Case Assignment)
NE4	Perform Screening and Assessments
NE5	Manage Treatment Plan and Outcomes
NE6	Manage Case Information (includes Case Documentation; Scheduling; Disposition; Transition; Care Coordination; Case Closure)
NE7	Manage Population Health Outreach
NE8	Manage Registry
NE9	Authorization Determination (includes Referral Management; Service and Treatment Plan Authorization)
NE10	Reporting
NE11	Consent Management
	Sample List of Reports

General		
Document Management		
Requirement number	**Requirement**	**Planned Release**
NE1.1	allow the end-Users to work with scanned images or PDFs at their point of origination without leaving the Contractor's workflow and User interface	R1 FINAL
NE1.22	notify the appropriate case manager for that specific member that the document (and document type) has been received.	R2
NE1.3	based on document type and other information within the artifact itself, notify the case manager of appropriate action.	R4

NE1.4	, based on document type and other information within the artifact itself, notify other appropriate Users of appropriate action	R-R4
NE1.5	if appropriate, schedule follow-up based on the document type and artifact content	R3
NE1.6	The text will be stored as a component of all uploaded images and made available as a searchable field to locate the scanned image.	R4
NE1.7	Other dynamic content includes User entered data that is populated from predefined fields in the Contractor's System such as notes, comments, and letter specific text.	R1 FINAL
NE1.8	Prompt persons (State employee, Contractor) during the letter creation step of the Correspondence module.	R2
NE1.9	These text fields will include a required field constraint.	R2
NE1.10	Pre-populate future, or static date based on business rules.	R2-R3
NE1.11	enter freeform text in letters that can be applied to all selected or identified members.	R2
NE1.12	Edit pre-populated date	R2
NE1.13	Allow User to freely navigate and allow information to be changed on any page of the wizard prior to submission.	R1 FINAL
NE1.14	Allow for Users to be edited	R1 FINAL
NE1.15	Allow for Users to be deactivated	R1 FINAL
NE1.16	Shall also allow for password sets/resets.	R1 FINAL
NE1.17	A role encapsulates specific User type scenarios in the Contractor's System through a predefined set of permissions. These permissions will be mutually exclusive from roles and will be assigned directly to a User in addition to a role. These permissions can be applied at the data field level	R1 FINAL
NE1.18	Include a configurable service-oriented workflow engine to allow the modeling of business processes and the execution and management of workflows. Activities to be modeled include assign.	R1 FINAL
NE1.19	Execute the appropriate event at each step of the workflow process, based on that step of the process.	R1 FINAL
NE1.20	Provide a workflow engine that allows the User to graphically model the workflow processes and easily update them without a core release of the Contractor's System requiring no downtime.	R1 FINAL
NE1.21	Generate Alerts and Notifications based on business rules as necessary	R1 FINAL
NE1.22	library of alerts and notifications to which will be preconfigured rules that can be "attached" to a specific member or defined globally.	R3

NE1.23	Present the User, when logging in, with a pop-up box informing the User of new or unconfirmed alerts or notifications that have been generated and allow the User to navigate to the alerts sections of the Contractor's System to read and address each alert/notification.	R1 FINAL
NE1.24	Additionally, to a login prompt, as a User is actively working in the Contractor's System a dashboard indicator will appear to let the User know an alert or notification has arrived.	R1 FINAL
NE1.25	Employ Business Rules Management, which will provide the components to author, test, deploy and maintain complex rules that leverage any data captured in the relational database. Rules will incorporate multiple conditions/constraints triggered during real-time use case scenarios.	R3-R4
NE1.26	Provide links to program policies that will be visible at appropriate times while navigating through a case.	R1 FINAL
NE1.27	The Member information will allow a User to drill down from a summarized view to the detail data.	R1 FINAL
NE1.28	Allow an Authorized User to view the correspondence electronically as an exact rendering of the mailed piece.	R4
NE1.29	Print all items to a preconfigured digital printer in a secure room for outbound document processing. Folding, stuffing, and postage machines will produce the bulk mail for daily pickup.	R4
NE1.30	Use HIPAA compliant vendors to pick up mail once it is inserted into the envelopes and sealed, process it for postal compliance reducing postage rates and deliver the mail to the postal location daily.	R4
NE1.31	A reduced rate will be utilized and the mail will be processed as First Class mail.	R4
Establish Case Criteria		
Document Management		
Requirement number	**Requirement**	**Planned Release**
NE2.1	Provide step-by-step instructions to Users with appropriate access through the Business Rules Management System (BRMS) for reviewing existing rules, modifying/editing rules	R1 FINAL
NE2.2	Provide an authoring tool that contains a rules library built on State policies for Program eligibility criteria and Services eligibility criteria.	R1 FINAL
NE2.3	Provide a front-end authoring tool that will allow State staff to work on the rules on their schedule.	R1 FINAL
NE2.4	Enable the rules built with the authoring system to be tested without interrupting the production environment.	R1 FINAL
NE2.5	Contain rules that are nested in a chained hierarchy or grouped as named “Rule Sets”; which are groupings of individual rules allowing for the application of multiple, single, or all criteria for either eligibility or services criteria.	R1 FINAL
NE2.6	Rules will be versioned to mirror system source code and be maintained in the same repository and allow for capturing of multiple criteria sets to identify various population groups, based on program policy.	R1 FINAL
NE2.7	Allow for criteria to be selected as active or inactive by using beginning dates and end dates for each	R3-R4

	criterion.	
NE2.8	Use a nationally recognized grouper such as Johns Hopkins adjusted clinical groups (ACG) System® to determine program eligibility and severity levels.	R1 FINAL
NE2.9	Eligibility rules criteria will be based and/or on national practice guidelines.	R1 FINAL
NE2.10	Each criterion will be used to evaluate and verify against individual claims (both medical and pharmacy) data.	R1 Final
NE2.11	Provide filter rules with the ability to be chained to establish a program-specific hierarchy of program eligibility.	R3
NE2.12	Incorporate the ACG toolkit in order to provide the ability to author and manage each set of program eligibility rules or options (filter rules and calculations).	R3-R4
NE2.13	The Contractor will provide training to appropriate AHS personnel on the ACG toolkit and allow for self-service management and will work closely with the state to establish an effective process for design and change management of each program's associated set of program eligibility rules.	
NE2.14	Allow for program eligibility rules to be selected as active or inactive by using beginning dates and end dates for each criterion.	R3-R4
NE2.15	Accept data through the Clinical Integration Framework (CIF)	R1 FINAL
NE2.16	Run eligibility and risk stratification each time eligibility data is obtained	R1 FINAL
NE2.17	Send a referral with an initial/updated severity level to the assigned care coordinator.	R1 FINAL
Establish Case		
Case Assignment		
Requirement number	**Requirement**	**Planned Release**
NE3.1	Route program-eligible Member contact information to appropriate User for outreach based on geography, load balance by case manager supervisors or filtered and mass-assigned by some other operational policy.	R2
NE3.2	Alert a case manager when a case is assigned through the Alerts module. This assignment functionality will allow for multiple case management resources (case manager/internal unit) to be simultaneously assigned, listed and managed.	R2
NE3.3	Provide real-time care coordinator case mix profile visible to Authorized Users.	
NE3.4	Allow Users (Case Manager or third party) to log outcome of each contact made during outreach efforts and any other contacts during the course of managing the case.	R3
Assign Case Manager		

NE3.5	The Contractor's System shall provide an assignment functionality that will allow for multiple case management resources (case manager/internal unit) to be simultaneously assigned, listed, and managed.	R3-R4
Assign Additional Staff to Case		
NE3.6	Case assignment changes and health edits will be validated against the resources availability functionality.	R3
Perform Screening and Assessments		
Member's Profile Summary		
Requirement number	**Requirement**	**Planned Release**
NE4.1	Include a Member's medication list which will include medications that have been automatically populated via the claims and pharmacy data feeds as well as those that have been manually entered.	R1
Perform Screening and Assessments		
NE4.2	Support the ability to apply a weighted scoring assignment to assessment and screening questions and aggregate the results to a final assessment score through the Form builder module.	R1
Manage Treatment Plan and Outcomes		
Create Plan of Care		
Requirement number	**Requirement**	**Planned Release**
NE5.1	Allow a User to monitor and update the status of services as well as outcomes of referrals for end Users to view at any time from the portals or the member profile report.	R3
NE5.2	Provide a report that shows all Plan of Care items that have been resolved in addition to those that are currently being worked on by the care management staff.	R2
Provide Education Materials		
NE5.3	Members will have the ability to access specific education tools through the Education Resources.	R3
Manage Case Information		
Case Documentation		
Requirement number	**Requirement**	**Planned Release**
NE6.1	Provide a configurable survey module that drives development of the Plan of Care problems, goals, and results/outcomes.	R1 FINAL

NE6.2	Provide a configurable survey module which will be mapped, and will auto-generate the Plan of Care based on system configuration and evidence based standards for each assessment/survey.	R1 FINAL
NE6.3	Provide a supplemental, searchable issues library that will be available to allow manual selection of problems/goals by the User.	R1 FINAL
NE6.4	Each problem/issue will be listed in the system and have associated goals and interventions and will support structured and standardized documentation.	R1 FINAL
NE6.5	Problem attributes will include, but not be limited to, priority, outcome type, date identified, and source of identification and reviewed by status.	R3
NE6.6	Goal attributes will include, but not be limited to, goal type, status, target completion, and actual completion dates.	R1 FINAL
NE6.7	Interventions will include, but not be limited to, intervention types, status, projected and actual completion dates.	R1 FINAL
NE6.8	Support mandated external reporting of incidents as required by State and Federal law.	R1 FINAL
NE6.9	Allow for all, multiple, or single interventions to be selected and then have any subsequent edits (such as Notes, Dates, etc.) apply to all the selected Interventions.	R3
NE6.10	Allow Users to enter freeform text to communicate supervisory review / comments that can only be viewed by Users authorized to do so.	R2
Scheduling		
NE6.11	Allow authorized Users to create and modify meetings and search by attendees.	R3
NE6.12	Allow the User to 'Block out' times unavailable.	R3
NE6.13	Provide mapping functionality which will be available within the provider search tool and the scheduling module.	R3
NE6.14	Provide printable map directions to each appointment.	R3
NE6.15	Create User specific bi-directional calendar integration, and can leverage experience and existing code base to meet requirements.	R3
Document Case Disposition		
NE6.16	Provide State configurable disposition status fields.	R1 FINAL
NE6.17	Allow for cases to be automatically referred/ transferred to other care management staff including a follow up Plan of Care for new staff.	R1
NE6.18	Support documentation of the disposition post hospital discharge, Plan of Care status and the final case closure status.	R1 FINAL
Case Transition		
NE6.19	Allow provider partners to have access to an electronic member search via the provider portal to initiate referrals.	R3
NE6.20	Internal system supported 'routing' of the referral is based on workflow.	R3, R4
NE6.21	Referrals are associated with referring, and referred entities.	R1 FINAL

Close Program Enrollment		
NE6.22	Allow member case data to be dynamic and updated in real-time for stakeholder review on case status via the appropriate mechanism (portal, interface, etc.).	R2
NE6.23	Allow for follow up flags to be visible reminders on the User dashboard based on follow-up criteria.	R1
NE6.24	Use a nationally recognized grouper, such as Johns Hopkins ACG System integration, for gap in Pharmacy metrics regarding medication/prescribed drug adherence and possession rates.	R3
NE6.25	Use a nationally recognized grouper, such as Johns Hopkins ACG System integration, for member's adherence with therapy.	R3
NE6.26	Leverage a nationally recognized pharmacy data base such as First Databanks' MedKnowledge to provide drug search capabilities, medication reconciliation, and contraindication warnings.	R1 FINAL
Care Coordination		
NE6.27	Provide an integrated web based application and portals.	R1 FINAL
NE6.28	Provide a modular, highly connected framework to allow all stakeholders to collaborate electronically to improve the population health including provider and member portals.	R3
NE6.29	Provide a modular, highly connected framework to allow all stakeholders to collaborate electronically to improve the population health including care management module.	R1 FINAL
NE6.30	Provide a modular, highly connected framework to allow all stakeholders to collaborate electronically to improve the population health including care coordination productivity module.	R1 FINAL
NE6.31	Provide a modular, highly connected framework to allow all stakeholders to collaborate electronically to improve the population health including report module.	R1 FINAL
NE6.32	Provide a modular, highly connected framework to allow all stakeholders to collaborate electronically to improve the population health including health and wellness module.	R1 FINAL
NE6.33	Provide a modular, highly connected framework to allow all stakeholders to collaborate electronically to improve the population health including evidence based care module.	R1 FINAL
NE6.34	Provide a direct link to communicate with Users through the Messaging module. Internal and external Users/partners actively working on or related to a member's case will be listed in the case assignment section of the case record.	R2
Manage Population Health Outreach		
Manage Population Health Outreach		
Requirement number	**Requirement**	**Planned Release**
NE7.1	The Contractor's System shall: i. NE7.1 Produce standard reports monthly, except as otherwise defined during Joint Application Design (hereinafter called "JAD") sessions.	R1 FINAL
NE7.2	Provide ad hoc reporting capability that allows development by both Contractor and State	R1
NE7.3	Have a Data/Health Informatics Analyst on staff to develop and assist the State in developing ad hoc and routine reports	R1
NE7.4	Automatically assign Users, based on predetermined parameters such as geographic location, to work with	R3

	Clinical Leads at provider and partner sites to address issues highlighted in panel reports.	
NE7.5	Use predictive modeling analytics tools to provide details on population health initiatives	R1
NE7.6	Use predictive modeling analytics tools to identify areas where population health initiatives may be indicated	R1
NE7.7	Be configurable per State specifications including by provider practice site and/or clinical leads, with automatic member assignment based on parameters, including but not limited to geographic and facility location, condition, staff license, etc.	R3
NE7.8	Allow Users to document and log all contacts made with members, providers, practice and/or clinical leads, and other participant's on a member/patient's treatment team including system pre-defined and State defined and configurable fields	R1
NE7.9	Be configurable to support session notes in which type of contact, method of contact, and content of contact can all be documented	R1 FINAL
NE7.10	Provide fields that are configurable at the State level	R1 FINAL
NE7.11	Integrate with a predictive modeling tool such as Johns Hopkins ACG and utilize claims data to analyze a population on dimensions including but not limited to chronic condition, age, gender, Primary Care Provider (PCP), program enrollment	R1 FINAL
Program Education Materials		
NE7.12	Integrate with a nationally recognized health care knowledgebase (e.g., Healthwise®) with continuous updates to provide evidence based educational materials that can be viewed online, printed or electronically sent to a patient and/or provider and other stakeholders involved in member care.	R1 FINAL
NE7.13	Track all educational correspondence and record correspondence history that is viewable to Users.	R1 FINAL
Care Coordination Program Goals		
NE7.14	Support targeting specific chronic disease processes for a member and support management of chronic illnesses, other co-morbid health conditions, behavioral health issues, and/or psychosocial issues	R1 FINAL
NE7.15	Support evaluation of quality, continuity, accessibility, timeliness and outcomes of care management services provided including process and quality improvement features to monitor care coordination efficiency, including but not limited to	R1 FINAL
NE7.16	Monitoring evidence of the participant-physician-care coordinator relationship	R1 FINAL
NE7.17	Monitoring care across all health care settings	R1 FINAL
NE7.18	Documenting and monitoring social support needs, interventions and results of the population.	R1 FINAL
NE7.19	Development, implementation, monitoring, and evaluation of individualized care plans. (R1.02) (R1 FINAL)	R1 FINAL
NE7.20	Coaching and behavior modification activities to promote participant self-care	R1 FINAL
NE7.21	Monitoring of participant health status via administration of evidence based health risk assessments (HRA) and disease specific assessments, self-care education, coaching and behavior modification, wellness screenings, in person and telephonic on-going engagement, and resolution of barriers to care.	R1 FINAL
NE7.22	Identification of participants for care coordination services based on but not limited to program eligibility criteria, predictive modeling and current utilization profiles	R1 FINAL
NE7.23	Support multidisciplinary Users engaged as members of the care management team	R1 FINAL

NE7.24	Document/trend improvement in participant clinical and financial measures and quality of life (survey tools, evidence based tools)	R1 FINAL
NE7.25	Support and promote physician adherence to evidence based care standards for each disease process, via reporting and trending by provider of treatment gaps	R1
NE7.26	Support and promote physician understanding and adherence to nationally recognized practice guidelines via gap in care report	R1
NE7.27	Support reduction in treatment variation by monitoring, evaluating, and reporting on physician treatment against national and state standards, and provider peers	R1
NE7.28	Manage and document utilization and cost savings based on integrated care coordination including but not limited to the total population vs. program eligible and intervened population(s), disease specific measures of improvement, and staff specific performance improvement	R3
Scope of Services		
NE7.29	Track delivery of services that are holistic, individualized, and evidence based and track multiple modes of communication and engagement, including but not limited to	R1 FINAL
NE7.30	In person, telephonic, electronic including via provider and patient portals, and/or mail and other written forms of communications	R1 FINAL
NE7.31	Interventions for monitoring and tracking include	R1
NE7.32	Predictive modeling to population identification for VCCI eligible members by the vendor including high risk/cost conditions and participants; as well as via other methods	R1
NE7.33	Risk stratification to ensure the right interventions are being provided to the right participants	R1 FINAL
NE7.34	Establishment and utilization of a Medical Home	R1 FINAL
NE7.35	Health Education tools and related tracking of supports provided by member and User	R1 FINAL
NE7.36	Health Coaching supports provided for behavior change	R1 FINAL
NE7.37	Health and wellness promotion services and goals including lifestyle modifications.	R1 FINAL
NE7.38	Medication Adherence/medication reconciliation tracking to support evidence based care	R3
NE7.39	Smoking Cessation resources and progress toward goal achievement	R1 FINAL
NE7.40	Depression Screening and related scoring and trending of results	R3
NE7.41	Assessment of psychosocial barriers to health and progress toward resolution	R2
NE7.42	Medical and psychosocial referrals and status of results.	R1 FINAL
NE7.43	Monitoring of face-to-face collaboration frequency between care coordinators and program participants and impact on results	R1 FINAL
NE7.44	On-going assessment of the participant's medical and psychosocial issues with comparisons over time	R3
NE7.45	Ability to develop and implement an individualized, collaborative plan of care among treatment/support team	R1 FINAL
NE7.46	Electronic monitoring tools and systems for Provider notification of care coordination enrollment and related engagement level by individual and panel of patients	R3
NE7.47	Tracking of on-going, frequent interactions between care coordinators and a participant's designated medical home	R1 FINAL
NE7.48	Provider profile reporting capability related to utilization patterns and adherence to condition specific	R2

	standards of care (gap in care reports).	
NE7.49	Provider education materials to support evidence-based practice guidelines.	R1 FINAL
Programs		
NE7.50	The Contractor's System shall include the following components to support care coordination integration of clinical treatment guidelines, disease prevention strategies, patient self-care education, and social support services while demonstrating a quantifiable cost savings to the payer	R3
NE7.51	Population Identification that will be performed by the Contractor's analytic staff and include use of predictive modeling tools to identify members based on medical and pharmacy claims, data, analytics data, provider, facility, or participant self-referrals	R1 FINAL
NE7.52	Population Stratification that categorizes eligible members into severity levels based on predictive model data findings, clinical data, and/or assessment findings. Stratification will be updated regularly based on clinical data receipt, care coordinator encounter, and/or at least every six months for the entire population	R1 FINAL
NE7.53	Evidence-based care guidelines to support Plan of Care development and monitoring of treatment adherence by provider and member	R1 FINAL
NE7.54	Monitoring of member engagement and readiness to change, tracking progress toward clinical and psychosocial problem resolution/goals as outlined in the Plan of Care goals	R1 FINAL
NE7.55	Development, implementation, sharing, and monitoring of progress on individualized plans of care goals as generated by response to evidence based health assessments, system generated triggers and case manager performance results	R1 FINAL
NE7.56	Documentation and management of Care Transitions including from inpatient to outpatient settings as well as levels of service provision	R2
NE7.57	Monitoring participant collaboration and engagement.	R2
NE7.58	Monitoring provider and practice level collaboration and engagement	R2
Manage Registry		
Manage Registry		
Requirement number	**Requirement**	**Planned Release**
NE8.1	Support bi-directional exchange of clinical and other data in multiple standard protocols and formats via the Clinical Integration Framework (CIF) module. Supported formats/protocols will include but not be limited to	R1
NE8.2	Have the ability to extract, transform, and transmit data within the system to an external registry, or registries, designated by the State and based on established protocols, payload specifications and support models for each channel to update the registry dataset for all members	R4
NE8.3	Maintain performance measures at the member and other designated levels and a static "snapshot" captured at an agreed upon frequency for graphic trending analysis to include 'roll up' for population level reporting	R1 FINAL
NE8.4	Analyze all available data, including the predictive modeling engine output, to generate a panel of clinical gaps	R1 FINAL
NE8.4-1	Analyze all available data to generate a panel of clinical gaps.	R1 FINAL

NE8.5	Use a nationally recognized grouper (e.g., Johns Hopkins ACG) to determine medication gaps that indicate a member's adherence with therapy, including but not limited to: the number and duration of gap, medication possession ratio (MPR), continuous medication availability ratio (CSA), and risks if untreated.	R1 FINAL
Authorization Determination		
Referral Management		
Requirement number	**Requirement**	**Planned Release**
NE9.1	Create and route referrals electronically	R2
NE9.2	Acknowledge referrals, accept referrals, and track referral status. The Contractor's System shall setup automated notifications related to the referral	R2, R3
NE9.3	Allow a User to modify or withdraw a referral.	R1 FINAL
NE9.4	Search for referrals	R1
Prior Authorization		
NE9.5	Support functionality to receive, process, and render determinations for prior authorization, concurrent service reviews for a multitude of service settings.	R4
NE9.6	Support functionality to receive, process, and render determinations for prior authorization, retrospective service reviews for a multitude of service settings.	R4
NE9.7	Have the ability to document and process Service and Treatment Plan Authorization requests that are received from Providers outside of the Core MMIS	R4
NE9.8	Support receipt, processing, and rendering determinations for prior authorization, concurrent service reviews for in-state facilities.	R4
NE9.9	Support receipt, processing, and rendering determinations for prior authorization, retrospective service reviews for in-state facilities.	R4
NE9.10	Support receipt, processing, and rendering determinations for prior authorization, concurrent service reviews for out-of-state facilities.	R4
NE9.11	Support receipt, processing, and rendering determinations for prior authorization, retrospective service reviews for out-of-state facilities.	R4
NE9.12	Integrate with a third-party authorization entity to receive a daily census of admits	R4
NE9.13	via the Alerts module, communicate to all Users that a member has been admitted	R1 FINAL
NE9.14	Allow providers to submit a review request to the Case Manager through the provider portal or other interface such as batch files. The request will include information to render a medical necessity decision, including but not limited to: diagnosis codes, procedure codes, HCPS and requested units	R4
NE9.15	The Contractor's System shall support all the uploading of supporting documentation for review by Authorized Users and via their respective portals.	R2
NE9.16	Include a prior authorization module that will capture all medically necessary authorized services at the member level. Prior authorizations will include data elements such as the service codes requested, quantity, frequency units, and requesting/billing provider. The services will be authorized after full consideration of the plan of care that will be developed and maintained in the Contractor's System as well	R4

NE9.17	The Contractor's System shall link all of these items directly to the individual case record, and create a holistic view of the member all in one place.	R4
Reporting Requirements		
Requirement number	**Requirement**	**Planned Release**
NE10.1	Where applicable, provide reports consisting of clinical and operational performance measures (through Inter-rater Reliability tools), financial, satisfaction, and quality of life measures on a population level.	R4
NE10.2	Where applicable, provide reports consisting of clinical and operational performance measures (through Inter-rater Reliability tools), financial, satisfaction, and quality of life measures on a program level.	R-R4
NE10.3	Where applicable, provide reports consisting of clinical and operational performance measures (through Inter-rater Reliability tools), financial, satisfaction, and quality of life measures on a population, program, and individual level.	R2-R4
NE10.4	Complete outcomes reporting semi-annually and more frequently as requested by the State. Outcomes and reporting data will be based on claims data, information collected in the Care Management Contractor's System, other State agencies or programs, providers, ACOs, etc.	R3
NE10.5	Structure the reporting processes to ensure consistent methodology and interpretation of data that is gathered.	R1
NE10.6	Monitor and report on service, program, clinical and financial outcomes, which support program operational, regulatory and certification goals.	R2-R3
NE10.7	These reports may include but are not limited to: Eligible population; i. Population distribution (age, gender, geography, acuity) Population that received care.	R1
NE10.8	These reports may include but are not limited to: Eligible population (after exclusionary criteria applied); iii. Population (age, gender, geography, acuity) Population that received care.	R3
NE10.9	These reports may include but are not limited to: Product Program Reports on i. Enrollment statistics, (e.g., referrals, opt-out, engaged, unable to contact and reason, cases closed and reason, health condition, etc.) ii. Health Condition iii. Participation-Total a. # of active participation (engaged with a CC) by severity level; b. Total # of active participants with an individualized plan of care. iv. Clinical- Condition specific	R4

	v. Utilization and Preventative a. % of enrollees with 2 or more MD office visits within 12 months b. % of enrollees getting a flu vaccine c. % of enrollees getting pneumonia vaccine within last 5 years d. Other Wellness/Preventive care screenings based on the member population.	
NE10.10	v. Assessment Results vi. Member satisfaction survey vii. Plan of Care outcome\ Length of program participation	R3
NE10.11	These reports may include but are not limited: v. Admissions and Readmissions vi. Length of stay vii. Admissions for specific conditions Pharmacy costs in relation to overall costs	R4
NE10.12	Total # patients referred, enrolled, number of member and provider encounters Total # patients unable to contact c. Related to no valid phone # d. Related to unable to reach the patient either in person or telephonically Number of initial screenings completed	R4
Consent Management Requirements		
Consent Management Requirements		
Contract# 28739 Requirement number	**Requirement**	**Planned Release**
NE11.1	The Contractor shall make use of the State of Vermont's HSE Consent Management solution once it is operational	R3
NE11.2	Allow consent to be set at the field level	R3
NE11.3	Provide consent notifications that are supported by a Business Rules Management System (BRMS)	R3
NE11.4	sort and filter by pertinent fields, for a member's consent record	R1 FINAL
Health Care Reform		
Health Care Reform		
Contract# 28739 Requirement number	**Requirement**	**Planned Release**
NE12.1	Align with Vermont's health care reform plans during the term of the Contract. (R1 FINAL)	R2
NE12.2	Provide integration with HSE platform and MMIS system to create a continuity of record at the person level. (R1 FINAL)	R1 FINAL

NE12.3	Provide integration with Vermont Health Information Exchange (HIE) to create claims and clinical continuity of care records and the creation of data profiles at the member, physician, and provider facility levels for data transparency.	R3
Case Management Certification		
Case Management Certification		
Contract# 28739 Requirement number	**Requirement**	**Planned Release**
NE13.1	Meet and maintain the requirements that will allow State programs to secure certification in Case Management by the National Committee for Quality Assurance (NCQA). (R1 FINAL)	R1 FINAL
NE13.2	Meet and maintain the requirements that will allow State programs to secure certification in Disease Management and/or Health Utilization Management by the Utilization Review Accreditation Commission (URAC) or National Committee for Quality Assurance (NCQA).	R1 FINAL

ATTACHMENT B
PAYMENT PROVISIONS

The maximum amount of this Contract shall not exceed the amount indicated in paragraph 3 on page 1 of this Contract. The maximum dollar amount payable under this agreement is not intended as any form of a guaranteed amount. The Contractor will be paid for services specified in Attachment A as are actually performed, up to the maximum allowable amount specified in this Contract.

1. Contractor must submit a certificate of insurance that meets the minimum coverage amounts required under this Contract prior to commencement of any work and submission of any invoice to the State.

2. Invoices must be rendered on Contractor's standard billhead or official letterhead. Contractor shall include the Contract # of this contract on all invoices. The Contractor shall submit invoices for the previous period on the 5th business day of the next month. The Contractor shall submit invoices to the State for actual hours worked or deliverables accepted and approved by the State Authorized Representative, in accordance with the rates and schedules outlined in this Agreement.

3. Unless otherwise specifically provided in Attachment A, Contractor shall issue to the State, monthly in arrears, an invoice in U.S. Dollars for the amounts due for work provided in Attachment A provided in the previous month. Each invoice shall include such detail and categories of information as mutually agreed upon by the parties. Each invoice shall itemize the specific sections of the Statement of Work on which such Charge is based and include calculations used to establish such Charges. Invoices shall be coded and charges segregated as directed by the State to facilitate proper accounting among multiple funding sources and different cost allocations among different parts of the solution. All periodic Charges under this agreement (excluding charges based upon actual usage or consumption of Services) shall be computed on a calendar month basis and shall be prorated for any partial month.

4. Invoices must be submitted electronically to: AHS.DVHAGrantsContracts@vermont.gov

5. Payment of each invoice is due within thirty (30) days of receipt of correct invoice. Contractor shall be paid based on documentation and itemization of work performed and included in invoicing as required by 32 VSA §463.

6. Per Attachment A, G (2), Contractor shall submit monthly reports regarding Service Level Requirements to the State. Any credits due to the State based on this monthly report shall be reflected in following month's invoice.

7. **Contract Maximum**.

a. All rates set forth in this contract are all-inclusive, no expenses, benefits or insurance will be deemed reimbursable to the Contractor by the State under this Contract.

Table B-1 Total Cost Summary Base Years

Total Cost Summary								
Description	**Total DDI One-time Costs**	**M&O Costs Year 1**	**M&O Costs Year 2**	**M&O Costs Year 3**	**M&O Costs Year 4**	**M&O Costs Year 5**	**Total M&O Costs**	**Total Costs**
Solution Implementation	$11,935,058							$11,935,058
Application Maintenance and Operations Support		$1,205,100	$1,468,227	$1,697,403	$1,697,403	$1,695,568	$7,763,701	$7,763,701
Hosting and Disaster Recovery Support (Until Full Deployment)		$22,800	$22,800	$11,400	$0	$0	$57,000	$57,000
Hosting after full deployment		$0	$0	$31,450	$40,000	$40,000	$111,450	$111,450
Disaster Recovery after full deployment		$0	$0	$6,650	$9,500	$9,500	$25,650	$25,650
Packaged Software Costs	$0	$642,750	$642,750	$642,750	$642,750	$642,750	$3,213,750	$3,213,750
Change Orders	$230,665	$0	$0	$325,012	$325,012	$96,182	$746,206	$976,871
Hardware Costs (if applicable)	$30,000	$0	$0	$0	$0	$0	$0	$30,000
Total Costs	**$12,195,723**	$1,870,650	$2,133,777	$2,714,665	$2,714,665	$2,484,000	**$11,917,757**	
							Total Costs including One-Time Costs and Ongoing Costs	**$24,113,480**

b. In the event the State elects to pursue either of the optional years after Year 5 (Years 6 and 7) of this Contract, the Contractor agrees to the prices for its work indicated in its bid to the State as follows:

Table B-2 Optional Years 6 & 7

Total Cost Summary (Optional Years 6 & 7)				
Description	**M&O Costs Year 6**	**M&O Costs Year 7**	**Total M&O Costs**	**Total Costs**
Solution Implementation				
Application Maintenance and Operations Support	$1,695,568	$1,695,788	$3,391,356	$3,391,356
Hosting and Disaster Recovery Support (Until Full Deployment)	$0	$0	$0	$0
Hosting after full deployment	$40,000	$40,000	$80,000	$80,000
Disaster Recovery after full deployment	$9,500	$9,500	$19,000	$19,000
Packaged Software Costs	$642,750	$642,750	$1,285,500	$1,285,500
Change Orders	$96,182	$95,962	$192,144	$192,144
Hardware Costs (if applicable)				
Total Costs	$2,484,000	$2,484,000	$4,968,000	$4,968,000
			Total Ongoing Costs	**$4,968,000**

c. <u>TASKS 1 -10 –Deliverable Based Payments for DDI and On-Going Task(s)</u>
The Contractor will perform TASKS 0 through 10, as specified in Attachment A of this Contract, on a fixed price basis, with payments tied to contractually-defined deliverables and the State's finding of satisfactory performance. Deliverables are considered approved when the State issues a Deliverables Acceptance Document (DAD) signed by the State's authorized representative.

Deliverable 6-D, System Source Code and Documentation, for each Release will be due upon receipt of payment by Contractor for approved Deliverable 7-B, Phase and System Acceptance. Updated code will be delivered to the State quarterly after Contractor receives all M&O payments for the quarter.

The actual due dates for deliverables are reflected in the approved Project Plan and Schedule for each major release, as indicated in Attachment A. The baseline Project Schedule typically is reviewed and updated weekly, as needed. Enclosed herein is the deliverables-based payment sequence:

Table B-3 Ongoing Task-Related Deliverables

Task 0 - Project Monitoring and Status Reporting		
Project Status Reporting (recurring throughout the length of the project, frequency to be determined with State) *The Contractor shall invoice for Task 0 monthly and shall not exceed $2,983.77 a month without prior written approval from the State Authorized Representative(s).	Ongoing across the Contract Lifecycle (Months 1-60)	$179,026*

Table B-4 DDI Task Related Deliverables.

DELIVERABLE	Major Release Number	State of Vermont Payment	Release total	Estimated Payment Date (by State Fiscal Year Quarter End)
Task 1A – Project Kick-off Presentation	Release 1	$89,513		*QE 6/2016*
Task 1B – Project Management Plan	Release 1	$89,513		*QE 6/2016*
Task 1D (R1) – Requirements Analysis, System Design and Development Strategy	Release 1	$89,513		*QE 6/2016*
Task 1C – Project Work Plan and fully resourced Schedule	1.01	$71,610.30		*QE 6/2016*
Task 1C – Project Work Plan and fully resourced Schedule	R1 Final	$167,090.70		*QE 6/2016*
Task 1E – System Implementation Strategy	Release 1	$268,539		*QE 6/2016*
Task 1F – Master Testing Strategy	Release 1	$179,026		*QE 6/2016*
Task 1G – Requirements Traceability Plan	Release 1	$111,891		*QE 6/2016*

Task 2A – Functional Specification and System Design Document	1.01	$26,853.90		*QE 6/2016*
Task 2A – Functional Specification and System Design Document	R1 Final	-$62,659.10		*QE 6/2016*
Task 2B – Data Integration and Interface Design Document	Release 1	$179,026		*QE 6/2016*
Task 3A – System Implementation Plan	Release 1	$44,756		*QE 6/2016*
Task 3B – Data Integration and Synchronization Plan, including multiple test files (MMIS/claims, PBM, eligibility, VCCI legacy, etc.)	Release 1	$477,402		*QE 6/2016*
Task 2C –System Architecture	Release 1	$358,052		*QE 6/2016*
Task 2D – Technical Design Document	1.01	$59,675.33		*QE 6/2016*
Task 2D – Technical Design Document	R1 Final	$119,350.66		*QE 6/2016*
Task 4A (R1) – Test Plan		$59,675		*QE 6/2016*
Task 5A (R1) – Training Plan	1.01	$17,902.50		*QE 6/2016*
Task 5A (R1) – Training Plan	R1 Final	$41,772.50		*QE 6/2016*
Task 6A (R1) – Deployment Plan	1.01	$17,902.50		*QE 6/2016*
Task 6A (R1) – Deployment Plan	R1 Final	$41,772.50		*QE 6/2016*
Task 4B (R1) – Test Scenarios, Test Cases and Test Scripts	1.01	$7,161.00		*QE 6/2016*
Task 4B (R1) – Test Scenarios, Test Cases and Test Scripts	R1 Final	$16,709.00		*QE 6/2016*
Task 4C (R1) – Documented System Test Results	1.01	$35,805.30		*QE 6/2016*
Task 4C (R1) – Documented System Test Results	R1 Final	$83,545.70		*QE 6/2016*
Task 5B (R1) – Training Manuals, End-User Guides and Materials	1.01	$17,902.50		*QE 6/2016*
Task 5B (R1) – Training Manuals, End-User Guides and Materials	R1 Final	$41,772.50		*QE 6/2016*
Task 6B (R1) – System Incident and Defect Resolution Report	1.01	$7,161.00		*QE 6/2016*
Task 6B (R1) – System Incident and Defect Resolution Report	R1 Final	$16,709.00		*QE 6/2016*

Task 3C – System Maintenance Support Plan		$238,701		*QE 6/2016*
Task 6C – Completed Detailed Functional and Technical Specifications Traceability Matrix	1.01	$35,805.30		*QE 6/2016*
Task 6C – Completed Detailed Functional and Technical Specifications Traceability Matrix	R1 Final	$83,545.70		*QE 6/2016*
Task 5C Conduct Training - R1	1.01	$3,580.50		*QE 6/2016*
Task 5C Conduct Training - R1	R1 Final	$8,354.50		*QE 6/2016*
Task 5D(R1) - Documented Evidence of Successful End-User Learning - R1	1.01	$35,805.30		*QE 6/2016*
Task 5D(R1) - Documented Evidence of Successful End-User Learning - R1	R1 Final	$83,545.70		*QE 6/2016*
Task 7A R1 Readiness Approval	1.01	$13,426.80		*QE 6/2016*
Task 7A R1 Readiness Approval	R1 Final	$31,329.20		*QE 6/2016*
Task 9E – Tier 2 Service Desk Plan	Release 1	$477,402		*QE 6/2016*
Task 6E Deployment (R1)	1.01	$53,707.80		*QE 6/2016*
Task 6E Deployment (R1)	R1 Final	$125,318.20		*QE 6/2016*
Task 6F (R1) – Performance SLAs	1.01	$214,830.90		*QE 6/2016*
Task 6F (R1) – Performance SLAs	R1 Final	$501,272.10		*QE 6/2016*
Task 6D (R1) – System Source Code and Documentation	After 7-B	$59,675		*QE 6/2016*
Task 7B (R1) – Complete R1 Phase Close Out	Release 1	$954,805	*$5,721,367*	*QE 6/2016*
Task 1D (R2) – Requirements Analysis, System Design and Development Strategy	Release 2	$111,891		*QE 6/2017*
Task 4A (R2) – Test Plan	Release 2	$59,675		*QE 9/2017*
Task 5A (R2) - Training Plan	Release 2	$59,675		*QE 6/2017*

Task 6A (R2) – Deployment Plan	Release 2	$59,675		*QE 6/2017*
Task 4B (R2) – Test Scenarios, Test Cases and Test Scripts	Release 2	$23,870		*QE 9/2017*
Task 4C (R2) – Documented System Test Results	Release 2	$119,351		*QE 9/2017*
Task 5B (R2) – Training Manuals, End-User Guides and Materials Updates	Release 2	$59,675		*QE 9/2017*
Task 6B (R2) – System Incident and Defect Resolution Report	Release 2	$23,870		*QE 12/2017*
Task 6C – Completed Detailed Functional and Technical Specifications Traceability Matrix	Release 2	$119,351		*QE 9/2017*
Task 5C Conduct Training - R2	Release 2	$11,935		*QE 9/2017*
Task 5D (R2) - Documented Evidence of Successful End-User Learning	Release 2	$119,351		*QE 9/2017*
Task 7A R2 Readiness Approval	Release 2	$44,756		*QE 6/2017*
Task 6E Deployment (R2)	Release 2	$44,756		*QE 9/2017*
Task 6F (R2) – Performance SLAs	Release 2	$179,026		*QE 9/2017*
Task 6D (R2) – System Source Code and Documentation	Release 2 After 7-B	$59,675		*QE 12/2017*
Task 7B (R2) – Complete R2 Phase Close Out	Release 2	$477,402	*$1,573,934*	*QE 12/2017*
Task 1D (R3) – Requirements Analysis, System Design and Development Strategy	Release 3	$111,891		*QE 12/2017*
Task 4A (R3) – Test Plan	Release 3	$59,675		*QE 12/2017*
Task 5A (R3) – Training Plan	Release 3	$59,675		*QE 12/2017*
Task 6A (R3) – Deployment Plan	Release 3	$59,675		*QE 12/2017*
Task 4B (R3) – Test Scenarios, Test Cases and Test Scripts	Release 3	$23,870		*QE 12/2017*
Task 4C (R3) –Documented System Test Results	Release 3	$119,351		*QE 12/2017*
Task 5B (R3) – Training Manuals, End-User Guides and Materials Updates	Release 3	$59,675		*QE 12/2017*
Task 6B (R3) – System Incident and Defect Resolution Report	Release 3	$23,870		*QE 3/2018*
Task 6C (R3) – Completed Detailed Functional and Technical Specifications Traceability Matrix	Release 3	$119,351		*QE 12/2017*
Task 5C Conduct Training - R3	Release 3	$11,935		*QE 12/2017*

Task 5D (R3) - Documented Evidence of Successful End-User Learning - R1	Release 3	$119,351		*QE 3/2018*
Task 7A R3 Readiness Approval	Release 3	$44,756		*QE 12/2017*
Task 6E Deployment (R3)	Release 3	$44,756.0		*QE 12/2017*
Task 6F (R3) – Performance SLAs	Release 3	$179,026		*QE 3/2018*
Task 6D (R3) – System Source Code and Documentation	Release 3, After 7-B	$59,675		*QE 3/2018*
Task 7B (R3) – Complete R3 Phase Close Out	Release 3	$477,402.0	*$1,573,934*	*QE 3/2018*
Task 1D (R4) – Requirements Analysis, System Design and Development Strategy	Release 4	$111,891		*QE 3/2018*
Task 4A (R4) – Test Plan	Release 4	$59,675		*QE 3/2018*
Task 5A (R4) – Training Plan	Release 4	$59,675		*QE 3/2018*
Task 6A (R4) – Deployment Plan	Release 4	$59,675		*QE 3/2018*
Task 4B (R4) – Test Scenarios, Test Cases and Test Scripts	Release 4	$23,870		*QE 3/2018*
Task 4C (R4) –Documented System Test Results	Release 4	$119,351		*QE 3/2018*
Task 5B (R4) – Training Manuals, End-User Guides and Materials Updates	Release 4	$59,675		*QE 3/2018*
Task 6B (R4) – System Incident and Defect Resolution Report	Release 4	$23,870		*QE 3/2018*
Task 6C – Completed Detailed Functional and Technical Specifications Traceability Matrix	Release 4	$119,351		*QE 3/2018*
Task 5C Conduct Training - R4	Release 4	$11,935		*QE 3/2018*
Task 5D (R4) - Documented Evidence of Successful End-User Learning	Release 4	$119,351		*QE 3/2018*
Task 7A R4 Readiness Approval	Release 4	$44,756		*QE 3/2018*
Task 6E Deployment (R4)	Release 4	$44,756.0		*QE 3/2018*
Task 6F (R4) – Performance SLAs	Release 4	$179,026		*QE 3/2018*
Task 6D (R4) – System Source Code and Documentation	Release 4, After 7-B	$59,675		*QE 3/2018*
Task 7B (R4) – Complete R4 Phase Close Out	R4	$477,402.0	*$1,573,934*	*QE 3/2018*
Task 8A Care Management Subsystem Certification Planning	TBD	$179,026		*QE 3/2018*

Task 8B Develop Certification Review Criterion and Testing Scenarios	TBD	$179,026		*QE 3/2018*
Task 8C Certification Readiness Assessment	TBD	$179,026		*QE 3/2018*
Task 8D Complete Certification Checklist and Submission	TBD	$179,026	*$716,104*	*QE 3/2018*
Task 9A – System Incident Reports – M&O (Until Full Deployment) One-time payment, reports due monthly	R 1	$119,351 * Not paid until all parts of R1 are deployed and approved		*QE 3/2018*
Task 9B – Adaptive Maintenance Reports (Until Full Deployment) One-time payment, reports due monthly	R1	$119,351 * Not paid until all parts of R1 are deployed and approved		*QE 3/2018*
Task 9C – System Enhancement Reports (Until Full Deployment) One-time payment, reports due monthly	R1	$358,052 * Not paid until all parts of R1 are deployed and approved	*$596,754*	*QE 3/2018*
			$11,756,027	
Task 0 Project Status Reports – Monthly at $2,983.77	Ongoing	$179,026	*$179,026*	
TOTAL Task Deliverables			**$11,935,053**	
Hardware Costs for Fulfillment (one-time)	One-time	$30,000.0		
Hosting & Disaster Recovery Support Until Full Deployment (Quarterly)	Quarterly	$5,700.0		

*Non-recurring deliverables shall be monitored by the Contractor and updated, as needed, without additional payments.

d. The Contractor will provide the packaged software, Maintenance and Operations Activities related, Hosting & Disaster Recovery and hardware costs listed below on a fixed price basis. Following is the payment schedule.

Table B-5 Maintenance and Operations Payment Schedule

Packaged Software	Frequency	Total Cost
Healthwise (Enterprise License)	Monthly	$ 53,563 *
FirstDatabank (Enterprise License)		

Geocoding (Web Service Subscription)		
Coding Libraries (CPT, ICD9-10 APDRG etc.) (Enterprise Access with Annual Updates)		
in-Rule (Business Rule Management System) (Enterprise Access, with 5 User Licenses)		
Mirth Match (Enterprise License)		
Quality Reporting (Per Member Per Month Licensing)		
Johns Hopkins ACG (Predictive Modeling)(Per Member Per Month Licensing)		
eQHealth eQSuite™ (Per Member Per Month Licensing)		
*Until all packaged software is in use, cost is as follows:	Monthly	$ 51,438

M&O Activities	Frequency	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7
On-going Data Loads	Monthly	$100,425	$122,352	$141,450	$141,450	$141,297	$141,297	$141,316
System Incident Reports								
Adaptive Maintenance Reports								
System Enhancement Reports								
Web-based State training on System Enhance-ments								
Performance SLAs								
Hosting & Disaster Recovery Support	Quarterly	0	0	$12,375	$12,375	$12,375	$12,375	$12,375

e. <u>Change Orders: Customer Service Request Hours</u>

Work performed under Change Orders called out in Table B-1 shall not exceed $976,871 during the life of the contract and is designated for DDI and M&O. The Change Order line-item shall be billed by Customer Service Request (CSR) hours as requested by the State, and will be billed per hour as utilized. As of contract execution, the base rate for CSR hours is $115.00 per hour. CSR hours are not expended for new project proposal development. The Contractor agrees to provide the following number of CSR hours to the State:

During the DDI Period, the Contractor shall allow the State up to 2,000 CSR hours.

During M&O, Year 3, the Contractor shall allow the State up to 2,802 CSR hours.
During M&O, Year 4, the Contractor shall allow the State up to 2,802 CSR hours.
During M&O, Year 5, the Contractor shall allow the State up to 786 CSR hours.

The State may initiate the CSR process leading to a new project need by requesting a proposal from the Contractor. The request shall be prepared by the State and will include the following:

i. Project Contact
ii. Type of Activity
iii. Project Goal(s)
iv. Brief Description of Project
v. Project Deliverable(s)
vi. Estimated Project Duration/Phasing
vii. Description of Expected Timeline of Project

The Contractor shall prepare a proposal in response to the State's request. The State shall then follow the process for review, acceptance and rejection of Change Requests, and the issuance of Change Orders as outlined in the Change Management Plan. If a Change Order is issued, then acceptance of the deliverables/products resulting from such Change Order by the State shall represent the Contractor's fulfillment of the project assignment. The State will have sixty (60) days to acknowledge the final deliverables/products or to reject them.

Any unused CSR hours may be carried over to the following year. State will have the option to purchase additional CSR allocations annually in minimum blocks of 500 per year at a rate of $115.00/hour through December 31, 2017 or until the completion of DDI work, if longer. Any purchase of additional blocks of hours will be reduced to writing and incorporated into a signed amendment to this Contract.

8. Implementation of Other Programs
The implementation of other AHS Programs shall be based on the hourly rate for additional program services. Composite hourly rates will be as follows:

Year 1	Year 2	Year 3	Year 4	Year 5
$115	$115	$118	$118	$120

9. Retainage. The State will hold back 10% of each DDI deliverable payment and DDI Change Request payment as retainage. Contractor may submit a single invoice for all retainage withheld six (6) months after the acceptance by the State of each deliverable, which will be paid to the Contractor in full, subject to the terms and conditions of the Contract.

The State will hold back 10% retainage for Maintenance and Operations, M&O Change Requests, Hosting, and Disaster Recovery, which can be requested by the Contractor 90-days after the initial invoice is submitted.

The State will not hold back any retainage on packaged software and hardware related payments.

Payment of each invoice is due within thirty (30) days of receipt.

10. Payment Disputes.
In order to dispute an invoice, or any part thereof, the State must set forth in writing the amount(s) disputed and the specific basis or reason for the dispute, which shall be reasonably detailed and not general or speculative in nature (hereinafter referred to as "Payment Dispute Notice"). The State shall forward a Payment Dispute Notice to Contractor on or prior to the due date of the invoice disputed. The State shall not dispute any invoice unless the State believes, in good faith, that the State is being charged for Services that have not been provided or at prices higher than those set forth in this agreement, or that manifest errors in calculation or the like have occurred, or that the State is otherwise being charged for items contrary to work described in the Attachment A of this contract.

Upon compliance with the foregoing provisions, the State may, at its option, withhold payment of the disputed amount(s) of the invoice, and shall remit to Contractor the undisputed amount(s), if any, in a timely manner. Upon receipt of the Payment Dispute Notice, both parties shall make reasonable, diligent, good faith efforts to resolve the dispute as soon as possible in accordance with the dispute resolution procedures set forth below:

a. General. Unless specifically provided otherwise in this agreement, any dispute or controversy between the parties hereunder shall be resolved as provided in this Section. A dispute over payment will not entitle Contractor to withhold, suspend or decrease its required performance under this Agreement. Contractor shall continue performing its obligations hereunder while the parties are seeking to resolve any dispute in accordance with this Article, unless and until such obligations are terminated or expire in accordance with the provisions of this agreement and the existence of such dispute shall not relieve the Contractor of any of its obligations under this agreement.

b. Informal Dispute Resolution. The parties may attempt to resolve any dispute or controversy hereunder, informally by submitting the dispute, in writing, to Project Managers responsible for the State and the Contractor ("Project Managers"),the State's Vendor Manager, and the State's general counsel (collectively referred to as "Informal Dispute Resolution Team") who shall meet in person or by telephone conference call in an effort to resolve the dispute, as often as they deem necessary to gather and analyze any information relevant to the resolution of the dispute, but not less than once every day.

i. During the course of attempting to resolve the dispute informally, all reasonable requests for non-privileged information related to the dispute, made by one party to the other, shall be honored; provided, however, in attempting to resolve the dispute, the conduct and activities of the parties, any offers of compromise, all settlement proposals and/or information exchanged shall: (i) be considered information that is confidential and proprietary to each of the parties and therefore, prohibited from disclosure by either of them; (ii) be considered settlement discussions, and shall be inadmissible in any subsequent proceedings; and (iii) in no way be construed or deemed to preclude, prohibit or restrict either party, at any time or in any manner,

from proceeding to litigation or otherwise exercising any right or remedy available to it under this agreement, at law or in equity.

ii. If the Informal Dispute Resolution Team determines in good faith that resolution through continued discussions does not appear likely or if the dispute is not resolved within five (5) business days after the dispute has been submitted in writing, either Party may notify the other Party and this notification shall escalate the dispute (hereinafter referred to as an "Escalation Notice"). To escalate the dispute the following procedure must be followed:

1) The Informal Dispute Resolution Team shall gather any additional information relevant to the resolution of the dispute and which may be necessary and appropriate for presentation to the Contractor Account Director and an executive designated by the State responsible for the Services involved in such dispute.
2) The Informal Dispute Resolution Team shall, within fifteen (15) business days after the Escalation Notice has been given, submit a report to the Contractor Account Director and Executive designated by the State (hereinafter referred to as "State Executive") which includes a description of the nature, extent and basis of the dispute, how the dispute arose, the U.S. dollar amount involved in the dispute, any agreed upon statements of fact, a fair, accurate and complete representation of the positions of each of the parties in the dispute, and any other information relevant to the dispute, including information that represents agreed upon stipulations and statements of fact, as well as points of disagreement between the parties (hereinafter referred to as the "Report"). The Report shall include one or more recommendations and alternatives, which the parties believe the Contractor Account Director, and designated State Executive should consider. A description of the projected impact of the failure to resolve the dispute promptly and amicably shall also be included in the submission. Each Party may include separate statements of impact, recommendations or other information to the extent any of the Parties cannot or do not agree on particular items.
3) Not later than ten (10) days after the Report in connection with any dispute is submitted the Contractor Account Director and designated State Executive for review, they shall meet in an attempt to resolve the dispute. Either Party may request additional information, material, advice and input from individuals and organizations inside or outside the State and Contractor's organization.
4) If the Contractor Account Director and designated State Executive are unable to resolve the dispute within five (5) business days after the aforesaid meeting date, the parties may mutually agree to refer the dispute to non-binding mediation, which shall be conducted using the rules and procedures promulgated by the American Arbitration Association, applicable to mediation in a location to be agreed upon in Vermont, where the parties agree all such proceedings shall be conducted. Such mediation shall be conducted by a qualified neutral, independent third-party mediator, knowledgeable in the subject matter of the dispute and, if the parties cannot agree upon a mediator, each party shall select such a mediator and the two (2) mediators so selected shall mutually agree upon a third and the mediation shall, in that case, be conducted by a panel of the three (3) mediators so

selected. Each party shall bear its own expenses and an equal share of the expenses of the mediator(s) and the any related fees.

5) If the Parties accept and agree to the mediators' recommendations or otherwise reach agreement resolving the dispute, such agreement shall be made in writing and once duly executed, shall be binding on the parties; provided, however, that for the avoidance of any doubt or ambiguity, nothing in this agreement shall be construed as restricting, prohibiting, preventing or otherwise impairing either party from proceeding to litigation, instituting judicial or other proceedings, including a formal claim or legal action, or from pursuing any and all other legal, equitable or contractual remedies available to such party, at any time. Notwithstanding anything in this agreement to the contrary, the State shall not agree to arbitration and the State shall not waive any right to a trial by jury.

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
OTHER TERMS

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.

As between the parties, and subject to the terms and conditions of this Contract, Contractor and its third-party suppliers will retain ownership of all intellectual property rights in the [System], and any and all derivative works made to the [System] or any part thereof, as well as all Work Product provided to the State ("**Contractor Proprietary Technology**"). The State acquires no rights to Contractor Proprietary Technology except for the licensed interests granted under this Contract. The term "**Work Product**" means all other materials, reports, manuals, visual aids, documentation, ideas, concepts, techniques, inventions,

processes, or works of authorship developed, provided or created by Contractor or its employees or contractors during the course of performing work for the State (excluding any State Data or derivative works thereof and excluding any output from the [System] generated by the State's use of the [System], including without limitation, reports, graphs, charts and modified State Data, but expressly including any form templates of such reports, graphs or charts by themselves that do not include the State Data).

Title, ownership rights, and all Intellectual Property Rights in and to the [System] will remain the sole property of Contractor or its suppliers. The State acknowledges that the source code is not covered by any license hereunder and will not be provided by Contractor. Except as set forth in this Contract, no right or implied license or right of any kind is granted to the State regarding the [System] or any part thereof. Nothing in this Contract confers upon either party any right to use the other party's trade names and trademarks, except for permitted license use in accordance with this Contract. All use of such marks by either party will inure to the benefit of the owner of such marks, use of which will be subject to specifications controlled by the owner.

4.2 State Intellectual Property; User Name

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 collect, access or 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.

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, the Contractor shall cause an SSAE 18 SOC 2 Type 2 audit report to be conducted annually. 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. Further, on an annual basis, within 90 days of the end of the Contractor's fiscal year, the Contractor shall transmit its annual audited financial statements to the State.

6.5 Redundant Back-Up. The Contractor shall maintain a fully redundant backup data center geographically separated from its main data center that maintains near realtime replication of data from the main data center. The Contractor's back-up policies shall be made available to the State upon request. 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.

6.6 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, all medium issues within 120 days and low issues within 180 days. Contractor shall obtain written State approval for any exceptions. Once remediation is complete, Contractor shall re-perform the test.

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 Service, and will not interfere with the State's access to and use of the Service during the term of this Contract;

(iii) The Service 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 leins, 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 $2,000,000.

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 OR $5,000,000, WHICHEVER IS GREATER. 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.

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.

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. ACCESS TO STATE DATA:

The State may import or export State Materials in part or in whole at its sole discretion at any time (24 hours a day, seven (7) days a week, 365 days a year), during the term of this Contract or for up to [three (3) months] after the Term (so long as the State Materials remain in the Contractor's possession) without interference from the Contractor in a format usable without the Service and in an agreed-upon file format and medium at no additional cost to the State.

The Contractor must allow the State access to information such as system logs and latency statistics that affect its State Materials and or processes.

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.

15. AUDIT RIGHTS

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. DESTRUCTION OF STATE DATA

At any time during the term of this Contract within (i) thirty days of the State's written request or (ii) [three (3) months] of termination or expiration of this Contract for any reason, and in any event after the State has had an opportunity to export and recover the State Materials, Contractor shall at its own expense securely destroy and erase from all systems it directly or indirectly uses or controls all tangible or intangible forms of the State Materials, in whole or in part, and all copies thereof except such records as are required by law. The destruction of State Data and State Intellectual Property shall be performed according to National Institute of Standards and Technology (NIST) approved methods. Contractor shall certify in writing to the State that such State Data has been disposed of securely. To the extent that any applicable law prevents Contractor from destroying or erasing State Materials as set forth herein, Contractor shall retain, in its then current state, all such State Materials then within its right of control or possession in accordance with the confidentiality, security and other requirements of this Contract, and

perform its obligations under this section as soon as such law no longer prevents it from doing so.

Further, upon the relocation of State Data, Contractor shall securely dispose of such copies from the former data location and certify in writing to the State that such State Data has been disposed of securely. Contractor shall comply with all reasonable directions provided by the State with respect to the disposal of State Data.

17 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.

18 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.

e-Signed by Jesse Moorman
on 2017-09-13 14:59:44 GMT

ATTACHMENT E
BUSINESS ASSOCIATE AGREEMENT

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 EQ HEALTH SOLUTIONS, INC. ("BUSINESS ASSOCIATE") AS OF MAY 29, 2015 ("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

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, though 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 though (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

ATTACHMENT H – REQUIRED FORMS

Department of Vermont Health Access
Request for Approval to Subcontract

Date: _____ Original Contractor Name: _____ Contract #: _____

Subcontractor Name: _____

Scope of Subcontracted Services:
_____
_____
_____
_____

Is any portion of the work being outsourced outside of the United States?
☐ YES (If yes, do not proceed) ☐ NO

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