Call Center Way Forward (CCWF)

Requirements Specification Document (RSD)

Release 6

(CLIN 0007AA)



Department of Veterans Affairs

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TO-81 Customer Relationship Management (CRM) Development and Operations and Maintenance (O&M)

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# Introduction

The Call Center Way Forward (CCWF) project is closely aligned with the Non-Department of Veterans Affairs (Non-VA) Medical Care Way Forward Program Office. The intent of this project is the full integration of the Customer Relationship Management (CRM) system. The initial goal of the project is to staff, train, and provide access to information, equipment, and materials that result in outstanding customer support. Customer Service Representatives (CSRs) will utilize telephone systems and customer relations management technology, Internet-based technology and information from Veterans Health Administration (VHA) medical center information system (VistA) and other internal VA systems to respond to Non-VA Medical Care Inquiries. Information to support customer service remains within these systems as only the physical processing of health claims is centralized. Customer support reaches across the Veterans Integrated Service Network (VISN) for inquiries regarding Non-VA Medical Care health claims.

## Purpose

The purpose of this Requirements Specification Document (RSD) is to record the CCWF requirements for Release 6 (CCWF v1.6) and to provide the Development Team an overview of the release specifications for the CCWF project. The intended audience for this document is the Veterans Affairs Information Technology (IT) Project Manager (PM), business stakeholders, and other parties associated with CCWF.

## Scope

The scope of this effort is to build and deploy additional functionality for the CCWF CRM system that provides the Community Care Contact Center (C4) with the ability to better support and resolve inbound calls and achieve first call resolution. These capabilities include, but are not limited to: efficient workflows, streamlined business processes, the incorporation of common enterprise services, the adoption of capabilities from the enterprise CRM platform, improved management reporting, and enhanced administrative capability that is easier to manage.

Table 1 shows the key features of CCWF releases and dates for this work.

Table 1: CCWF Releases

|  |  |  |
| --- | --- | --- |
| Release | Release Dates | Release Key Features |
| Release 1 | 09/2015 – 03/2016 | * CCWF Pilot * Person Search * Contact History * Workflow * Data Migration |
| Release 2 | 04/2016 – 09/2016 | * Replacement of existing SharePoint call tracker * Integration with ESR (Enrollment System Redesign) * Additional Workflow improvements, including for Adverse Credit Reporting * Quality Assurance Scoring |
| Release 3 | 10/2016 – 12/2016 | * Custom Reports * System Improvements (Tab Order, Field Requirements, Dropdown Updates, etc.) |
| Release 4 | 01/2017 – 03/2017 | * Integration with existing VistA interfaces via the Health Data Repository (HDR) * Additional reports (Custom CRM reports and Veteran Data reports) * Additional System Improvements (Tab Order, Field Requirements, Dropdown Updates, etc.) * Community Care (CC) Referrals workflow |
| Release 5 | 03/2017 – 06/2017 | * Additional CC workflow functionality and updates to existing Referrals workflow * Ability to add clinical data from VistA to a CRM Request * Usability updates including updates to the Non-Core process, Interaction form layout improvements, Request form modifications, Clinical information web-part updates, and MVI search UI updates. * Ability to create correspondence via mail, fax, or email. * Addition of an emergency button to aid CSRs with suicidal Veteran callers. * Addition of Sensitive Veteran process to comply with regulations regarding viewing a sensitive patient’s record. |
| Release 6 | 06/2017-09/2017 | * Building out all remaining CC workflows * Creating all VISN/Facility teams and queues and Request routing updates to accommodate onboarding of additional VISNs * Enhancement to the Sensitive Veteran process to log the records accessed in VistA * Additional functionality for the Community Viewer Help Desk LOB, including updates to the Interaction and Request form and Request routing * Ability to create correspondence via mail, fax, or email. * Updates to existing web parts for clinical and demographic data * Ability to add clinical data from VistA to a CRM Request |

## References

The following is a list of references applicable to this RSD:

* [VA Handbook 6102 Internet/Intranet Web-site requirements](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwiF9sPa5obMAhVF8CYKHaXQAHsQFggpMAA&url=http%3A%2F%2Fwww1.va.gov%2Fvapubs%2FviewPublication.asp%3FPub_ID%3D410%26FTy&usg=AFQjCNH5ycyMhKa0qkHzwgpko_EwB4Q8xQ)
* CCWF FY16 Business Requirements Document (BRD)
* Community Care BRD
* Requirements Traceability Matrix (RTM)
* VA Handbook 6500 – Information Security Program
* CCWF System Design Document (SDD)
* CCWF Operations and Maintenance (O&M) Plan
* CRM Cloud Hosting System Security Plan
* CCWF CRM Data Dictionary
* CCWF Master Test Plan

# Overall Description

The following specifications delineate the requirements necessary for the development of the CCWF solution. Some of the requirements may be applicable to multiple sections of the RSD.

**Note:** The requirements documented in this section are only a snapshot as of the date of this document. All requirements are maintained in Rational. Rational is the authoritative source for all requirements and user stories, and is a living repository.

## Accessibility Specifications

Section 508 Compliance is required for the CCWF Solution to have accessibility. According to VA Handbook 6102, accessibility is ensuring that content can be navigated and read by everyone, regardless of location, experience, or the type of computer technology used. VA Web Managers must ensure that all web pages, documents, and files posted to the web and/or to a collaboration tool must be accessible (including .pdf, .xls, .doc).

The VA Section 508 Compliance Office performed 508 compliance testing for MS Dynamics CRM 2015, and identified Section 508 issues with the CCWF application. Issues due to the Commercial off the Shelf (COTS) nature of MS Dynamics have been referred to MS for resolution. The CCWF development team is responsible for addressing Section 508 compliance issues that are the result of application development. The Section 508 Office issued the CCWF project team an Interim Validation Statement for Release 5 on June 13, 2017. David Fanning, the Section 508 Representative for the project, recommended the CCWF CRM product for release. The Section 508 Office will provide an additional Validation Statement for Release 6 after their audit of the application is complete.

The Accessibility requirements for the CCWF CRM Solution identified for Section 508 Compliance consist of the requirements found in the [Section 508 standard checklist §1194.21](http://www.section508.va.gov/docs/1194_21_VASection508_software_checklist.doc) (Software Applications and Operating Systems) and [Section 508 standard checklist §1194.22](http://www.section508.va.gov/docs/1194_22_VASection508_web_checklist.doc) (Web-based Intranet and Internet Information and Applications). These specific checklists have been documented within the enterprise-level-requirements by the VA Section 508 Compliance Office for the purpose of being utilized within applicable projects. The details for CCWF 508 Compliance checklist specifications are in the CCWF SDD.

## Business Rules Specifications

Business rules are a set of VA policies and procedures that govern decision making in various core contact center capabilities. The examination of existing workflow processes is leveraged to improve the speed, accuracy, and efficiency in which information is exchanged between Veterans and the VA. As a result, identified requirements from the BRD and RSD have been defined as business rules and workflows and are included in the user stories for the current release.

Table 2 illustrates the business terms that are relevant to the CCWF CRM application and necessary to develop and understand the applicable business rules. For an expanded of terms used in the CCWF CRM application, see the CCWF CRM Data Dictionary.

Table 2: CCWF Business Terms

| Business Term | Tabular Definition |
| --- | --- |
| Caller type | An entity contacting the CSC (Customer Service Center) and comprises of Veterans, provider, meaningful relationship, Veteran Service Officers. |
| Provider | An entity who provides medical, mental, dental services identified by TIN (Tax Identification Number). |
| Veteran | A beneficiary of non-VA benefits for having served in the armed forces identified by Name, Social Security Number (SSN), and Date of Birth (DOB). |
| Provider caller type | A caller type that requires a CSR (Customer Service Representative) to input first name, TIN, if no TIN available first name, first initial of last name, physical address, and facility name. |
| Veteran caller type | A caller type that requires a CSR to input Veteran name, SSN, and DOB. |
| VSO (Veteran Service Organization) caller type | A caller type that requires a CSR to input first name, first initial of last name, and physical address. |
| Contact History | A record of all contacts made between a CSR and a caller type. Contact history and is identified by: Caller Type, Veteran Name, VISN, Site, Program Type, Call Purpose, Provider Name, TIN, and Address. |
| VISN | A VISN is a regionalized network of VA providers who provide service to Veterans. VISNs are identified by their regional number; this project is currently aligned with VISN 16. |
| Site | A hospital location within a VISN. There are currently 9 sites in VISN 16 and they are 502 Alexandria, LA: 520 Biloxi, MS; 564 Fayetteville, AR VAMC (Veterans Affairs Medical Center); 580 Houston, TX VAMC; 586 Jackson, MS; 598 North Little Rock, AR; 623 Muskogee, OK VAMC; 629 New Orleans, LA; 635 Oklahoma City, OK VAMC; and 667 Shreveport, LA VAMC. |
| Program Type | A specialized work unit responsible for operations within that unit identified as: Choice, Non-VA Care, and PC3 (Patient Centered Community Care). |
| Call Purpose | The reason a caller is making contact with the CSC and is identified as: Claim Status, Claim Status Report, Appeal, Authorization, Benefits, Eligibility, and PFRAR (Preliminary Fee Remittance Advice Report). |
| Contact history reports | A contact history report is a report based on Veteran name, SSN, TIN, phone number, user, program, caller type, VISN, Site, call purpose, creation date, and date range, in any permutation, to include ad hoc reporting. |
| Configure | The ability to manipulate drop down menus in the system and would include add, edit and delete functionality. |
| Access level | Defined in section 2.13.1. |
| Date of service | The month, day, and year a Veteran receives provider services, as well as the date of a claim. |
| Billed amount | The total billed charges of a Non-VA care claim. |
| Claim number | A uniquely generated identifier from a VA claim system of record that connects a provider, Veteran, DOS (Date of Service), and billed amount to a claim. |
| Type of Bill | A type of bill is a Non-VA care claim categorization and is identified as: Unauthorized, Authorized, and Mill Bill. |
| Type of bill subcategory | A dependent area of type of bill selection and is identified by: Unauthorized Outpatient, Unauthorized Inpatient, Authorized Outpatient, Authorized Inpatient, Mill Bill Outpatient, and Mill Bill Inpatient. |
| Action Type | An indicator of work that needs to be performed on a workflow issue and is identified by: Claim Reprocess, Claim Reprocess Authorization, Claim Reprocess Medical Docs, Authorization, Escalation, BOC (Budget Object Code), Appeals, Claim Status Report, and PFRAR. |
| Action Type subcategory | A dependent area of action type selection and is identified by: Needs Medical Review/Determination. |
| Claim Status Report | A workflow issue action type selected when a provider needs a record of all claims processed by their TIN over a period of time. |
| Method of delivery | The choice a caller would make in order to receive a Claim Status Report and is identified by: Mail, Email, and Fax subcategories. |
| Mail Subcategory | A method of delivery subcategory identified by: Facility name, Attention Line, Street/PO Box, City, State, and Zip. |
| Email Subcategory | A method of delivery subcategory identified by: Email Address Box. |
| Fax Subcategory | A method of delivery subcategory identified by: Attention Name field, Fax Number field. |
| Date/time stamp | A system generated date and time field associated with a contact record and/or workflow issue being saved with new or edited information. |
| User | One with a VA enterprise login account to the system. |
| File attachment | A software file that can be linked and sent through a workflow issue and is identified by: MS Office Suite document types, PDF, and image files. |
| Workflow status | The current position a workflow issue and is identified by: Unassigned, Assigned, and Resolved. |
| Free text notes | A component of a workflow issue and provide additional unique information in a free type format. |
| Workflow reports | A report based on Veteran name, SSN, TIN, phone number, user, type of bill, type of bill subcategory, action type, claim status report delivery type, status of a workflow issue, VISN, Site, issue number, issue creation date, issue resolved date and date range, in any permutation, and ad hoc reporting. |
| Issue identification number | A uniquely system generated tracking number related to a workflow issue. |
| Workflow issue search | Initiated by a user to find a workflow issue; they are identified by: Issue Numbers, SSN, Veteran Name, and TIN. |
| User edits | A change made to system fields including: Type of Bill, Action Type, Claim Status Report Delivery Type, Workflow Status, VISN, Site, and any free text that have been saved. |
| First in first out | A workflow issue that has the oldest creation date is processed by a user before others. |
| Workflow queue | A grouping of workflow issues sorted by oldest claim generated first as well as parameters that include user, workflow status and action type. |
| User roles | User roles are identified in section 2.13.1. |
| Access level | Access levels are outlined in section 2.13.1. |
| Historical contact notes | Historical contact history records are stored in the SharePoint Call/Issue Tracker and are comprised of the following fields: Contact Type, Caller Type, First Name, First Initial of Last Name, Phone, TIN, Provider Facility Name, Address, Program, VISN, Facility, Call purpose, Veteran Name, and notes. |
| Historical workflow issues | Stored in the SharePoint Call/Issue Tracker and are comprised of the following fields: Veteran Name, Phone, TIN, Type of Bill, Action Type, Claim Status Report Delivery Type, Workflow Status, VISN, Site, and any free text that have been saved. |

## Design Constraints Specifications

The following design constraints apply to the CCWF solution:

* The interface screens and workflows designed and developed within CRM are intended only work in the same “apples-to-apples” fashion as the current Microsoft Dynamics CRM 2015 along with the reporting use cases identified by the CCWF Client.
* Customization of the COTS product Microsoft Dynamics CRM is limited by OIT guidelines and mandates.
* External system integration is dependent on the availability of the necessary Web Services and/or the availability of VA resources to assist with integration development where web services must be created or modified in VA systems not covered by this project.
* A repository for centralized storage of all relevant case management data is required to implement the system’s ability to function as a paperless solution.
* Upgraded equipment and applications for all users may be required to introduce added system capabilities.
* Development must be compliant with all relevant CCWF policies and procedures pertaining to VA security standards.
* Operational success of the system is reliant upon the operation, availability, and accuracy of all identified interfaces.
* Support for the encryption and decryption of letters, emails, or other documentation is required.

## Disaster Recovery (DR) Specifications

The CCWF CRM system resides at the Booz Allen CRM hosted cloud and depends on the Disaster Recovery and Concept of Operations (CONOP) plans in place to support systems that require continuous availability and recovery of data to meet VA data-retention requirements.

The Disaster Recovery Specifications are as follows:

* Virtual Server’s Operating System (OS) is backed up using Snap Manager for Virtual Infrastructure (SMVI); backups of the OS are done bi-weekly (Tuesday and Thursday).
* Server File Data is backed up nightly (Monday – Friday), with one day of data loss, using Netbackup to restore the data.
* Transactional database server’s logs are backed up every 30 minutes and nightly, with the ability to restore 30 minutes to one day of data using either SQL restores or Netbackup restores or a combination of both.

For detail regarding Disaster Recovery (DR) plans, please refer to the CRM Cloud Solution Disaster Recovery Plan and/or the VCE Cloud Hosting System Security Plan (SSP). This section of the RSD discusses the high-level requirements that have been identified and should be considered for disaster and system recovery:

* The CRM Cloud Solution backs up the virtual machine data via regularly occurring environment snapshots at 15-minute intervals using industry best practice tools. These real-time snapshots will be retained, per an outlined schedule, to provide application restoration capabilities in the event of an outage.
* A ‘Nightly’ snapshot is taken at 12:00 a.m. EST and retained on the storage controller (SAN Storage) for seven (7) days. On the eighth day, the oldest snapshot is rolled off the system.
* The CRM Cloud contractor performs a full system backup and sets the retention period to two years for the purpose of historically archiving the application baseline for each major application release.
* Long term backup is performed at the DR site using SAN replication and the replicated data sets as the source. Further, the backup is run against an offline copy of the data set using separate disk resources so there is no impact to the private cloud systems during the backup window.
* The CRM Cloud contractor updates and maintains the DR plan.
* The CRM Cloud contractor will have the DR site databases and applications operational within two (2) hours of the VA decision to failover to the DR site.
* The CRM Cloud contractor provides the infrastructure, connectivity, and replication of data to support successful DR testing in two (2) regularly occurring cycles: (1) Failover DR testing occurs on a monthly basis to confirm that failover capabilities from the primary to the DR site is functioning at the same level of performance, availability, and integrity as the primary site. As part of this testing, the contractor performs a monthly tape backup restoration test with a sample server; (2) Annual DR testing occurs once per year to demonstrate full restoration capabilities from the primary and DR sites, as well as restoration from tape. The results of DR testing are included as part of the Bi-Weekly Status Report.

## Documentation Specifications

System documentation includes descriptions of the system hardware, software, policies, standards, procedures, and approvals related to the system lifecycle and system’s security controls. The VA requires that sufficient documentation exist to provide an operating reference for the effective use of hardware and software. Formal security and operational procedures must also be documented, including documentation of adequate completion of all Certification and Accreditation processes. Documentation must include, but is not limited to, all documentation of the security planning, Certification and Accreditation processes, and configuration management of the hardware and software associated with the system.

## Functional Specifications

This section provides the functional requirements for the CCWF CRM solution derived from the CCWF BRD dated May 21, 2015 and the CC BRD dated June 6, 2016. Table 3 contains high-level functional requirements for CCWF CRM as developed by the Chief Business Office Purchase Care (CBOPC) (now Office of Community Care (OCC)).

Table 3: CCWF High-Level Requirements

|  |  |  |  |
| --- | --- | --- | --- |
| Source | ID | Theme | Requirements |
| CC BRD | Epic 6 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR, I need the ability to look up and answer general questions about copay /other health insurance (OHI). |
| CC BRD | Epic 9 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR, I need the ability to look up a Veteran's OHI in the ES system |
| CC BRD | Epic 13 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR, I need the ability to create a request for a secondary authorization (SAR) to be created. |
| CC BRD | Epic 14 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR, I need the ability to view scheduling information for a VAMC |
| CCWF BRD | Epic 18 | CRM Capability for NVCA Inquiries | As CBOPC Non-VA Medical Care Customer Service Providers, we need the ability to configure a robust Customer Relations Management capability for Non-VA Medical Care related inquiries in order to meet needs of our customers and the CBOPC organizational structure. |
| CCWF BRD | Epic 19 | CRM Capability for NVCA Inquiries | As CBOPC Non-VA Medical Care Customer Service Providers, we need the ability to utilize the Customer Relations Management capability from multiple call center locations for Non-VA Medical Care related inquiries in order to meet needs of our customers and the CBOPC organizational structure. |
| CCWF BRD | Epic 20 | CRM Capability for NVCA Inquiries | As CBOPC Non-VA Medical Care Customer Service Providers, we need the ability to utilize the Customer Relations Management capability from remote/virtual locations for Non-VA Medical Care related inquiries in order to meet needs of our customers and the CBOPC organizational structure. |
| CCWF BRD | Epic 21 | CRM Capability for NVCA Inquiries | As CBOPC Non-VA Medical Care Customer Service Providers, we need manual contact noting capability for all contact types of Non-VA Medical Care contacts in order to increase efficiency and standardize processes. |
| CCWF BRD | Epic 24 | CRM Capability for NVCA Inquiries | As CBOPC Non-VA Medical Care Customer Service Providers, we need a robust workflow capability in order to ensure appropriate resolution of Non-VA Medical care inquires. |
| CCWF BRD | Epic 25 | CRM Capability for NVCA Inquiries | As CBOPC Non-VA Medical Care Customer Service Providers, we need the ability to route workflow items to individuals and groups in order to ensure appropriate resolution of Non-VA Medical care inquires. |
| CC BRD | Epic 21 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR I need the ability to escalate and track a request to VAMC Care coordinators (NVCC) |
| CC BRD | Epic 22 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR Lead/Supervisor, I need the ability for the system to automatically escalate a request to a queue of unresolved requests for direct follow-up by the Supervisor. |
| CC BRD | Epic 32 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR, I need the ability to have the system identify the closest facility Name and Number based on the Veterans' location |
| CCWF BRD | Epic 32 | CRM Capability for NVCA Inquiries | As CBOPC Non-VA Medical Care Customer Service Providers, we need the ability to compile data in ad hoc and automated reports in order to respond to Freedom of Information Act requests and monitor user performance. |
| CC BRD | Epic 33 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR, I need the ability to automatically escalate request based on request type and pre-defined business rules. |
| CC BRD | Epic 36 | Customer Service, Eligibility, Authorization, Provider Relationship Management | As a CSR, I need the ability to access data from the ES system so that I can answer Veteran eligibility questions. |

CCWF also has specific requirements for the CRM system that are being developed by the development team during Release 6. Table 4 details these requirements as of 07/13/17. The requirements are documented in Rational Team Concert (RTC).

Table 4: CCWF CRM Requirements

|  |  |  |  |
| --- | --- | --- | --- |
| Rational ID | Function | Requirement | Release/ Sprint |
| 512745 | Community provider issue reporting | As a COR I need the ability to view statistics on community provider urgent issues and complaints, so that I can verify if contractual obligations are met | Release 6 |
| 555807 | Research: update “VAMC" web part - backend | As a CRM User, I want to update the "VAMC" Web Part source system so that I am retrieving information from the authoritative source | Release 6 Sprint 31 |
| 512749 | Add/remove progress notes to emergency notification requests | As a CSR I need to attach the Hospital Notification Progress Note to the request that is routed to NVCC for emergency, so the NVCC agent has context for the episode of care | Release 6 |
| 512748 | Route emergency notification requests to NVCC | As a CSR I need to be able to route Emergency Notifications requests to NVCC, so they can perform entitlement reviews | Release 6 |
| 538016 | Update "VAMC" web part - facility phone number | As a CRM User, I want the Visit Web Part to have the Facility's Main Phone Number so that I can easily refer the caller to contact the facility | Release 6 Sprint 31 |
| 538011 | Update "VAMC" web part - facility name | As a CRM User, I want the Visit Web Part to have the Facility Name so that I can tell which Facility is being referenced in the table | Release 6 Sprint 31 |
| 474615 | Custom Merge for Veteran records | As a CCWF user, I need a custom process for merging Veteran Records to consolidate duplicates and retain the Request History. | Release 6 Sprint 31 |
| 437962 | Add/remove consults | As a CSR, I must be able to add consults from the consults tab to “Consult Details” section of request, to provide specific information about the referral investigation | Release 6 Sprint 31 |
| 556228 | Request changes for CVHD | As a CVHD user, I need the Request form to only show me fields that I need in order to properly work a request. | Release 6 Sprint 31 |
| 437970 | Add/remove appointments | As a CSR I need the ability to add and remove an appointment to/from the request so the CCFOR knows which appointment to work on and the system knows which appointment to determine priority from | Release 6 Sprint 31 |
| 456860 | Update "VAMC" web part | As a CRM User, I want to update the "VAMC" Web Part with information about a Veteran's visits so that we can determine the applicable action based on visit data. | Release 6 Sprint 31 |
| 437977 | Referral investigation required objects | As a CCFOR I need he following information should be prepopulated on the request form from the interaction, so I can more efficiently assist the veteran | Release 6 |
| 529496 | Claim Requirements for Bill of Collections Action | As a CSR, I want BOC request to require a claim to route so that I cannot route a BOC request without a claim | Release 6 Sprint 31 |
| 554951 | Areas/Subareas for CVHD | As a CVHD user, I need certain Areas and Sub Areas in order to correctly classify the call. | Release 6 Sprint 31 |
| 276133 | View all medical documentation to verify receipt | As a CCWF user I need the ability to see medical information to verify that all documents have been received. | Release 6 |
| 437999 | Appointments required objects | As a CCFOR I need he following information should be prepopulated on the request form from the interaction, so I can more efficiently assist the veteran | Release 6 |
| 539296 | Technical story: consults backend updates | As a CRM user, I want the consults service to be updated so that I have the most accurate consults information from VistA. | Release 6 Sprint 32 |
| 539202 | Technical: clinical information performance improvements | As a CRM user, I want the speed at which clinical information is returned to be increased so that I do not have to wait as long for this information | Release 6 Sprint 31 |
| 540622 | Integration Team Story: Filtering updates | Story to track research into updating date filter in web parts | Release 6 Sprint 31 |
| 539170 | Technical Story: Update javascript Eval Command | As a CCWF CRM Stakeholder, I need the CRM solutions to be compliant with Software Assurance Office standards so that I am able to complete subsequent production Releases. | Release 6 Sprint 31 |
| 494672 | Clinical information on interaction/request | As a CSR, I need the ability to view the clinical information tabs on the Interaction and Request forms so that I can easily access Veteran clinical information | Release 6 Sprint 31 |
| 438004 | View AOD and VAMC transfer office numbers | As a CSR I need the ability to view AOD and Transfer office coordinator contact information via CRM, so that I can easily perform a warm handoff and ensure Veteran is discharged properly. Related to VIEWING PCP/PACT STORY (426953) | Release 6 Sprint 31 |
| 555542 | Sensitive Vet 10: VistA/VIA SSOi | As a CRM user, I want to automatically be logged in to vista so I do not have to spend time entering my VistA credentials in CRM | Release 6 |
| 555522 | Sensitive Vet 1: Update sensitive Veteran check | As a CRM user, I want the sensitive Vet check to occur using the sensitive veteran determination provided from MVI so that I do not have to wait for an additional search to the Enrollment system | Release 6 Sprint 31 |
| 530267 | Sensitive Vet 3: ISO Log in VistA | As a CRM user, I need access to a sensitive or deceased veteran's record logged in VistA so that I am compliant with ISO standards | Release 6 Sprint 31 |
| 458627 | Set Veteran home facility from E&E | As a CRM User, I want the preferred facility field in CRM to be auto-populated from E&E so that I do not have to set that field manually | Release 6 Sprint 31 |
| 555526 | Sensitive Vet 5: update non-sensitive Veteran record | As a CCWF user, I need the Veteran record to be updated with the Sensitive and Veteran flag so that I can always have the most recent value of the indicator | Release 6 Sprint 31 |
| 555529 | Sensitive Vet 6: update sensitive Veteran record | As a CCWF user, I need a sensitive Veteran’s record to be updated with the Sensitive and Veteran flag so that I can always have the most recent value of the indicator | Release 6 Sprint 31 |
| 530275 | Sensitive Vet 9: Determination from Request/Submitted Interaction | As a CRM user, I want the Sensitive Vet pop up to appear when I open a Request or submitted Interaction for a sensitive Veteran so that I can properly log accessing a sensitive Veteran's CRM data on the form. | Release 6 Sprint 32 |
| 555523 | Sensitive Vet 2: Proceed message + Login VIA | As a CRM user, I need the ability to log into VistA so that I can log sensitive patient access | Release 6 Sprint 31 |
| 543383 | Correspondence 5: select E&E data | As a CRM user, I want to select data from the E&E system when completing correspondence so that I can automatcially send correspondence to the the Veteran's email/fax/addresses. | Release 6 Sprint 32 |
| 539621 | Technical story: Sensitive Vet - CRM process usability updates | As a CRM system Administrator, I want the CRM log of sensitive Veteran access to be more clear so that I can more easily provide the required data to the ISO | Release 6 Sprint 31 |
| 555525 | Sensitive Vet 4: Unmasked SSN/DOB field | As a CRM user, I need a sensitive non-Veteran’s unmasked SSN/DOB to be saved separately from the regular SSN and DOB field so that these fields can be hidden unless I have approval to see them | Release 6 Sprint 31 |
| 555532 | Sensitive Vet 7: Evaluate status | As a CRM user, I need to know if I have access to a sensitive patient’s record so that I am compliant with the ISO standard | Release 6 Sprint 31 |
| 539625 | Sensitive vet 8: CRM external log access | As a VA OIT Stakeholder, I do not want end users to have access to their own sensitive veteran access audit logs so that I am not in violation of any security standards. | Release 6 Sprint 31 |
| 543389 | Correspondence 6: view E&E data | As a CSR, I want to see data from the E&E system when completing correspondence so that I can know the Veteran's email/fax/addresses. | Release 6 Sprint 32 |
| 438015 | Correspondence 2: Email | As a CSR I need the ability to enter an Email address if the Method of Delivery is set to Email so that I can easily send the form letter by email | Release 6 Sprint 31 |
| 438018 | Correspondence 4: post-emergency claim filing - content | As a CSR, I need the form letter to contain specific information so that the caller is informed of the criteria for timely filing of emergency claims | Release 6 Sprint 31 |
| 526454 | State lookup not associating ME with Maine | As a CRM user, I need the state lookup to work will all abbreviations in order to easily find what I am looking for. | Release 6 Sprint 31 |
| 500653 | Discharge planning - area/subarea/resolutions/actions | As a CSR, I need additional CRM fields related to discharge planning processes so that I can categorize calls about Discharge Planning | Release 6 Sprint 31 |
| 500660 | Traveling Veteran - area/subarea/resolutions/actions | As a CSR, I need additional CRM fields related to traveling veteran processes so that I can categorize calls about Traveling Veterans | Release 6 Sprint 31 |
| 541493 | Correspondence 3: correspondence from request | As a CSR I need the ability to access the options to send correspondence directly from the Request so that I can quickly send correspondence while on a call | Release 6 Sprint 31 |
| 493650 | Correspondence 1: correspondence from interaction | As a CSR I need the ability to access the options to send correspondence directly from the interaction so that I can quickly send correspondence while on a call | Release 6 Sprint 31 |
| 500651 | Dental - area/subarea/resolutions/actions | As a CSR, I need additional CRM fields related to Dental processes so that I can categorize calls about Dental | Release 6 Sprint 31 |
| 437998 | Appointments - queue notification | As a CCFOR I need to notify the team when Requests are urgent, so they are worked in a timely manner | Release 6 Sprint 31 |
| 438019 | Email no reply | As a CRM User, I want the ability to send emails from a DONOTREPLY address so that recipients are not able to respond to my personal email address | Release 6 Sprint 32 |
| 458597 | Saving Notes on Request | As a CSR, I want CRM notes field to not save when I click away from the Notes box, so that I do not accidentally incomplete create notes | Release 6 |
| 523562 | Research: Location of Routing Information section | Research having Routing information and Address/fax/email fields on the same row as Complete topic buttons | Release 6 Sprint 31 |
| 512742 | Reroute complaints to NVCC | As a CSC Supervisor I need to be able to route / assign a complaints for Quality or Safety issues to the NVCC, so they can review the issue with the contractor | Release 6 |
| 457832 | NVCC routing - queue / team setup | As a VISN 6/21 CCFOR, I want queues to only show requests related to my facility/facilities so that I am only displayed work I am able to complete | Release 6 |
| 552777 | NVCC routing for all visns | As a CCFOR, I want queues to only show requests related to my facility/facilities so that I am only displayed work I am able to complete | Release 6 |
| 511823 | Routing for CVHD Requests | As a CVHD user, I need the ability to route Requests in order to get work done. | Release 6 |
| 437961 | VA resources / facility locator | As a CRM user, I want the Va.gov facility search web page (facility locator) within CRM, so I don’t have to launch another browser | Release 6 Sprint 31 |
| 500657 | DME - area/subarea/resolutions/actions | As a CSR, I need additional CRM fields related to Durable Medical Equipment (DME) processes so that I can categorize calls about DME | Release 6 Sprint 31 |
| 553776 | Remove duplicate facility | As a CRM user, I need all facilities in CRM to be unique so that I can retrieve the correct integrated data for the facility | Release 6 Sprint 31 |
| 426974 | Complaints (provider managment) - area/subarea/resolutions/actions | As a CSR, I need additional CRM fields related to the provider management processes so that I can categorize calls about provider complaints | Release 6 Sprint 31 |
| 538669 | Email MOD for PFRAR | As a CCWF user, I want to have the option to email a PFRAR to accommodate new business functionality. | Release 6 Sprint 31 |
| 510991 | Field supervisors reactivate requests | As a Field Supervisor, I need the ability to reactivate Requests in order to make necessary updates. | Release 6 Sprint 31 |
| 511820 | Interaction changes for CVHD | As a CVHD user, I need modifications to the Interaction form based on Type in order to capture only the information I need. | Release 6 Sprint 31 |
| 437989 | Re-route request to another facility | As a CCFOR, I need the ability to re-route request if request goes to wrong facility | Release 6 Sprint 31 |
| 512741 | Reroute complaints to COR | As a CSC Supervisor I need to be able to re-route / assign a complaints for experience issues to the COR, so they can review the issue with the contractor | Release 6 |
| 552698 | CC request history tracking | As a CRM user, I want the ability to see and report on whether a request has been re-routed so that I can track the lifecycle of a request. | Release 6 |
| 534438 | Assign to CSC Supervisor date field width need to be expanded on ACR form | As a CCWF user, I need to see the full Assign to CSC Supervisor date field in order to track the Request. | Release 6 Sprint 31 |
| 500659 | Emergent care notification - area/subarea/resolutions/actions | As a CSR, I need additional CRM fields related to emergent care notification processes so that I can categorize calls about Emergent Care Notification | Release 6 Sprint 31 |

## Graphical User Interface (GUI) Specifications

In general, MS Dynamics CRM 2015 provides a primary console interface that is configured for CCWF. When configuring entities within MS Dynamics CRM for CCWF, the CRM Dynamics system utilizes a single GUI allowing responders to interact with the data more efficiently than the previous set of applications that were used. The User Interface (UI) includes lists with customizable views, Find and Advanced Find capabilities, editors for all entities, lookup dialogues, and various UIs.

The MS Dynamics CRM GUI specifications being configured for CCWF were determined through on-going interactions with Subject Matter Experts (SMEs) from the CCWF site.

Table 5 illustrates the CCWF GUI Specifications that have been configured to date.

Table 5: CCWF GUI Specifications

|  |  |
| --- | --- |
| Description | Source |
| Single UI – Replace legacy application screens used by CCWF users with a single-UI. | CCWF – BRD |
| Display Veteran data – Display key information about the Veteran, where it is prominent, during the entire call. | CCWF – BRD |
| System Integration – Integrate with all Veteran Non-VA medical care system or record repositories. | CCWF – BRD |

## Multi-Divisional Specifications

User access to data within the Dynamics CRM system is based on the segmentation of permissions in a hierarchical structure. The top level for the CCWF CRM system is the Business Unit, which defines the business divisions throughout the system and organizes users into groups.

User Roles determine the specific access permissions (Create, Read, Write, Delete, Append, or Append To) for any given entity. User Roles can be assigned at the User, Team, Business Unit, or Organizational level. This multi-tiered approach to divisional hierarchical structuring enables the CRM to fully meet accessibility and security requirements while providing a seamless user experience.

## Performance Specifications

The CCWF application supported 200 users at Go Live in October 2016. The application currently supports approximately 500 users. More users will be accessing the application as additional VISNs are onboarded.

Call volume may increase if the call center is required to provide support in the event of a public health emergency, such as an epidemic or pandemic. Other natural disasters and/or power outages at an individual center can also increase call volumes at other call centers.

CCWF CRM response time is dependent on several external factors including:

* VRM hosted cloud data center support and application response time;
* The response time of external VA data services including Master Veteran Index (MVI), Eligibility and Enrollment (E&E), HDR, and other currently undetermined services.

## Quality Attributes Specifications

### Maintainability

A comprehensive maintenance program is defined as part of the CCWF O&M Plan. Briefly, the Development Team shall:

* Consider how the system will manage changes to business processes and dynamic business rules,
* Follow documentation standards and release standards, and
* As a part of best practice, create logs of changes, updates, or fixes.

Table 6 contains maintainability requirements that are addressed by CCWF CRM.

Table 6: CCWF Maintainability Requirements

| Description | Source |
| --- | --- |
| Maintenance, including the maintenance of externally developed software incorporated into the single desktop view, shall be scheduled during off peak hours or in conjunction with relevant VistA maintenance schedules. | CCWF Operations and Maintenance Plan |
| Provide a real-time monitoring solution during the maintenance windows or when technical issues/problems occur that may require a preventative backup. | CCWF Operations and Maintenance Plan |
| Notification of scheduled maintenance periods that require the service to be offline or that may degrade system performance shall be disseminated to the user community a minimum of one week prior to the scheduled event. | CCWF Operations and Maintenance Plan |
| Communication of CRM maintenance schedule & expected/unexpected down time/outages will be proactively monitored and provided to the CCWF Team. | CCWF Operations and Maintenance Plan |

### Data Integrity

The CCWF CRM system contains data integrity measures to protect sensitive information. For a detailed description of these data integrity controls, see the CRM Cloud Hosting System Security Plan dated July 7, 2016.

The CCWF CRM environment has been deemed to be FIPS Moderate. The basic threat involving data integrity is the corruption of data. Threats to data integrity include:

* Component Failure;
* Thunderstorm;
* Blizzard;
* User Sabotage;
* Earthquake;
* Fire; and
* Power Failure.

All threats have a medium or low level risk level.

There are 20 system and information integrity controls in place for the CCWF CRM system. There are no additional controls planned. For a full list of the data integrity controls in place, see Section 2.0: Security Control Identification of the CRM Cloud Hosting System Security Plan.

### Supportability

The CCWF CRM system uses ScienceLogic Enterprise Management 7 (EM7) for system monitoring, troubleshooting, and tracing tools. Additional supportability requirements are based on the VCE hosted cloud and will be added as they become known. Table 7 contains the supportability requirements for the CCWF CRM.

Table 7: CCWF Supportability Requirements

| Description | Source |
| --- | --- |
| Information about response time degradation resulting from unscheduled system outages and other events that degrade system functionality and/or performance shall be disseminated to the user community within 30 minutes of the occurrence. The notification shall include the information described in the current Automated Notification Reporting (ANR) template maintained by the VA Service Desk. The business impact must be noted. | CCWF Operations and Maintenance Plan |

### Testability

Testability is fully addressed in the CCWF Master Test Plan. In summary, the development team creates user interaction tests scripts to maximize test and code coverage, and specify system inputs and outputs to facilitate the construction of test cases. User Acceptance Testing (UAT) personnel shall include CSRs, SMEs, and administrators that are able to confirm acceptable changes to their workflow.

## Reliability Specifications

The CCWF CRM system is hosted at and dependent upon the reliability of the VRM hosted cloud environment. The CCWF CRM is expected to be available at a rate of 99.5% during business hours (7:00AM – 10:00PM EST), excluding 10 Federal holidays.

A maintenance team monitors the CCWF CRM system in the Production environment. Tools, methods, and specifications for monitoring the reliability of the CCWF CRM system are at the discretion of the maintenance team. The precision (resolution) and accuracy of the system’s output should be 99%, but the actual accuracy of the system is dependent on the data stored by integration partners.

## Scope of Integration

The CCWF CRM provides internal users with the ability to access a single desktop view in the CRM using Active Directory (AD) capabilities for all authentications and is the call center entry point for support of Veterans & other callers. The CCWF CRM integrates with multiple VA systems to allow CSRs to view Veteran information & medical record documentation.

Table 8 illustrates the integrations needed for CCWF per the CCWF BRD.

Table 8: CCWF Scope of Integration

|  |  |
| --- | --- |
| Description | Source |
| CCWF CRM will provide an integrated reporting platform for various sources of data. Sources of data may include: VistA, CPRS, and FBCS. | CCWF – BRD |
| MS Dynamics CRM will provide integration with VA portal-based applications as well as VHA (Veterans Health Administration) data. | CCWF – BRD |

Enterprise Technology Architecture (ETA) data services are needed to interface with the data sources for the CCWF CRM. The CCWF implementation team is working with VA representatives to determine the appropriate services for integration external systems. These services consist of existing, available services, and possibly new services, as required to meet the CCWF functional requirements.

## Security Specifications

All VA security requirements are adhered to. Based on Federal Information Process Standards (FIPS) 199 and National Institute of Standards and Technology (NIST) Special Publication (SP) 800-60, the recommended Security Categorization of the CCWF system is ‘Moderate’.

This recommended Security Categorization drove the initial set of minimal security controls required for the information system. Minimum security control requirements are addressed in NIST SP 800-53 and VA Handbook 6500.

### Role-Based Permission

MS Dynamics CRM is role based and every user is required to be assigned a valid role to work within the system. Predefined roles in MS Dynamics CRM may be used in CCWF CRM. CSRs perform demographic review and entry, and appointment scheduling. Table 9 contains the various roles that a user can be assigned in the CCWF system.

Table 9: CCWF User Roles

| User Level | User Role(s) | Responsibilities | Access Level |
| --- | --- | --- | --- |
| Primary | CSC Production User  CSR  CSC Lead  CSC Supervisor  CSC Quality Analyst  CSC Lead Program Analyst  CSC Leadership | Conduct MVI Veteran search Input contact history  Input workflow issue | Contact history CRM read, write  Workflow issue CRM read, write |
| Primary | CSC Workforce User  CSC Supervisor  CSC Workforce Analyst  CSC Lead Program Analyst  CSC Leadership | Generate contact history reports  Generate workflow issue reports  Configure ad hoc reports | Contact history CRM generate report  Workflow issue CRM generate report |
| Primary | CSC Supervisory User  CSC Supervisor  CSC Leadership | Conduct MVI Veteran search Input contact history  Input workflow issue  Assign workflow issue  Edit workflow issue | Contact history CRM read, write, edit, delete  Workflow issue CRM read, write, edit, delete |
| Secondary | CSC Administrator  CSC Lead Program Analyst  CSC Leadership | Configure contact history menus  Configure workflow issue menus  Configure ad hoc reports | Contact history CRM read, write, edit, delete, configure  Workflow issue CRM read, write, edit, delete, configure |
| Primary | Field Support User  Voucher Examiner  Lead Voucher Examiner  FS Analyst  FS Supervisor  FS Leadership | Edit workflow issue | Workflow issue CRM read, write |
| Secondary | Field Support Workforce User  FS Analyst  FS Supervisor  FS Leadership | Generate workflow issue reports  Configure ad hoc reports | Workflow issue CRM generate report |
| Primary | Field Support Supervisory User  FS Supervisor  FS Leadership | Assign workflow issue  Edit workflow issue | Workflow issue CRM read, write, edit, delete |
| Primary/Secondary | CCWF User  CSR  CSC Lead  CSC Supervisor  CSC Quality Analyst  CSC Lead Program Analyst  CSC Leadership  Voucher Examiner  Lead Voucher Examiner  FS Supervisor  FS Leadership | Input workflow issue  Assign workflow issue  Edit workflow issue | Workflow issue CRM read, write |

### Privacy Requirements

The CCWF CRM adheres to all VA and VHA Privacy requirements. A Privacy Act System of Records Notice (SORN) must cover efforts that involve the collection and maintenance of individually identifiable information.

### Certification and Accreditation

VA requires that mechanisms are in place to control any changes being made to system security documentation. These mechanisms must address the revisions to all system security planning documentation (such as Security Plans and Contingency Plans). The system owner ensures that a table of changes that describes the nature of significant changes that require revision to the document is maintained within the System Security Plan or other document. The Information Security Officer (ISO) conducts annual reviews of the security documentation with system owners, system managers, and other Office of Information Technology (OIT) personnel.

The security controls are designed, developed, approved by the VA, and implemented in accordance with the provisions of the VA security system development lifecycle as outlined in NIST SP 800-37 (Guide for Applying the Risk Management Framework to Federal Information Systems), VA Handbook 6500 (Information Security Program), and VA Handbook 6500.5 (Incorporating Security and Privacy in System Development Lifecycle). The CCWF CRM falls under the VCE hosted cloud’s System Security Plan (SSP) as a Minor Application covered by its certified network. The Field Security Service (FSS) Standard Operating Procedure (SOP) for a Minor Application is being followed to address Certification and Accreditation for CCWF CRM.

## System Features

System features are documented in the Functional Specifications, Section 2.6.

## Usability Specifications

User experience encompasses the entire interaction between the user and the system. This includes direct interaction with the system as well as other interactions, understanding, awareness, perceptions, beliefs, feelings, and actions that result. One key component of the user experience is the usability of the system. Improving usability of the new system over the prior version is a key requirement for this application. The International Organization for Standardization (ISO) defines usability as “the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use” (1998).

In order for this application to promote a good user experience, the system must meet the requirements outlined in this section. These involve attributes of the application as well as the process required to achieve them.

In order to improve the usability of VA-developed or purchased applications, the following actions are required:

* In accordance with the Office of the National Coordinator for Health Information Technology’s (ONCHIT) Meaningful Use (MU) Stage 2 final ruling, use of an industry recognized User Centered Design (UCD) process is required. The methods for UCD are well defined in documents and requirements such as ISO 9241–11, ISO 13407, ISO 16982, National Institute of Standards and Technology Interagency Report (NISTIR) 7741, ISO/International Electrochemical Commission (IEC) 62366, and ISO 9241-210. Developers will choose their UCD approach; one or more specific UCD processes will not be prescribed.
* Adherence to an industry recognized UI Best Practices Guideline or Style Guide. For example, first follow UI guidelines for the development platform. In instances where platform guidelines are not available, the system must adhere to the VA’s Best Practices Guidelines/Style Guide.
* Inform requirements and designs with detailed human factors in mind. Examples of specific human factors activities might include heuristic evaluations, site visits, interviews, application-specific design guides, and usability testing on existing systems or prototypes.

The system demonstrates high usability by being:

* Intuitive and easy to learn with minimal training,
* Effective by allowing users to successfully complete tasks,
* Efficient by allowing users to complete their work in a manner consistent with clinical practice and workflow,
* Perceived to have high usability, as demonstrated by appropriate survey measures, and
* Designed to aid users in meeting task goals without being an additional burden.

The system demonstrates reliability and enables user trust by providing:

* Stable and reliable performance,
* Accurate data,
* A display of all data available in native or interfaced systems and intended to be available in the application, and
* Accessible information related to the source of data.

The system allows the user to view data from multiple sources and includes a modern GUI that provides:

* An integrated display of structured and unstructured data,
* A rich data visualization and graphical display of data,
* The ability to switch between tabular and graphical data views,
* The ability to interact with displayed data to obtain additional details related to the data and source of the data, and
* User customizable components and settings.

The system provides advanced and up-to-date searching, including:

* Fast, Google-like, Lucene search functionality with auto-complete and real-time display of matched results during typing, and
* A search history.

The system provides advanced filtering capabilities, including:

* Filtering of data tables, lists, and grids, and
* Filtering of search results.

The system design is modified to:

* Address the specific findings from a human factor heuristic evaluation conducted on the prior version of the application,
* Address the specific findings reported from field use of the prior version, and
* Address the specific findings reported from usability testing of the prior version or relevant prototypes.

Usability requirements for this work effort are documented in the CCWF BRD.

# Purchased Components

VA contract and purchase information is sensitive. Please contact the CCWF IT Project Manager for this information if needed.

# Estimation

The functional size of the project is zero (0) as this release is related to contractor enhancements to the MS Dynamics CRM COTS application and does not develop or enhance existing VistA business functionality, CRM is therefore exempt from this functional sizing process.

Attachment A Approval Signatures

REVIEW DATE:

SCRIBE:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signed: Date:

*PII, Business Sponsor*

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Signed: Date:

*PII, CCWF Development Team Project Manager*

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Signed: Date:

*PII, VA OIT Project Manager*

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Signed: Date:

*PII, VA OIT Project Manager*

Appendix A Non-Functional Requirements

The following non-functional requirements should be reviewed and assessed while developing the requirements for the project.

System Performance Reporting Requirements

(Note: Each system developed by the Department of Veterans Affairs (VA) Office of Information and Technology (OI&T) must comply with the following mandatory requirements.)

1. Include instrumentation to measure all performance metrics specified in the Non-Functional Requirements section of the Requirements Traceability Matrix (RTM). At a minimum, systems will have the ability to measure reporting requirements for Responsiveness, Capacity, and Availability as defined in the non-functional requirements section of the RTM.
2. Make the performance measurements available to the Information Technology (IT) Performance Dashboard to enable display of “actual” system metrics to customers and IT staff.

Operational Environment Requirements

1. System response times and page load times shall be consistent with contract standards (for example, My HealtheVet or HealtheVet). (Comment: There may be different expectations for an external display vs. a query. Need to address these different uses. Also indicate if this information is unknown).
2. Maintenance, including maintenance of externally developed software incorporated into the CCWF application(s), shall be scheduled during off peak hours or in conjunction with relevant maintenance schedules. The business owner should provide specific requirements for establishing system maintenance windows when planned service disruptions can occur in support of periodic maintenance.
3. Information about response time degradation resulting from unscheduled system outages and other events that degrade system functionality and/or performance shall be disseminated to the user community within 30 minutes of the occurrence. The notification shall include the information described in the current Automated Notification Reporting (ANR) template maintained by the VA Service Desk. The specific business impact must be noted in order for OIT to provide accurate data in the service impact notice of the ANR.
4. Provide a real-time monitoring solution to report agreed/identified critical system performance parameters.
5. Critical business performance parameters shall be identified e.g., transaction speed, response time for screen display/refresh, data retrieval, etc. in a manner that data capture can occur to support metric reporting and support the OI&T performance dashboard display. If no such performance metrics are required or provided there will be no program specific Service Level Agreements (SLA) created, nor shall there be any active/real time monitoring through OI&T Performance Dashboard to provide the business owners any performance metrics.
6. Notification of scheduled maintenance periods that require the service to be offline or that may degrade system performance shall be disseminated to the business user community a minimum of 48 hours prior to the scheduled event.

Documentation Requirements

1. The training curriculum shall state the expected training time for primary users and secondary users to become proficient at using the CCWF application(s).
2. All training curricula, user manuals and other training tools shall be developed by the CCWF team and updated by the VCE TDD Team and delivered to all levels of users. If known, insert how much time in advance the training tools will be delivered and via what mechanism(s); for example, 2-4 weeks in advance of the release of the enhancement through nationwide conference calls and PowerPoint presentations). The curricula shall include all aspects of the enhanced CCWF application(s) and all changes to processes and procedures.
3. The training curriculum developed by the Program Office shall state the expected task completion time for primary and secondary users.
4. User manuals and training tools shall be developed. If they already exist, updates shall be made, as necessary, to them and they shall be delivered to all levels of users.
5. IT will provide the level of documentation required to support the system and maintain operations and continuity. Documentation shall represent minimal programmatic and lifecycle operations support documentation artifacts as defined by VA standards in ProPath and as required by the VA Enterprise System Engineering Lifecycle and Release Management office for sustained operations, maintenance, and support (http://vaww.eie.va.gov/lifecycle/default.aspx) prior to approval by any VA change control board and release into production.

Implementation Requirements

1. Technical Help Desk support for the application shall be provided for users to obtain assistance with CCWF.
2. The IT solution shall be designed to comply with the applicable approved Enterprise SLA.
3. The implementation of Release 1.2 must be complete by 12/29/2016.

Data Protection/Back-up/Archive Requirements

1. Based upon the criticality of the system, provide a back-up and data recovery process for when the system is brought off-line for maintenance or technical issues/problems.
2. Data protection measures, such as back-up intervals and redundancy shall be consistent with systems categorized as routine (30 day restoration), mission essential (72 hour restoration), or mission critical (12 hour restoration).
3. Business owners are required to state the mission criticality of the IT services required in order to assist the planners and developers in determining best strategies for engineering an IT solution to meet their business objectives/needs. The business owner needs to state the criticality of the data and the impact to the business during a service disruption so appropriate technologies can be considered.

Levels for Disaster Recovery

Table 10: Levels for Disaster Recovery

|  |  |  |
| --- | --- | --- |
| Classification | Recovery Time Objective | Recovery Point |
| Objective Routine | 30 day restoration | TBD |
| Mission Essential | 72 hour restoration | 24 hours |
| Mission Critical | 12 hour restoration | 2 hours |

Recovery Time Objective (RTO) – RTO defines the maximum amount of time that a system resource can remain unavailable before there is an unacceptable impact on other system resources, supported mission/business processes, and the MTD.

Maximum Tolerable Downtime (MTD) - The MTD represents the total amount of time the system owner/authorizing official is willing to accept for a mission/business process outage or disruption and includes all impact considerations.

Recovery Point Objective (RPO) - The RPO represents the point in time, prior to a disruption or system outage, to which mission/business process data can be recovered (given the most recent backup copy of the data) after an outage.

Data Quality/Assurance Requirements

A monitoring process shall be provided to ensure that data is accurate and up-to-date and provides accurate alerts for malfunctions while minimizing false alarms.

User Access/Security Requirements

Ensure the proposed solution meets all Veterans Health Administration (VHA) Security, Privacy, and Identity Management requirements including VA Handbook 6500.

Usability/User Interface (UI) Requirements

Adhere to good User Interface/User Centered Design (UI/UCD) principles as outlined in the Usability Appendix of the BRD.

Conceptual Integrity

Provide standards based messaging and middleware infrastructure needed to support both Legacy Veterans Health Information Systems Technology Architecture (VistA) and future VistA 4 deployments.

Availability

1. Maintenance window, including maintenance of externally developed software incorporated into the VistA 4 application(s), will be by mutual agreement between OI&T and the VHA Point of Contact (POC) for the affected facility. VHA will provide POCs for each facility.
2. VistA application unavailability due to an unplanned outage or planned outages that exceed the defined maintenance window will not exceed 8.76 hours per year and will not exceed 43.8 minutes per month (99.9% availability).
3. The application shall be available 24 hours a day, seven days a week, with an uptime of 99.9%.
4. All system updates and scheduled maintenance should occur between the hours of 1800 and 0600 (per local time zone), when clinical usage would be lightest.

Interoperability

1. The system shall support all recognized health system standards i.e., Health Level 7 (HL7), Fast Healthcare Interoperability Resources (FHIR).
2. Systems must be heterogeneous and agnostic for operating systems and code bases.
3. Provide the ability to securely transfer large files (of 4-8 gigabyte) from an external source to VA systems.
4. Provide access to the system over a remote access solution.

Manageability

1. Provide Service Desk/Incident and Problem Management tracking related to maintenance events of patient care systems with priority over non-patient care systems.
2. Provide data related to maintenance events, both routine and exceptional, including key metadata:
   1. Predicted routine work
   2. Occurrences where maintenance is completed, including restart from down time
   3. Identity of the organization performing maintenance
   4. User performing maintenance (if available)
   5. Identity of the system
   6. Date/time, physical location
   7. Systems impacted
   8. Does it affect patient care
   9. Non-urgent or emergent
3. Provide audit capabilities for system access and usage with settings that are configurable to support internal and external audits based on federal and VHA mandates.
4. The system must comply with VA Directive 6300 Records and Information Management and with VHA Records Control Schedule (RCS) 10-1, in general and specifically with Electronic Final Version of Health Record: Destroy/Delete 75 years after last episode of patient care, or longer (if specified).

Performance

1. Provide an Info button Query Responder on all platforms with a response time of less than .5 seconds.
2. The system shall recognize, report, and retransmit data lost, with less than 0-1% chance of incomplete patient records.
3. Provide patient data (for data within the system) transactions (e.g., capture, search, request for data) within .5 seconds.
4. Mouse or key-based UI controls, e.g., menus, checkboxes shall provide instantaneous responsiveness (<90ms).
5. Part-screen refreshes after user action shall complete within a pro-rated interval between 200ms and 1200ms times a percentage of the screen area being refreshed. For example, a component 10% of the screen area would refresh in (1200 – 200) \* 0.10 + 200 = 300ms.

Reliability

1. Provide system reliability:
   1. Threshold = 99.9%
   2. Objective = 99.99% system and application
2. Provide system reliability:
   1. Level 1 severity =<1 failure per month
   2. Level 2 severity =<2 failures per month
   3. Level 3 severity =<3 failures per month

Security

Provide management of electronic attestation of information including the retention of the signature of attestation (or certificate of authenticity) associated with incoming or outgoing information.

Supportability

1. Provide alerts (that extend beyond system messages to external systems like mobile devices) for malfunctions, while preventing false alarms for local, regional, and national evaluations in real time.
2. Provide reports on performance metrics as specified in the VistA 4 Effectiveness and Value / Benefits Framework on a bi-weekly basis.
3. Provide national, regional, and local reports on performance metrics as specified in the VistA 4 Effectiveness and Value / Benefits Framework.
4. Provide performance metrics (from request for information to receipt of information on the screen) monitored by the system and system administrators so they know what the user experience is like without users having to call them and tell them the system is running very slow.
5. Provide the ability for VHA and IT staff to create standard and ad-hoc reports of usage, bandwidth, response time, login time, and other variables with a verification process for measuring the capabilities of the system.
6. Provide end-user training on how to generate the various system performance reports (e.g., in standard file formats such as Comma Separated Values [CSV], Portable Document Format [PDF], or Excel) depending on the user's needs.
7. Provide the ability to view system statistics (e.g., information on the specific network environment) and identify areas that are having issues or are beyond capacity, in near-real-time (to be quantified at a later time).
8. Technical Help Desk support for the application via instant message, on-line, phone, and remote desktop access support, shall be provided for users to obtain assistance 24/7.
9. The IT solution shall be designed to comply with the applicable approved Enterprise SLAs.
10. Data protection measures, such as back-up intervals and redundancy shall be consistent with systems categorized as mission critical (1hr restoration, 2hrs backup recovery). Impact of system failure must be monitored on a near real time basis.
11. Provide the ability to set thresholds and notification type (e.g., email or text alerts) when alerting the user about response time degradation and unscheduled outages.
12. Disaster Recovery Plans (DRP) and Continuity of Operations Plan (COOP) will be updated and tested semi-annually to address the VistA 4 product (see National Security and Homeland Security Presidential Directive: National Continuity Policy. NSPD-51/HSPD-20, May 9, 2007 <http://www.fas.org/irp/offdocs/nspd/nspd-51.htm>)

Usability

1. Provide viewability/usability of VistA 4 applications on mobile devices.
2. User prompts and screen help shall be embedded into the system to guide use of the solution.

Documentation

1. The training curriculum shall be provided in two hours or more of training time for primary users and secondary users to become proficient at using the VistA 4 application(s).
2. All training curricula, user manuals and other training tools shall be developed/updated by the VE Program Office and delivered to all levels of users 4 weeks in advance of the release of the enhancement through mediums that will best support the sharing of information to all affected staff.

Provide follow-up training classes tailored to VHA workflow 4 weeks after the users have begun to use the system.