**Department of Veterans Affairs**

**Clinical Video Teleuser12encing**

**Scheduling**

**Requirements Specification Document**



**March 2014**

**Version 3.1**

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**Revision History**

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**1 Introduction**

**1.1 Purpose**

The purpose of this Requirements Specification Documentation (RSD) is to record the Clinical Video Teleconferencing (CVT) Scheduling requirements. This RSD will give the development team a high-level look at the specifications for the CVT project.

**1.2 Scope**

CVT Scheduling is a requirement of the following strategic initiatives:

• Research, Telehealth and Mental Health (RTMH)

• VHA Telehealth Task Force Report, dated January 2011. Recommendation 4, “deploy a scheduling solution for CVT”.

The VHA Telehealth Task Force assessed that current VA scheduling systems cannot support widespread expansion of CVT due to manual processes involved with the current inter-facility CVT consult and inability of the current VistA scheduling system to interface with other CVT scheduling technologies and resources.

Problems with the current “as is” interfacility CVT scheduling for consult processes are listed below:

• Manual scheduling must occur on the VistA system where the health care provider is located and the VistA system where the Veteran is located. This pair is not handled within and across VistA systems as a synchronized event and uses separate scheduling systems that do not link with VistA or various work-arounds. Therefore, it is difficult to create or modify CVT appointments.

• Inability to document all CVT activities including CVT event closure on both healthcare provider and Veteran’s local VistA systems.

• Potential for clerical error and improper tracking of workload capture. There is currently not a way to show a single listing of daily scheduled CVT patients across facilities and VISNs. Healthcare providers currently do not have a clear view of CVT scheduled patients.

The CVT project will address:

• Consistency and adaptability across all VISNs, VistAs and facilities

• Management of CVT resource availability

• Interfaces to existing systems to include VistA ( an integration solution is to be determined) and the TMS system.

• Ease of use through the use of Graphical User Interfaces (GUIs) and application wizards

• Recent advances in CVT technology

• Flexibility in scheduling healthcare providers, Veteran patients and CVT resources

The Office of Telehealth Services supports the development of an enterprise CVT scheduling system which will ensure that resources at both ends of a telehealth visit for the Veteran and the Healthcare Provider are coordinated with the patient possibly across different VISNs. The CVT scheduling system will also capture workload data.

The contractor will provide design, development and deployment consulting to advise and assist OI&T and VHA with the following activities around the Clinical Video Teleconferencing (CVT) application:

Overall objective: Develop and deploy standalone initial CVT Capability hosted at NWA. Using an Agile based approach, identify, prioritize and incorporate as many features as possible within two iterations and available hours.

***CRM infrastructure and Solution Design***

• The production version of the solution is expected to be hosted by the same hosting provider as other VRM projects, currently BAH at NWA. .

• The VISN 19 release will be developed using CRM on premise (hosted in Azure)and will be moved to NWA in between the first and second iterations.

• During the current phase of development, integration with other systems is not included.

• Business process discovery, analysis and modeling

• Meet with representatives that perform these assessments to learn the desired business process flow. The goal is to incorporate national and VISN requirements into a comprehensive system.

***Develop CRM solution for “CVT”***

• Create and customize CRM workflows, entities, forms, and relationships as needed for current phase of the CVT application.

***Test and validate CRM solution***

• Integrate the solution into the hosting provider’s standards for build and release management.

• At present, NWA hosts CRM 2011.

***Support CRM deployment***

• CVT is divided into three developmental phases known as increments. Increment 1 involved the conversion of the Class 3 system into a Class system. System functionality and user interface were replicated in order to minimize the need for training. Increment 2 was the previous increment and involved testing the initial version of the program in 5 VISNs to validate business requirements through IOC testing. Increment 3 will be utilized to provide defect fixes and begin the process of nationwide release of the intial product. This RSD includes hours to help support that initial effort.

• The first phase of this project will be to get CVT/TSS system rolled out to a VISN 19 users.

This RSD includes hours to help support that initial effort.

***Update and incorporate changes in a second iteration***

• Incorporate feedback from first iteration testing into a second iteration

**1.3 References**

• Requirements Tracibility Matrix (RTM)

• VHA Telehealth Task Force Report, January 2011

• RTMH Telehealth Operating Plan

• CVT Pathways, September 28, 2010

• CVT Scheduling GUI

• CVT System Design Document (SDD)

Project documentation can be found on the CVT TSPR:

[http://serv.vista.med.domain/warboard/anotebk.asp?proj=1466&Type=Active](http://serv.vista.domain.ext/warboard/anotebk.asp?proj=1466&amp;Type=Active)

**1.4 Scope Objectives**

Work with VHA on the deployment of a CRM system to produce a CVT application. The goal of the application is to allow the scheduling of diverse CVT resource components (Personnel, Rooms, and Technologies). There are 2 main logistical facets to CVT which are the Patient Side Resources and the Provider Side Resources. Operationally, the system is again bifurcated into a configuration and resource management component and a rapid scheduling component. The system will help to facilitate scheduling by automating the selection of available time slots. Current phase will not have integration capabilities but will be built knowing that those capabilities will be added in future phases, and will account for that future requirement in the

data structure.

The end result of the current phase of development will at a minimum be a working CVT scheduling application for VISN 19 which can be used by end users to validate the requirements as they are developed into a more integrated, robust CRM based-solution in later increments.

**1.5 Acronyms and Definitions**

**1.5.1 Acronyms**

|  |  |
| --- | --- |
| **Acronym** | **Acronym Meaning** |
| BRD | Business Requirements Document |
| CEVN | Clinical Enterprise Video Conferencing Network |
| CVT | Clinical Video TeleConferencing |
| CVT | Clinical Video Telehealth |
| COTS | Commercial Off-The-Shelf |
| CVS | Conformance Validation Statement |
| COOP | Continuity of Operations |
| CRM | Customer Relationship Management |
| EA | Enterprise Architecture |
| XML | Extensible Markup Language |
| FTC | Facility Telehealth Coordinator |
| FIPS | Federal Information Processing Standard |
| FISMA | Federal Information Security Management Act |
| FY | Fiscal Year |
| GUI | Graphical User Interface |
| GBS | Green Beacon Solutions |
| HTTP | Hypertext Teansfer Protocol |

|  |  |
| --- | --- |
| **Acronym** | **Acronym Meaning** |
| HTTPS | Hypertext Teansfer Protocol Secure |
| IT | Information Technology |
| IPT | Integrated Project Team |
| IP | Internet Protocol |
| LAN | Local Area Network |
| MTSA | Master Telehealth Service Agreement |
| MDWS | Medical Domain Web Services |
| MCS | Microsoft Consulting Services |
| NIST | National Institute Standards and Technology |
| NMOC | New Models of Care |
| OED | Office of Enterprise Development |
| OI&T | Office of Information and Technology |
| OMB | Office of Management and Budget |
| PwC | Pricewaterhouse Coopers |
| RSD | Requirements Specification Document |
| SIP | Session Initiation Protocol |
| SOAP | Simple Object Access Protocol |
| SDK | Software Development Kit |
| SQL | Structured Query Language |
| SDD | System Design Document |
| TRM | Technical Reference Model |
| TCT | Telehealth Clinical Technician |
| TSA | Telehealth Service Agreement |
| VISN | Veteran Integrated Service Network |
| VA | Veterans Affairs |
| VAMC | Veterans Affairs Medical Center |
| VHA | Veterans' Health Administration |
| VistA | Veterans Health Information Systems and Technology Architecture |
| WAN | Wireless Area Network |

**1.5.2 Definitions**

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Create | In reference to user permissions in CRM, “Create” refers to the ability of a  user to perform an Insert action in the database or to save a new record in the  CRM UI |
| Read | In reference to user permissions in CRM, “Read” refers to the ability of a user to perform a Read action on a database row, or to ‘see’ a record in the CRM UI |
| Write | In reference to user permissions in CRM, “Write” refers to the ability of a user to perform an Update action on a database row, or to change the values of specific fields and save the record in the CRM UI |
| Delete | In reference to user permissions in CRM, “Delete” refers to the ability of a user to perform a Delete action on a database row or to delete record in the CRM UI – This is a separate UI permission from Deactivation. |
| Append | In reference to user permissions in CRM, “Append” refers to the ability of a user to perform an Update action on a database field set for the CRM UI field type, “Lookup.” In the CRM UI, Append permission on a given entity, X, refers to the ability of a user to select X as a value for a lookup field on a different entity, Y, and save record Y. This can be thought of as the ability to “Attach” entity Y to entity X. |
| Append To | In reference to user permissions in CRM, “Append To” refers to the ability of a user to perform an Update action on a database field set for the CRM UI field type, “Lookup.” In the CRM UI, Append permission on a given entity, X, refers to the ability of a user to select a value for a lookup field on entity X for  another given entity, Y and save record X. This can be thought of as the ability to “Attach” entity X to entity Y. |

**2 Overall Description**

In outlining the requirements that are being provided below for VA OI&T to provide the basis upon which the necessary information and telecommunications platform is negotiated to support the care of Veteran patients, the following assumptions/caveats are understood:

• All CVT services are provided on VA’s clinical enterprise video conferencing network (CEVN)

• CVT services into the homes of Veteran patients provided via IP video are undertaken as an associated service to CEVN

• As of September 2, 2010, care via CVT is provided annually to 70,000 Veteran patients in 110

VA Medical Centers and 450 Patient-side Vista Clinics

• Levels of CVT activity are set to rise by 50% in FY2013 and a further 50% in FY2014

• The technology and associated peripheral attachments that constitute clinical video teleconferencing technologies are classified as “medical care technologies” that are standardized units purchased from VA’s medical care appropriation

• VA OI&T supplies the telecommunications infrastructure, gatekeeper, local area network, wide area network, IT backbone and associated routing, cyber security, firewalls, and channels through which organizations and individuals outside VA connect; VA OI&T also provides the systems whereby scheduling takes place

• Requirements to define national contracts for clinical video user12encing units that connect to CEVN are defined by the Office of Telehealth Services (OTS) with input from VA OI&T. OTS is the business owner for clinical video conferencing units. OTS provides the expertise for the clinical review of these technologies and VA OI&T provides the IT expertise in contracting reviews.

**2.1 Accessibility Specifications**

The CVT Scheduling tool is a minor application on the CRM UD platform and is currently a “stand-alone” system that is being released only as an initial pilot system. The need for submission of a Conformance Validation Statement (CVS) form still exists.

**2.2 Business Rules Specification**

***Scheduling:***

In order to schedule a medical appointment, a Telehealth Service Agreement will need to be in place.

All resources, sites and equipment must be available in order to secure an available slot at the desired appointment time.

***Pilot Business Requirements:***

• Enter in summary TSA information including

• Resources required for the Patient clinic

• Resources required for the Physician clinic

• Create Service Sites

• Enter in work hours for all resources

• Work hours are daily schedules sometimes referred to as free/busy time.

• The TSA becomes a CRM Service – this is the mechanism that is actually scheduled and ties all of the resources together.

• This CRM Service can then be scheduled by a TCT utilizing the CRM Service Scheduling capabilities. This mainly involves the users selecting the Patient’s service Site and then which Service (TSA) that they wish to schedule. When prompted the system will then provide the user with a list of times when all of the required Resources for both the patient and physician will be available. Once a time is selected, a Service Activity is created for the Veteran and the related Resources will be blocked off from other appointments within CVT.

• A TCT would then have to manually schedule the same resources in VistA.

**2.3 Design Constraints Specification**

The initial phase of VISN 19 release development has been completed. No substantive design constraints were imposed on that application development. Additional functionality development may be constrained when the code has been imported into the NWA CRM cloud environment and/or once integrated with the VA VistA network via MDWS.

**2.4 Disaster Recovery Specification**

CVT Disaster Recovery procedures will follow those currently in force for CRM UD.

**2.5 Documentation Specifications**

System documentation includes descriptions of the system hardware, software, policies, standards, procedures, and approvals related to the system life cycle and system’s security controls. VA requires that sufficient documentation exists to provide an operating reference to effectively use software and hardware, and formal security and operational procedures have been documented, including the adequate completion of certification and accreditation processes. Documentation must include, but is not limited to, all documentation of the security planning, certification and accreditation process, and configuration management of the hardware and software associated with the system.

**2.6 Functional Specifications**

This solution will save the Telehealth units considerable time and expense as well as increase the utilization of the Telehealth equipment. The CVT Pilot will include the following application functions: Service Activity Management; Service Scheduling; VA CVT Resource Management; VA CVT TSA Management; and VA CVT Site Management.

In order to manage the overall objectives of CVT, the development team tracks activities as User Stories in Team Foundation Server (TFS). These User Stories are tied to features, which are the high-level functional objectives of the business team. Elaboration of those features into User Stories which can then be developed is undertaken in an elaborative, agile approach. At present, the Features and User Stories tracked in TFS break down according to the table below:

**ID Work Item Title Description State**

1033 Feature CVT: Enhancements to current Pilot

326 User Story CVT: Service Activity

Recurrence

335 User Story CVT: Adding Multiple

Resources

As a scheduler I want to schedule recurring service activities so that Provider services that are available on certain days and time can be scheduled.Criteria: Service Activities can be scheduled with a recurring pattern.

As a product owner I would like to be able to add multiple resources to a TSA at once so that the process of adding resources to a TSA will be quicker for the User. Acceptance Criteria:

Ability to add multiple single resources at once to TSA

Active

Closed

Closed

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 336 | User Story | CVT: Group Appointment Scheduling | As a product owner I want to be able to schedule group appointments and keep track of capacity across multiple patient sites so that Group Service Activity \ capacity can be accurately managed.Acceptance Criteria: | Closed |
|  |  |  | Group Service Activities can be scheduled. |  |
| 408 | User Story | CVT: Update Security  Roles | Updates to the security model conceptual design and Roles based on Pilot Feedback. | Closed |
| 1088 | User Story | CVT: TSS Pilot Minor  Enhancements List | As the Product Owner I would like to discuss the potential minor enhancements to the TSS application so that they could be evaluated and possibly be added to the Product Backlog. Acceptance Criteria: | Closed |
|  |  |  | The list of potential enhancements are discussed and documented. |  |
| 1319 | User Story | CVT: TSS Pilot Minor  Enhancements | As the Product Owner I would like to implement the minor enhancements to the TSS application so that the TSS application is easier to use. Acceptance Criteria: The list of potential enhancements are demonstrated. | Closed |
| 1320 | User Story | CVT: Group Appointment Scheduling Enhancements | As a product owner I want to enhance the TSS group appointment scheduling feature to better incorporate filtered list so that the group appointment scenarios can be easier to schedule. Acceptance Criteria: Group Service Activities can be scheduled. | Closed |
| 1920 | User Story | CVT: Service Activity Recurrence Enhancements | As a user I would like to be able to update and delete a series of Service Activities that have been scheduled. A Service Activity status will only be  'Reserved' once patients have been added to the Service Activity. | Closed |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 1935 | User Story | CVT: TSA Usability  Enhancements | As a user I would like to be able to create a new Service Activity directly from a TSA. | Closed |
|  |  |  | Add a field to a form to designate the status for the service for as reserved or open. |  |
| 1936 | User Story | CVT: Validate  Plugins and Scenario  Testing | Explore options for surfacing validation messages on TSA from Pat / Pro Site Resource additions when using the add multiple resource method, which does not currently display the messages to user. Further Test out scenarios for Group Appointment scheduling and identify any modifications or fixes which will need to be made. | Closed |
| 2163 | User Story | CVT: Plugin Testing  & Code Review | As the product owner, I would the plugins which have been developed in the last Sprint to be further tested out and adjusted based on testing and feedback. | Closed |
| 2169 | User Story | CVT: Validate Service Status & Resource Restriction Scenarios | As a product owner I would like to better understand the implications for different service statuses and understand the different scenarios for use with Single versus Group Appointments and Scheduling. | Closed |
| 2520 | User Story | CVT: Remediation of Business Owner Review Items | Miscellaneous Development Items: TSA Deletion, Code Refactoring based on Code Review sessions | Closed |
| 2922 | User Story | CVT: Update the Telehealth Administration Navigation to add a Users Link | Add a link to the Users View from the Telehealth Administration area in the left hand navigation. | Closed |
| 2982 | User Story | CVT: Change VistA clinic automatic creation | Re-visit the Vista Clinic Automation process, and redefine the process for ensuring there is a Vista Clinic for each MTSA, and one for each Patient Site on the TSA. | Closed |
| 2983 | User Story | CVT: Review/Update the service activity status reasons | Update and Simplify the Service Activity and TSA option set status reasons. | Closed |

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| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 3241 | User Story | CVT: Deletion of TSS Records | As a Product Owner I want to be able to delete TSS scheduling records and  have the corresponding CRM scheduling records deleted as well so that the application will not have obsolete records. | New |
|  |  |  | Investigate the viability of applying this pattern for Master VA Site, TSA, TSA, Provider Side Resource, Patient Side Resources, Resources, and Resource Groups. |  |
| 1034 | Feature | CVT: Deployment to  Environments |  | Active |
| 328 | User Story | CVT: EPIC - Release  B Data Migration | As a product owner I would like to develop import worksheets for the TSS metadata records(Facilities, Sites, Resources and import these records into the Production environment so that number of records that have to be manually created is minimized. | Closed |
| 334 | User Story | CVT: Production Environment / Validation Baseline | As the Product owner I need to validate that I have a per formant production environment before I deploy CVT to ensure a good user experience so that  a baseline performance capacity can be established before the TSS application  is deployed. | New |
|  |  |  | Acceptance Criteria: |  |
|  |  |  | - Provide Minimum specs to OIT |  |
|  |  |  | - If needed invoke Premier to execute  CRM performance baseline |  |
|  |  |  | - If inadequate, provide recommendations for mitigation |  |
| 337 | User Story | CVT: Solution  Deployment Checklist | As the Product Owner I need a complete deployment checklist so we have a successful deployment. | Closed |
| 719 | User Story | CVT: Draft Interface  Control Document | As the team, we need to draft the CVT interface control document so that we can meet PMAS compliancy. | Closed |

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| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 892 | User Story | CVT: Develop TSA Import Template Workbook | As the Product Owner I want to be able to import TSAs into the TSS application (or portions of TSAs) from an Excel worksheet so that the manual creation of TSA can be minimized. Acceptance Criteria | New |
|  |  |  | - A TSA Import workbook to be used as an import template (a worksheet for each entitiy to be imported). |  |
|  |  |  | - A TSA can be created based on the import worksheets |  |
| 894 | User Story | CVT: Develop TSA Import Lists | As the Product Owner I want to have lists of the TSAs developed in order to import them into the TSS application so that so that the manual creation of TSA can be minimized. | New |
| 895 | User Story | CVT: TSS Rollout  Schedule | As the Product Owner I want a comprehensive schedule for the  National Rollout of TSS to the 21 VISNs so that the activities of the varoius contributing organizations can be planned and coordinated. | Closed |
| 899 | User Story | CVT: Draft Implementation Plan content | As the team, we need to draft an Implementation Plan for CVT so that we will meet PMAS compliancy. | New |
| 1133 | User Story | CVT: Determine M2 contribution requirements | As part of the documentation effort, we need to work with Harpreet and Arianne to determine what our contribution should be to the M2 documentation. Harpreet is in the middle of preparing  for the M1 presentation and cannot devote adequate time to preparing this until the next sprint. At that time, we will need to determine an appropriate distribution of responsibility. | Closed |
| 1891 | User Story | CVT: Update PMAS VDD content | As part of our ongoing document maintenance, we will be taking time to review the recent changes to the CVT system and how they should be accurately presented in the VDD. | Active |

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| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 1892 | User Story | CVT: Update PMAS RSD content | As part of our ongoing documentation maintenance, the Requirements Specifications Document will be  updated to reflect the recent changes to the product backlog and developed components. | New |
| 1898 | User Story | CVT: Develop Resource Metadata Lists | As the Product Owner I want to have lists of Resources related to Sites developed in order to import them into the TSS application so that TSS metadata can be imported, minimizing manual record creation. | Closed |
| 1917 | User Story | CVT: Complete Facility and Site Mapping | As the Product Owner I want to update the Facility and related Sites Lists in order to have the Site to Facility mapping completed. | Closed |
| 1979 | User Story | CVT: Develop Resource Import Template | As the Product Owner I want to have a template of Resources related to Sites developed in order to import them into the TSS application so that TSS metadata can be imported, minimizing manual record creation. | Closed |
| 2130 | User Story | CVT: Architectural  Code Review | As the team, we need to hold an architectural code review with the Architect to ensure the quality of what we are producing is as high as possible. | Closed |
| 2236 | User Story | CVT: Deploy TSS to the VA INT Environment | As a product owner I would like to deploy the TSS Solution to the new INT environment. | Closed |
| 2238 | User Story | CVT/TSS: Review/Feedback Operational Acceptance Plan |  | New |
| 2239 | User Story | CVT/TSS: Review/Feedback Deployment Plan |  | New |
| 2240 | User Story | CVT/TSS: Provide Data Definition Document (TBD) |  | New |
| 2518 | User Story | CVT: Development  Coordination |  | Closed |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 2936 | User Story | CVT: Develop MTSA, TSA, VistA Clinic Metadata Lists | As the Product Owner I want to have lists of MTSA, TSA, VistA Clinic related to Sites developed in order to import them into the TSS application so that TSS metadata can be imported, minimizing manual record creation. | New |
| 2937 | User Story | CVT: Import MTSA, TSA, VistA Clinics into CVT Environments | Import the MTSA, TSA, VistA Clinics metadata in the INT environment. | New |
| 2938 | User Story | CVT: Import Resources into CVT DEV and INT Environments | Import the Resource metadata in the  INT environment. | Closed |
| 2939 | User Story | CVT: Update TSS Site Metadata List | Work with Product Owner to update the TSS Sites metadata list with the newly identified Sites. | Closed |
| 2940 | User Story | CVT: Import Updated Sites into CVT Environments | Update the Site metadata in the INT  environment. | Closed |
| 2962 | User Story | CVT: Deploy TSS to the VA Pre-Prod Environment | As a product owner I would like to  deploy the TSS Solution to the new Pre- Prod environment. | Active |
| 2963 | User Story | CVT: Deploy TSS to the VA Prod Environment |  | New |
| 2977 | User Story | CVT: Develop Performance Testing Scenarios | As the Product Owner, I would like to have the representative end-user scenarios scripted in order to model the typical workload on the TSS application so that a Performance Benchmark may be performed in the Pre-Prod or Prod environment prior to release. | New |
| 3327 | User Story | CVT: Deploy TSS to the VA QA Environment | As a product owner I would like to deploy the TSS Solution to the new QA environment. | New |
| 1035 | Feature | CVT: Support  National Rollout | Assistin full rollout to remaining VISN in the production environment | Active |

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| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 893 | User Story | CVT: Develop Facility and Site Import Lists | As the Product Owner I want to have lists of the Facility and related Sites developed in order to import them into the TSS application so that resources can be also be imported, minimizing manual record creation. | Closed |
|  |  |  | Acceptance Criteria |  |
|  |  |  | - A facility and Site workbook containing the records to be imported |  |
| 1087 | User Story | CVT: Release B Planning | As the Product Owner I would like determine if all the required User Stories are identified for Release B so that the Release can be successful. Acceptance Criteria | Closed |
|  |  |  | - The team agrees that User Stories in the Product Backlog are sufficient to deliver Release B. |  |
| 1036 | Feature | CVT: VistA Integration Roadmap |  | Active |
| 332 | User Story | CVT: Vista  Integration Roadmap | As a CVT Product owner I need a Vista Integration Roadmap so that we can plan and track progress for this long running effort. | New |
|  |  |  | Acceptance Criteria: |  |
|  |  |  | - Draft Document- Know key Players |  |
|  |  |  | - What is the OIT formal process that needs to be followed? |  |
|  |  |  | - Draft Schedule |  |
|  |  |  | - Technical Dependencies |  |
|  |  |  | - What are the approvals needed? |  |
|  |  |  | - What are the Security / ATO  requirements? |  |
| 1037 | Feature | CVT: TSA Development Workflow Process |  | Active |
| 338 | User Story | CVT: EPIC - TSA Workflow | Developa CRM workflow process within TSS to manage and track the TSA Development andApproval process. | New |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 896 | User Story | CVT: TSA Workflow Process Document V1 | As a product owner I would like to further develop the process flow for the TSA development in light of how the flow could be modeled in TSS so that we can model the TSA development process in TSS as a CRM workflow. Acceptance Criteria: | Closed |
|  |  |  | - TSA Development process workflow document |  |
|  |  |  | - Team review |  |
| 1253 | Feature | CVT: Technology  Management |  | New |
| 1978 | User Story | CVT: EPIC - Technology Management | Developan Inventory of Assets within TSS for managing tracking CVT Technology Assets | New |
| 1254 | Feature | CVT: End user customizable process for routing/approving |  | New |
| 331 | User Story | CVT: Site Approval  Creation Workflow | As a product owner I want to automate the approval process required to create a new service related site so that only required sites are created in TSS. | New |
| 1255 | Feature | CVT: TSS Reporting | DevelopTSS reporting features for managing and tracking Patient Outcomes andScheduling Metrics | New |
| 1256 | Feature | CVT: TSS / SharePoint Integration | UtilizeSharePoint document libraries as  TSS document repositories. | New |
| 1257 | Feature | CVT: CRM 2013  Upgrade Assessment | Determinethe upgrade path and feature enhancements for the TSS System in light of theCRM 2013 features | New |
| 1258 | Feature | CVT: Document  Management |  | New |
| 1259 | Feature | CVT: Other VA Systems Integrations |  | New |
| 1260 | Feature | CVT: Distribution of  Telehealth  Operations Manuals / Guidance Documents |  | New |

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| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 1261 | Feature | CVT: Consult system design / Building CPRS Templates |  | New |
| 2074 | Feature | CVT: Demonstrate  Rollout to VISN | Assist in full rollout to one VISN in theproduction environment | New |
| 364 | User Story | CVT: EPIC - NTTHD Training Support | As a product owner, I would like to have developer support for the training ramp- up on the TSS application so that the learning curve can be minimized. | Closed |
| 2161 | User Story | CVT: Assist with  Rollout to initial VISN |  | New |
| 2075 | Feature | CVT: VistA Patient Enrollment Integration | Provideintegration from TSS into the VistA systems for enrollment of new VistA patientaccount on first time use at new site. | New |
| 2076 | Feature | CVT: Systems  Integration Roadmap | Developthe approach for integration with other services and systems | New |
| 2162 | User Story | CVT: Develop TSS Integration Roadmap |  | New |
| 2077 | Feature | CVT: MVI Scheduling  Integration |  | New |
| 2078 | Feature | CVT: CCOW Scheduling Integration | Provideintegration from TSS into the VistA systems for patient context acrossapplications. | New |
| 2079 | Feature | CVT: VistA Scheduling Integration | Provideintegration from TSS into the VistA systems for patient/clinic scheduling | New |
| 2157 | Feature | CVT: TSS Releace C Enhancements |  | New |
| 765 | User Story | CVT: Service Activity  Nofication | As a Telehealth Clinician, I want to be notified when serviceactivities are scheduled for me (email and/or possibly an Outlook appointment) so that I plan my workday accordingly. Acceptance Criteria: | New |
|  |  |  | - The clinician is notified when a service activities is scheduled |  |
|  |  |  | - Information regarding the service activities is included (e.g. room, phone number, local tech support POC) |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Work Item** | **Title** | **Description** | **State** |
| 766 | User Story | CVT: Service Encounter Frequency Limit | As a telehealth clinician I want to be able to limit the total number of encounters I will allow in a given day or week for a particular telehealth clinic so that I can plan my workload based on Service Type | New |
|  |  |  | Acceptance Criteria: |  |
|  |  |  | - The particular Service Type (clinic) can be set to a specified frequency per time period. |  |
|  |  |  | - New Service Activities will not be created if the specific frequency is exceeded. |  |
| 1266 | User Story | CVT: Default Calendars Based on Resource Type | As the Product Owner I want to be able to define a default Calendar template based on the type of scheduling Resource so that the TSS Resources can be created and configured efficiently. Acceptance Criteria: | New |
|  |  |  | - The Application Administrator can configure a Calendar template for each Resource Type |  |
|  |  |  | - The Application Administrator can create new Site Resources that have a default Calendar based on the respective Calendar template. |  |
| 2158 | Feature | DELETED: Systems  Integration Roadmap | Develop the approach for integration with other services and systems | New |
| 2159 | Feature | CVT: VistA Integration |  | New |
| 3195 | Feature | CVT: Facility / Site / Resource Development |  | New |
| 3201 | Feature | CVT: MTSA / TSA Development |  | New |
| 3209 | Feature | CVT: Service  Scheduling |  | New |
| 3217 | Feature | CVT: User Evaluation and Feedback |  | New |

**2.6.1 Business Requirements**

The Features and Stories used for development purposes are generated based on the Business

Requirements originally outlined in the CVT Business Requirements Document, dated March,

2011. In that document, the requirements were represented according to the content below:

**2.6.1.1 Business Needs:**

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| NEEDCVT1 | Ability to schedule a patient and provider as a pair on both the VistA system where the health care provider is located and the VistA system where the Veteran is located. This pair should be handled within and across VistA systems as synchronized event. |
| NEEDCVT2 | Ability to document all CVT activities including CVT event closure on both healthcare provider and veteran’s local VistA systems. |
| NEEDCVT3 | A CVT scheduling system would reduce clerical error and improve workload capture, in addition to improving efficiency for provider and scheduler. There is a need for a single listing of daily scheduled CVT patients across facilities and VISNs. Health care providers currently do not have a clear view of CVT scheduled patients. |

**2.6.1.2 Business Features:**

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| OWNRCTV1 | The system shall have the capacity to identify the Veteran. |
| OWNRCTV2 | The system shall have the capability to select locations of patient and healthcare provider. |
| BDETCVT1 | The system shall have the ability to capture Patient Location (including patient home). |
| BDETCVT2 | The system shall have the ability to capture Provider Location including:  • Providers designated as privileged at the chosen Veteran location  • VistA clinics  • Non-VA sites (e.g. DoD, IHS, Contractor site) |
| OWNRCVT3 | The system shall have the ability to generate an automatic Consult to register a Veteran at a provider location. The need will be determined by search for Veteran at a provider site. |
| BDETCVT3 | The system shall prompt to return to schedule event, allowing time for registration to occur. |
| OWNRCVT5 | The system shall have the ability to handle the creation, cancellation, or updates to a CVT appointment pair (patient and provider) as a single event (to prevent creation of orphans) within VistA and any interfacing system. |
| OWNRCVT6 | The system shall provide the ability to allow changes to a CVT appointment pair (patient and provider) to occur individually as needed to prevent creation of orphans or to correct errors. |

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| OWNRCVT7 | The system shall allow visualization of VistA clinics in order to review and/or confirm correct Decision Support System (DSS) coding by request. |
| OWNRCVT8 | The system shall allow for appointments/events at non-VistA sites for  Veterans that includes:  • Veteran home  • Non-VA sites e.g. DoD, IHS, Veterans’ home |
| OWNRCVT9 | The system shall allow for appointments/events at non-VistA sites for  Providers that includes:  • VA Contracted Providers at non-VA Sites |
| OWNRCVT10 | The system shall have the capability to process check-in, no-show, reschedule, cancellation, and walk-in. |
| OWNRCVT11 | The system shall have the capability to query and view of appointments by:  • Health care provider  • Veteran  • Pre-determined views (control by access, pre-built reports for quality management, e.g. where are telepresenters, room schedules, basic management reports) |
| OWNRCVT12 | The system shall have the capability to set permissions to access lookup tables and scheduling processes determined in advance. |
| OWNRCVT13 | The system shall allow a health care provider to choose events to document/close:  • From Veteran identification information from a list (created by “action required” status on events for this provider.)  • Allow for visualization by date, locations, or other selections. |
| OWNRCVT14 | After an event is selected, the system shall provide a means to display all open consults on (at all locations) for Veteran, so provider can indicate which to close at the time if necessary (or proceed if not necessary). Existing CPRS functionality shall be accessible to the CVT scheduling system. |
| OWNRCVT15 | The system shall allow selection of a Veteran’s Medical Home by healthcare provider from a list of locations where Veteran is registered. Documentation, such as a clinical progress note, would be captured to this system (for example, a Veteran that receives primary care in one facility, but also receives care from a primary care Provider while at another VA site while on vacation or “snowbird”.) |
| BDETCVT4 | System shall provide a lookup capability and/or display the Veteran’s  Medical Home for primary care. |

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| OWNRCVT16 | The system shall allow a provider to select from a list of standardized CVT  note titles and enter clinical progress note content, service connection, and other question information, chooses/enters diagnosis(es) and chooses/enters clinical procedure code(s) (System would allow healthcare provider to access their progress note templates): |
| BDETCVT5 | The system shall build clinical progress note in Veteran’s Medical Home  VistA system. |
| BDETCVT6 | The system shall automatically create a clinical encounter on Veteran’s  Medical Home VistA system with a Q3014 procedure code. |
| BDETCVT7 | The system shall build clinical encounter on Provider’s VistA system with  GT (Procedure Code) modifier. |
| BDETCVT8 | The system shall build “pointer” note on Provider’s VistA system indicating that there is clinical content on Veteran’s VistA system. |
| BDETCVT9 | The system shall apply an electronic signature to both notes. |
| BDETCVT10 | The system shall allow for administrative closure of consults. |
| OWNRCVT17 | The system shall have the ability to convert the date/time of the appointment across time zones so the correct date and time of the appointment is displayed on all media at the respective provider and patien sites, but will then assign the appropriate date/time on the provider and patient VISTA encounters for VERA workload matching purposes. |
| OWNRCVT18 | The system shall provide a capability for patient self-scheduling. |

**2.6.1.3 Non-Functional Requirements:**

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| NONFCVT1 | Interface with other systems:  • Clinical Enterprise Video teleconferencing Network (CEVN) scheduling system to check availability of telecommunications connectivity  • Data sources with rooms and designated purposes, e.g., calendar/tracking system(s)/MS Outlook  • Identification of the equipment in the room  • Video  • Peripheral equipment  • Status of mobile equipment, e.g., wheeled carts  • Staff – VistA data on staff (contract staff would also have to be in VistA) |
| NONFCVT2 | Urgent appointment request facility |
| NONFCVT3 | A Memorandum of Understanding (MOU) and Service Level Agreement (SLA) between VHA and OI&T should specify service level requirements for a national CVT scheduling system. |

|  |  |
| --- | --- |
| **ID** | **Requirement** |
| NONFCVT4 | An Operations and Maintenance Plan (O&M Plan) should specify operational support, system robustness, and help desk for a national CVT scheduling system. |
| NONFCVT5 | A Continuity of operations plan (COOP) and disaster recovery plan should identify risks, mitigations, and contingencies for the national CVT scheduling system |

**2.7 Graphical User Interface (GUI) Specifications**

In general, MS Dynamics CRM 2012 provides a primary console interface that has been configured for CVT. When configuring entities within MS Dynamics for CVT, the MS Dynamics system generates GUIs for users to interact with the data. The user interfaces include lists with customizable views, find, advanced find, editors for all entities, lookup dialogues, and various multiple user interfaces. Please refer to the System Design Document (SDD) for further GUI specifications.

**2.8 Multi-divisional Specifications**

Data accessibility with the Dynamics CRM system is based on segmentation of permissions at multiple levels. The deployment is first organized into a Business Unit hierarchical structure, defining the business divisions at a top-level. At CVT, business units have been established for each VISN to segment their individual data, where appropriate. Users can be members of a specific business unit, enabling access to specific levels within and without that unit or Users may be members of the Parent Business Unit (VHA Telehealth Services), enabling cross-unit access.

At the next level down, records can be directly tied to Users or to Teams. The CVT system was designed to avoid individual ownership and instead attribute all ownership at the Team level in order to standardize divisional data access. Teams, in the case of CVT are actually VHA Facilities, within which, it is assumed that roles will be standardized. Members of the team will be granted specific access levels to records owned by – or not owned by – that team based on their User Roles.

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

**2.9 Performance Specifications**

Data volume for the CRM Base / CVT TSS system should start with 800 users in the first year, adding approximately that number each year thereafter. In the end, the system should be able to handle about 3000 concurrent users on average per year. CVT TSS will align with the performance requirements in the CRM/UD environment.

This document section is currently under development and will be finalized pending closure of a hosting agreement for the eventual production environment.

**2.10 Quality Attributes Specification**

MS Dynamics CRM 2012 contains native service scheduling capabilities perfectly suited to the needs of the CVT Scheduling process; allowing for the specified location tracking at facility and site levels, as well as the integration of diverse resource types from User to Room to Technology without any significant customization. The specific data points which must be tracked and the dichotomy between Patent Site and Provider Site determination, however, mandate the creation of a sort of ‘facade structure’ for the end-user interface which allows for the custom fields and divergent work processes of Individual and Group service activities.

In practice, this entails the duplication of certain system entities such as Facility, Site, and Service as ‘custom’ entities which then leverage plugins to create their corresponding system components.

By effectively wrapping the existing CRM Scheduling functionality in a CVT-specific layer the system is able to provide an effectively tailored environment for users, structured according to familiar conventions and systems while minimizing the degree of necessary custom coding by leveraging existing structure and capabilities.

This approach maximizes the future extensibility of the system by allowing for the greatest degree of configurability within those CVT entities. It also supports system supportability and maintainability through a bi-directional approach; minimizing custom code dependency on the technical end, and providing a context-tailored experience on the functional end to provide a familiar and intuitive interface to end users who will require reduced support assistance to work within it.Instructions in Section A.19

**2.11 Reliability Specifications**

This document section is currently under development and will be finalized pending closure of a hosting agreement for the eventual production environment.

• Creation of new Telehealth Service Agreement (TSA) - Save of new TSA data shall be no longer than five second response time from the production server.

• TSS program user shall not be presented with any SSL certificate errors in usage or at logon throughout the application.

**2.12 Scope Integration**

For this pilot release of the CVT system, no external system integrations have been planned or developed. It is anticipated that as part of future releases, the CVT system will be integrated

with constituent VistA systems and perhaps other external data sources, but this functionality has yet to be fully scoped and is not documented here.

**2.13 Security Specifications**

As noted in the SDD, no specific security or privacy considerations or requirements were outlined in the CVT Business Requirements Document (BRD). Details on the general security model of CRM, including Business Unit, Team, User, and Role construction as well as field- level security is available from the Microsoft Developer Network (MSDN) Library article, “The Security Model of Microsoft Dynamics CRM.” At [http://msdn.microsoft.com/en- us/library/gg309524.aspx](http://msdn.microsoft.com/en-us/library/gg309524.aspx)

As addressed in section 2.8 above, system records are segmented by Business Unit, Team, and User, with the specific permissions for their data intersections determined by User Security Roles. The table below provides a general overview of the security roles currently established for the CVT system and their general functional permissions.

|  |  |  |
| --- | --- | --- |
| **Role** | **Primary Job Functions** | **Additive Roles** |
| VISN Lead | • Manages Facilities, Sites, Resource Groups, Resources, Resource Calendars  • General Application Administration, Updates  Metadata Libraries | • CVT User  • CVT Application  Administrator |
| Facility Telehealth Coordinator | • Manages Facilities, Sites, Resource Groups, Resources, Resource Calendars  • Manages Master TSAs and TSAs | • CVT User  • Facility Telehealth  Coordinator |
| Telehealth Clinical Technician | • Manages Facilities, Sites, Resource Groups, Resources, Resource Calendars  • Schedules Service Activities (appointments)  • Creates and Edits Patients | • CVT User  • Telehealth Clinical  Technician  • CVT Scheduler |
| CVT Scheduler | • Schedules Service Activities  • Creates and Edits Patients | • CVT User  • CVT Scheduler |
| Telehealth  Provider/Clinician | • Provides telehealth clinical services | • CVT User |
| Telepresenter | • Clinical presenter of patient | • CVT User |
| CVT User | • A User of the CVT Application  • Owns calendar | • CVT User  • (base role) |

**2.14 System Features**

Please refer to the SDD, sections *2.2: Overview of the Business Process*, *3.3.4.2: Conceptual Production String Diagram* and *6.2: Software Detailed Design* for highly detailed breakdowns of the system features and operations.

**2.15 Usability Specifications**

Usability of the CVT system is ensured by presenting the entire UI through the Micdosoft Dynamics CRM COTS interface, which conforms to Microsoft’s Standards of Graphical User Interface style and design, further elaborated within the CRM 2012 sdk downloadable files, “The Microsoft Dynamics CRM UI Style Guide.”

**3 Applicable Standards**

The following standards and regulations may apply to the design of this system:

• C.5 VAAR 852.219-10 VA NOTICE OF TOTAL SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS SET-ASIDE (DEC 2009)

• Federal Information Security Management Act (FISMA) of 2002

• Federal Information Processing Standard (FIPS) Pub 201, Personal Identity Verification for

Federal Employees and Contractors, February 25, 2005

• VA Directive 6102, Internet/Intranet Services

• VA Handbook 6102, Internet/Intranet Services

• Electronic and Information Technology Accessibility Standards (36 CFR 1194)

• Office of Management and Budget (OMB) Circular A-130

• Sections 504 and 508 of the Rehabilitation Act (29 U.S.C. § 794d), as amended by the Workforce

Investment Act of 1998 (P.L. 105-220), August 7, 1998

• VA Directive 6500, Information Security Program

• VA Handbook 6500.3, Certification and Accreditation

• VA Handbook 6500.5, Incorporating Security and Privacy into the System Development Life

Cycle

• Office of Enterprise Development (OED) ProPath Process Methodology [http://vaww.webdev.oed.oit.va.gov/process/propath/](http://vaww.webdev.oed.oit.domain/process/propath/)

• PMAS portal [http://vaww.oed.portal.va.gov/pmas/Pages/default.aspx](http://vaww.srv.server.domain/pmas/Pages/default.aspx)

• Technical Reference Model (TRM)

• National Institute Standards and Technology (NIST) Special Publications

• VA Information Technology (IT) Program Management (VA Handbook 6062), no date

• VA Facility Directory [http://www.appc1.va.gov/directory/guide/home.asp?isFlash=1](http://www.appc1.domain/directory/guide/home.asp?isFlash=1)

• VA Enterprise Architecture (EA) - The P/PMS Contractor shall ensure that all projects adhere to the one VA EA [http://vaww.va.gov/oit/ea\_internal/EAS/index.asp#EA](http://vaww.domain/oit/ea_internal/EAS/index.asp%23EA)

• The Program Managers’ Guide to the Integrated Baseline Review Process (Office of the

Undersecretary of Defense), April 2003 [G]

• FISMA <http://csrc.nist.gov/groups/SMA/fisma/index.html>

Any regulations related to security may impose access restrictions or other protection related limitations on the system.

**4 Interfaces**

The CRM COTS product is the only User interface leveraged by this solution. No external systems currently interface with the CVT product. For detailed descriptions of the current solution architecture and anticipated future architecture in subsequent releases, please refer to the SDD.

**4.1 Communications Interfaces**

MS Dynamics CRM uses web services to access and manipulate data resources from outside data repositories and interact with enterprise tiered platform services. These services allow implementers to write applications using MS Visual Studio or other development tools by referencing the platform’s web services. The MS Web Services are interoperable with non-MS platforms. The MS Dynamics CRM Software Development Kit (SDK) includes the following Web Services:

• Discovery Web Service - The Discovery Web Service is a mechanism to find the correct endpoint for the organization web service.

• Metadata Web Service -The Metadata web services provide methods to read and write metadata for an organization including definitions for entities, attributes, and relationships.

Extensible Markup Language (XML) Web and Software Services:

• Simple Object Access Protocol (SOAP) - SOAP is the communication protocol for XML Web Services. SOAP defines the XML format for messaging. SOAP also enables MS Dynamics CRM to perform remote procedure calls for applications built on COM or CORBA instead of the latest and more flexible document style messaging where SOAP is a wrapper around an XML document.

• XML Web Services - MS Dynamics CRM uses XML Web Services as a building block for distributed computing. XML Web Services are a flexible and interoperable vehicle to integrate and communicate with other applications regardless of the language or platform and is a key ingredient in a SOAP-based web-services environment.

• XML/SOAP Security - MS Dynamics CRM uses Web Services (WS) Security while using SOAP to exchange data via XML documents supporting various security models and encryption technologies. In brief, SOAP Security Web Services provide a vehicle for security related information targeted at a specific receiver using WS Routing.

• WSDL

Client Side Scripting

• Java Script - Client-side scripting includes the capabilities to perform business logic and actions from the MS Dynamics CRM Web or Outlook clients. It also includes capabilities to add the user interface elements to integrate MS Dynamics CRM with other applications.

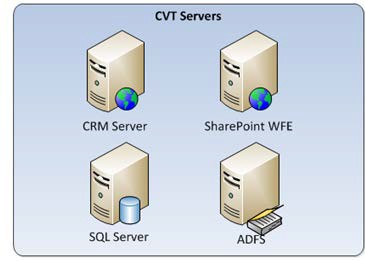
Other Protocols

• Hypertext Transfer Protocol (HTTP)/Hypertext Transfer Protocol Secure (HTTPS) - HTTP functions as a request-response protocol in the client-server computing model. HTTPS is a secure HTTP connection.Instructions in Section A.27

**4.2 Hardware Interfaces**

This document section is currently under development. The current, development & production environments are reflected in the diagrams below:

**CRM Development Environment**



**CRM Production Environment**

Image redacted

**4.3 Software Interfaces**

The following is an approximate list of software that will be utilized with the CVT solution, but the list will be built by our selected developer during our design and integration sessions:

• MS Dynamics CRM 2012

• MS CRM Sales Standard/Professional

• MS CRM Customer Service Standard/Professional

• MS CRM Suite Standard/Professional

• MS Dynamics CRM SDK

• MS Internet Explorer (v9)

• MS Windows 7

• MS Office Suite 2010

• MS SQL Server 2008 R2

• MS Windows Server

**4.4 User Interfaces**

In general, MS Dynamics CRM 2012 provides a primary console interface based on the look and feel of Internet Explorer that will be configured for VA CRM. When configuring entities within MS Dynamics for VA CRM, the MS Dynamics system generates GUIs for Users to interact with the data. The user interfaces include lists with customizable views, find, and advanced find, editors for all entities, lookup dialogs, and various multiple user interfaces.

The following list presents a few of the highlight user interface features of the CRM 2012 system:

• Seven user categories:

• VISN Lead

• FTC

• TCT

• CVT Scheduler

• Telehealth Provider / Clinician

• Telehealth Presenter

• CVT User

• Types of interactions:

• CVT Resource administration

• Administering Facilities and Sites

• Administering Resources and Resource Groups

• Administering MTSAs and TSAs

• CVT Scheduling

• Service Activity Creation

• Scheduling

• Reporting

• Users are able to create their own Dashboards and Reports

• Office Productivity

• MS Dynamics CRM integrates with MS Outlook, Word, Excel, etc.

• Advanced Find:

• User-creatable ad-hock queries

• Option to save these queries as personal views with configurable columns and sorting criteria

• Option to share these personal views with other users

• User indicators on forms

• Red asterisks denote required fields

• Blue plus signs denote recommended fields

• Magnifying glass icon indicates a lookup field

• Administrative User capabilities

• Create/Modify system forms, views, charts, dashboards

• Create/Modify Workflows and Dialog Processes

**5 Legal, Copyright, and Other Notices**

Not Applicable.

**6 Purchased Components**

TBD

**6.1 Defect Source (TOP 5)**

TBD

**7 User Class Characteristics**

The specifications of the CVT solution, as defined in the SDD, are authored to be directly compliant with User Class characteristics set forth as guidelines by the VA Handbook 6102. The specific directives that are used to define the general characteristics of intended users of the CVT solution are as follows:

1. VA websites must be designed, developed, and tested for a broad range of visitors, including

those with lower-end hardware and software capabilities, e.g., browsers that are one version older than current version ([http://vaww.va.gov/6102/,](http://vaww.domain/6102/) checklist item 9).

2. VA Web sites should be organized in a logical and useful way by subject (topic, tasks, services, life events), by audience group, by geographic location, or any combination of these factors as the primary navigation ([http://vaww.va.gov/6102/,](http://vaww.domain/6102/) checklist item 10).

3. VA Web sites must focus on helping the Web site’s target audience(s) to efficiently find the services and information they seek from VA. VA home pages must help Web site visitors to get

to the content they need and want most, with minimal complexity of navigation and the fewest

drilldowns. Content must be easy to read and without excessive text and/or graphics. Web content managers must ensure that all VA Web content is spell-checked and grammatically correct prior

to posting that content ([http://vaww.va.gov/6102/,](http://vaww.domain/6102/) checklist item 11).

4. VA Web managers must ensure that all home pages, all major entry points, and all navigational elements of their VA Web sites are written in plain language, which is language designed so a

Web site's typical visitor can easily understand the material presented in one reading. Internet Web pages should be written at a seventh grade level whenever possible; all Web pages must be written at the most elementary level of understanding for the subject matter presented to the Web site’s target audience. VA Web page content should be spell-checked and grammatically correct prior to posting that content ([http://vaww.va.gov/6102/,](http://vaww.domain/6102/) checklist item 12).

5. VA Web sites must include common terminology and placement where specified, using wording that is simple, straight forward, and concise to optimize comprehension of VA Web content and to ease use of navigational pathways. Pages must share common branding attributes such as

agency logos, official seals, and other recognized attributes that identify the Department. Material relevant only to the intranet must not appear on Internet pages; e.g., non-public information about VA employees, Intranet links on the Internet, links to internal VA resources ([http://vaww.va.gov/6102/,](http://vaww.domain/6102/) checklist item 13).

**8 Estimation**

A Function Point Analysis was requested and closed on January 17, 2014. Per Chad Lynch, Project Management Service/Program Planning & Oversight Software Metrics & Estimation Team, function point sizing for a stand-alone COTS package that does not require modification to existing VistA applications is not needed. A second request will be submitted in the future once the CVT scheduling tool is integrated with VistA.

**Project Software Functional Size and Size-Based Effort and Duration**

**Estimate**

**Application**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Item** | **A** | **B** | **C** | **D** | **E** | **Total** |
| Counted Function Points | NA | NA | NA | NA | NA | NA |
| Estimated Scope Growth | NA | NA | NA | NA | NA | NA |
| Estimated Size at Release | NA | NA | NA | NA | NA | NA |

|  |  |  |
| --- | --- | --- |
| **Size-Based Effort Estimates** | **Labor Hours** | **Probability** |
| Low-Effort Estimate – With indicated probability, project will consume no more than: | NA | NA |
| High-Effort Estimate – With indicated probability, project will consume no more than: | NA | NA |

|  |  |  |
| --- | --- | --- |
| **Size-Based Duration Estimates** | **Work Days** | **Probability** |
| Low-Duration Estimate – With indicated probability, project will consume no more than: | NA | NA |
| High-Duration Estimate -- With indicated probability, project will consume no more than: | NA | NA |

**Figure 1: Cumulative Probability (“S-curve”) Chart**

*[Insert Cumulative Probability (“S-curve”) Charts here]*

**9 Approval Signatures**

REVIEW DATE: March 17, 2014

SCRIBE: Russell Stokes

Signed: Date

Integrated Project Team (IPT) Chair & Project Manager

Signed: Date

Business Sponsor, VHA Office Of Telehealth Services

Signed: Date

IT Program Manager

**Appendix A Use Case Specification**

Not applicable; please see details on RTM for mapping between requirements and user stories.

**Template Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| March 2013 | 1.1 | Formatted to current ProPath documentation standards and edited to conform with latest Alternative Text (Section 508) guidelines | Process Management |
| January 2013 | 1.0 | Initial Version | PMAS Business Office |