Camp Lejeune-Veterans (CL-V)

Increment 4

VistA

Clinical Reminders (CR) V. 2.0

Patch PXRM\*2.0\*58

System Design Document



May 2016

Version .11

Department of Veterans Affairs

Revision History

| Date | Version | Description | Author |
| --- | --- | --- | --- |
| 03/09/2016 | .11 | Addressed additional VA anomalies to DTT#440 that referenced the Scheduling/AmbCare SDD and the PTF SDD; code changes were also added, and new template content reviewed by developer. |  |
| 01/05/2016 | .10 | Addressed VA anomalies in DTT #440. |  |
| 11/12/2015 | .09 | Did the following: Ensured Table 5 had the correct functional requirement numbers; ensured figure on p.9 is displayed; fixed section 4.3 to read Network Architecture; ensured table 21 has the correct Alt Text for the routine; fixed cross reference in section 6.2.2; fixed section B. 4 to ensure acronym section is referenced properly; updated Scope Section in Table 1 to explain the National Computed Finding and what it entails. |  |
| 10/22/2015 | .08 | Addressed anomalies found in document; performed TW edit and section 508 edit. Ensured document ready to go to AERB. |  |
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# Introduction

Public Law 112-154 was enacted to furnish Department of Veterans Affairs (VA) medical services and hospital care to Veterans stationed at Camp Lejeune between August 1, 1953 and December 31, 1987. Veterans serving at this location for at least 30 days may suffer from medical conditions and/or illnesses arising from their exposure to water contaminated by hazardous chemicals.

Software enhancements to the Veterans Health Information Systems and Technology Architecture (VistA) and to the centralized Health Eligibility Center (HEC) Enrollment System Core (ESC) are required for maintaining the Camp Lejeune-Veteran (CL-V) support information in the Veteran records. This implies that enhancements to the Health Level 7 (HL7) messaging between VistA and ESC, as well as other external consumers of CL-V data, are also required as part of the software development effort.

The purpose of this System Design Document (SDD) is to outline the design specifications for the CL-V project for the Clinical Reminders (CR) application. The change to CR will be done via patch PXRM\*2.0\*58. Wherever the CR patch is referenced in this SDD, it is for CR patch PXRM\*2.0\*58.

## Scope

For detailed information, refer to the Camp Lejeune PL 112-154 System Changes to Support Provisions Affecting Veterans BRD (Business Requirements Document) v10 located on CL-V Technical Services Project Repository (TSPR).

The Clinical Reminder system helps caregivers deliver higher quality care to patients for both preventive health care and management of chronic conditions, and helps ensure that timely clinical interventions are initiated.

Reminders assist clinical decision-making and also improve documentation and follow-up, by allowing providers to easily view when certain tests or evaluations were performed and to track and document when care has been delivered.

CR may be used for both clinical and administrative purposes. However, the primary goal is to provide relevant information to providers at the point of care, for improving care for Veterans. The package benefits clinicians by providing pertinent data for clinical decision-making, reducing duplicate documenting activities, assisting in targeting patients with particular diagnoses and procedures or site-defined criteria, and assisting in compliance with Veterans Health Administration (VHA) performance measures and with Health Promotion and Disease Prevention guidelines.

## User Profiles

The Clinical Reminder Managers and Clinical Application Coordinators will be the primary users of the Clinical Reminder application. These individuals (along with Clinicians and Nurses) will perform the tasks associated with the CR application, and are already familiar with how to establish and track environmental indicators and reminders, of which CL-V is one.

# Background

This section provides an overview of the system, business process, and business benefits.

## Overview of the System

In order to fulfill the legislative requirements, implementation of Camp Lejeune system changes from the front-end applications for point of entry, through the back office processing of Camp Lejeune related care, are required.

The CL-V project implements system changes through front-end applications as well as back office [e.g., Integrated Billing (IB), Office of Policy and Planning (OPP) reporting, and Managerial Cost Accounting (MCA), etc.].

The first phase of the CL-V project addressed the front-end applications involved in Veterans Health Administration (VHA) Eligibility and Enrollment of Camp Lejeune–eligible Veterans; this was accomplished during Increment 3 of the CL-V project. The second phase of the initiative, Increment 4, addresses the downstream clinical, administrative, and back office processing of services related to the Camp Lejeune–eligible Veterans’ healthcare. CR is one of the applications that handles the back office processing of services affected by Increment 4.

CR users will not be able to enter/edit Camp Lejeune Eligibility. The CR update for Camp Lejeune involves creating a national computed finding (in the background) for Camp Lejeune. A computed finding is an M routine that takes a standard set of arguments. The computed finding must be entered into the REMINDER COMPUTED FINDING file (#811.4) before it can be used as a finding in a REMINDER DEFINITION file (#811.9) or term. When none of the standard finding types will work, a computed finding can be used.

A detailed description of the changes required with the CR patch can be found in Table 11, items 2.6.10.1 through 2.6.10.1.1 in the CL-V Increment 4 VistA RSD (Requirements Specification Document) on CL-V TSPR.

## Overview of the Business Process

The VistA CR application provides relevant information to providers at the point of care and clinical reporting and tracking of clinical care. A National Computed Finding will be created to provide access to and reporting of clinical care related to a Veteran’s exposure to Camp Lejeune water contaminants.

See details of the requirements and updated user interfaces in Section 2.6.10 of the CL-V Increment 4 VistA RSD, found on the CL-V TSPR site.

The CL-V Increment 4 RTM (Requirements Traceability Matrix), found on CL-V TSPR, contains a tab for CR with a listing of all CR requirements linked to the Business Needs found on CL-V TSPR.

## Overview of the Significant Requirements

The RSD for the CL-V Increment 4 applications is the CL-V Increment 4 VistA RSD, found on the CL-V TSPR site.

Table 1 provides an overview of the significant requirements for the CR patch.

Table 1: Overview of Significant Requirements for CR Patch

| ID | Requirement |
| --- | --- |
| 2.6.10.1 | A National Computed Finding shall be created for Camp Lejeune. |

**Functional and Workload Requirements**

It is expected that functional workload will be the equivalent of current workload and existing performance system requirements:

* There is no anticipated increased user base or increased transaction volume being introduced with this project.
* No new user interfaces are being added or removed with this project. Modification of existing user interfaces to accommodate the new CL-V data fields should have no impact on user response times or system performance.
* There are no interfaces and communication methods being used with this project.
* Existing interfaces and communication methods are being used to send additional CL-V data fields to the external system at the Austin Information Technology Center. The new data fields should not impact VA network or VistA MailMan servers in any way.

**Security and Privacy Requirements**

There are no special security or privacy requirements that are unique to this project.

**System Criticality and High Availability Requirements**

This is an enhancement to an existing VistA legacy system (CR). There will not be any changes to the required level of availability and disaster recovery currently in place for the existing legacy system.

**Single Sign-on Requirement**

This is an enhancement to an existing VistA legacy system (CR), and pre-existing standard sign-on applies.

**Requirement for Use of Enterprise Portals**

This is an enhancement to an existing VistA legacy system (CR). Modifications will be made to the existing roll and scroll user interface, and there will not be any new user interfaces introduced that require use of Enterprise Portals.

**Special Device Requirements**

No special devices are required for this enhancement.

**Technical Requirements**

There are no applicable technical requirements for this project.

# Conceptual Design

This section provides an overview of the conceptual design, including:

* Conceptual Application Design
* Conceptual Data Design
* Conceptual Infrastructure Design

## Conceptual Application Design

This section provides an overview of the conceptual application design.

### Application Context

The context diagram below shows the application context of the components related to this specific release.

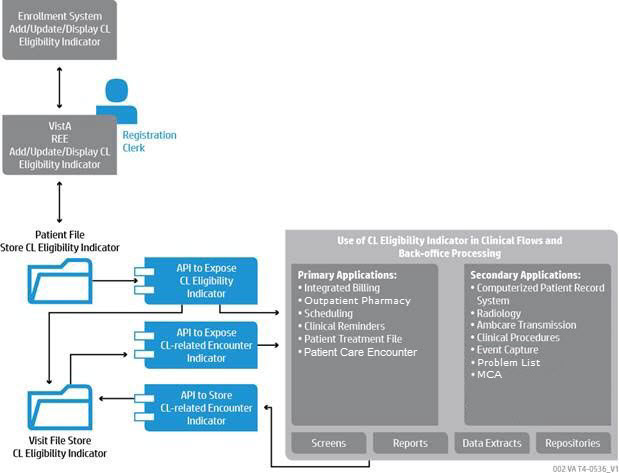


Figure 1: Camp Lejeune Context Diagram -VistA

Table 2 (Grouping): Application Context Description

Object

| ID | Name | Description | Interface Name | Interface System |
| --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | N/A |

Interfaces External to OI&T

| ID | Name | Related Object | Input Messages | Output Messages | External Party |
| --- | --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | N/A | N/A |

Interfaces Internal to OI&T

| ID | Name | Related Object | Input Messages | Output Messages | External Party |
| --- | --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | N/A | N/A |

Externally Shared Data Stores

| ID | Name | Data Stored | Owner | Access |
| --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | N/A |

### High-Level Application Design

The CL-V Increment 4 modifications to the CR application have no impact to the existing high-level design of VistA.

Table 3 (Grouping): Objects in the High Level Application Design

Objects / Components to be Built or Modified

| ID | Name | Description | | Service or Legacy Code | | External Interface Name | | External Interface ID | | Internal Interface Name | | Internal Interface ID | | SDP Sections 1&2 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | | N/A | | N/A | | N/A | | N/A | | N/A | |

Internal Data Stores

| ID | Name | Data Stored | Steward | Access |
| --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | N/A |

### Application Locations

The VistA CR application resides on the existing VistA application and infrastructure servers. No change in this area is introduced.

Table 4: Application Locations

| Application Component | Description | Location at Which Component is Run | Type |
| --- | --- | --- | --- |
| N/A | N/A | N/A | N/A |

The VistA CR application users are shown below:

Table 5: Application Users

| Application Component | Location | User |
| --- | --- | --- |
| CR User Interface | VistA sites | Chief of Health Information Management (HIM) or equivalent and coding staff |

## Conceptual Data Design

This section is not applicable to this SDD.

### Project Conceptual Data Model

N/A

### Database Information

N/A

Table 6: Database Inventory

| Database Name | Description | Type | Steward |
| --- | --- | --- | --- |
| N/A | N/A | N/A | N/A |

### User Interface Data Mapping

There are no new user interfaces being created for this project. This project is making enhancements to existing user interfaces (menu options) within the CR application.

#### Application Screen Interface

N/A

##### GUI Screens

N/A

Table 7: Screen Description

| Graphical User Interface (GUI) Field | Table (Database Table that field connects to) | Field (Field in Table that the GUI field connects to) | Comments |
| --- | --- | --- | --- |
| N/A | N/A | N/A | N/A |

#### Application Report Interface

There is no Application Report Interface applicable to the CR application.

##### Report Names

There are no reports to mention, so there are no figures and tables in this section.

#### Unmapped Data Element

N/A

## Conceptual Infrastructure Design

There is no change in infrastructure for this release.

### System Criticality and High Availability

N/A

### Special Technology

N/A

Table 8: Special Technology Requirements

| Special Technology | Description | Notional Location | TRM Status |
| --- | --- | --- | --- |
| N/A | N/A | N/A | N/A |

### Technology Locations

The CR patch will be installed in each VA VistA instance by VA OI&T staff.

There are no specific components apart from VistA that the CR patch includes or adds. It is all legacy mainframe-based

Table 9: Technology Location Details

| Technology Component  Production 1 | Location | Usage |
| --- | --- | --- |
| Workstations | N/A | N/A |
| Special Hardware | N/A | N/A |
| Interface Processors | N/A | N/A |
| Legacy Mainframe | N/A | N/A |
| Legacy Application Server | N/A | N/A |
| Legacy Databases | N/A | N/A |
| Other | N/A | N/A |

| Technology Component  Production 2 | Location | Usage |
| --- | --- | --- |
| N/A | N/A | N/A |

| Technology Component  Certification | Location | Usage |
| --- | --- | --- |
| N/A | N/A | N/A |

| Technology Component  Education | Location | Usage |
| --- | --- | --- |
| N/A | N/A | N/A |

| Technology Component  Test | Location | Usage |
| --- | --- | --- |
| N/A | N/A | N/A |

| Technology Component  Development | Location | Usage |
| --- | --- | --- |
| N/A | N/A | N/A |

### Conceptual Infrastructure Diagram

No changes are being made to the infrastructure of the existing legacy VistA system.

#### Location of Environments and External Interfaces

The system will use existing locations and existing VistA technology.

#### Conceptual Production String Diagram

N/A

# System Architecture

There is no change in the System Architecture for this release.

## Hardware Architecture

There is no change in the Hardware Architecture for this release.

## Software Architecture

There is no change in the Software Architecture for this release.

## Network Architecture

There is no change in the Network Architecture for this release.

## Service Oriented Architecture / ESS

There is no change in the Service Oriented Architecture for this release.

## Enterprise Architecture

There is no change to the Enterprise Architecture for this release.

# Data Design

This section describes the data design (where applicable).

## DBMS Files

N/A

## Non-DBMS Files

N/A

## Data View

N/A

# Detailed Design

The CR patch has very little architectural impact on the overall system, as it has similarities to other existing environmental factors such as Agent Orange, Shipboard Hazard and Defense (SHAD), etc., and uses similar design components to store and maintain.

## Hardware Detailed Design

There is no change to the Hardware for this release.

## Software Detailed Design

There is no change to the Software Detailed Design for this release.

### Conceptual Design

There is no change to the Conceptual Design for this release as all updates will adhere to the existing VistA design concepts, conventions, and guidelines.

#### Product Perspective

Existing CR software supports other environmental indicators such as Agent Orange and SHAD. The CL-V project uses the same business model and data structures to add the new functionality for tracking and utilizing the new Environmental Factor for CL-V.

##### User Interfaces

This project will modify existing Clinical Reminder roll and scroll user interfaces and users will continue to enter/edit data using the roll and scroll user interface. For details of reminder updates, refer to Table 11 of the CL-V Increment 4 VistA RSD, found on CL-V TSPR.

##### Hardware Interfaces

N/A

##### Software Interfaces

Table 10 lists the Integration Control Registrations (ICRs) applicable to this CR patch.

Table 10: Applicable ICRs

| ICR | Custodian | Usage | Description | New/Modified |
| --- | --- | --- | --- | --- |
| 10061 | Registration | Supported | VADPT is a utility routine designed to provide a central point where a programmer can obtain information concerning a patient's record. Supported entry points are provided which will return demographics, inpatient status, eligibility information, etc. | Modified |

##### Communications Interfaces

N/A

##### Memory Constraints

The effects of the CL-V data on the dynamic memory and disk storage is insignificant compared to the existing overall dynamic memory and disk storage for the CR application. There are no memory constraints given the nature of the addition. It uses existing features such as Agent Orange, SHAD, etc.

##### Special Operations

The project does not introduce or impact any special operations required by the user such as backup, recovery, and archiving operations.

#### Product Features

The CR patch does not add any new features. It adds an additional environmental prompt to existing functionality on screens listed under Requirement ID 2.6.10 in the CL-V Increment 4 VistA RSD, which is found on CL-V TSPR.

#### User Characteristics

The users are Chief of Health Information Management (HIM) or equivalent and coding staff. They are the first contact points with the Veteran; they use the Registration/PTF screens in VistA for setting environmental indicators such as Agent Orange, and perform all subsequent, related business processes.

#### Dependencies and Constraints

CL-V Increment 3 VistA Registration Eligibility and Enrollment (REE), in host file DG\_5\_3\_P909.KID containing patches DG\*5.3\*909 and IVM\*2.0\*161, must be in place so that Camp Lejeune eligibility can be displayed in the Registration application and help drive the related business processes.

The Radiology patch RA\*5.0\*120 must be released and installed prior to CR. Refer to sections 2 and 3 of the CL-V Increment 4 VistA Installation, Back-out, and Rollback Guide*,* found on CL-V TSPR*,* for detailed system requirements, pre-installation, and installation instructions.

Patient Care Encounter (PCE) patch PX\*1.0\*207 must be released and installed prior to CR. PTF must be released and installed before Integrated Billing (IB) patch IB\*2.0\*544 and Scheduling/AmbCare Transmission patch SD\*5.3\*631, as those applications are dependent upon CR. Refer to sections 2 and 3 of the CL-V Increment 4 VistA Installation, Back-out, and Rollback Guide*,* found on CL-V TSPR*,* for detailed system requirements, pre-installation, and installation instructions.

### Specific Requirements

For specific requirements, see section 2.6.10 in the CL-V Increment 4 VistA RSD, found on the CL-V TSPR site.

For an historical perspective, see the CL-V VistA Registration, Eligibility, and Enrollment (REE) Increment 3 System Design Document.

#### Database Repository

Database Repositories are related to relational databases which are not related to VistA. VistA relies on the Cache hierarchical database design.

#### System Features

The System Features are described in Section 2.6.10 of the CL-V Increment 4 VistA RSD, found on the CL-V TSPR site.

#### Design Element Tables

This section provides design element tables specifying the modifications to the CR software components

##### Routines (Entry Points)

The second line of each routine listed in this section will be modified to include the patch number “58” in the patch list.

**Example:**

PXRMCLV ;ALB/TGH - Computed Findings for Camp Lejeune Exposure ; 07/23/2015  
 ;;2.0;CLINICAL REMINDERS;\***58**\*;

Table 11: PXRMCLV Routine

| Routines | Activities | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Routine Name** | PXRMCLV | | | | | | | | |
| **Enhancement Category** | New | | Modify | | | Delete | | No Change | |
| **RTM** | 2.6.10.1.1 | | | | | | | | |
| **Related Options** | N/A | | | | | | | | |
| **Related Routines** | **Routines “Called By”** | | | **Routines “Called”** | | | | | |
|  | N/A | | | GETSVCD^PXRMMSER  $$FMTE^XLFDT | | | | | |
| **Data Dictionary (DD) References** | ^TMP($J | | | | | | | | |
| **Related Protocols** | N/A | | | | | | | | |
| **Related Integration Control Registrations (ICRs)** | N/A | | | | | | | | |
| **Data Passing** | Input | Output Reference | | | Both | | Global Reference | | Local |
| **Input Attribute Name and Definition** | DFN = the patient IEN.  NGET = the number of findings to search for.  BDT = the beginning date and time for the finding search.  EDT = the ending date and time for the finding search. | | | | | | | | |
| **Output Attribute Name and Definition** | TEST(N) = the logical value of the finding for occurrence N; this is set to 1 for each occurrence that is found. (Required)  DATE(N) = the date of the finding in FileMan format for occurrence N. (Required)  DATA = an array of values that can be used by the CONDITION field. For the N’th occurrence set DATA(N,”VALUE”)=VALUE. You can also pass back other data using subscripts just as for a single occurrence computed finding, the only difference being the occurrence subscript comes first. For example, DATA(N,”COLOR”)=”RED”.  TEXT(N) = text to be displayed in the Clinical Maintenance output for occurrence N. (Optional) | | | | | | | | |
| **Current Logic** | | | | | | | | | |
| N/A | | | | | | | | | |
| **Modified Logic (Changes are in bold)** | | | | | | | | | |
| **PXRMCLV ;ALB/TGH - Computed Findings for Camp Lejeune Exposure ; 07/23/2015  ;;2.0;CLINICAL REMINDERS;\*58\*;;Build 33   ; CLV(DFN,NGET,BDT,EDT,NFOUND,TEST,DATE,DATA,TEXT) ;This computed finding will be true if the Camp Lejeune   ;Exposure registration date is in the date range specified by Beginning Date/Time and Ending Date/Time.   ;VA-CAMP LEJEUNE EXPOSURE.  N RDATE  S NFOUND=0  D GETSVCD^PXRMMSER(DFN)  S TEST=^TMP($J,"SVC",DFN,15)  I 'TEST Q  S RDATE=+$P(^TMP($J,"SVC",DFN,15,1),U,1)  I (RDATE=0)!(RDATE<BDT)!(RDATE>EDT) S TEST=0 Q  S NFOUND=1  S TEST(NFOUND)=1,DATE(NFOUND)=RDATE  S TEXT(NFOUND)="Camp Lejeune exposure registration date: "\_$$FMTE^XLFDT(RDATE,"5Z")  Q  ;** | | | | | | | | | |

##### Templates

N/A

##### Bulletins

N/A

##### Data Entries Affected by the Design

There were no new Data Dictionary FileMan field or file definition updates; however, additional data was added to the REMINDER COMPUTED FINDING file (#811.4) and the REMINDER DEFINITION file (#811.9).

Table 12: Data Entries Affected by the Design

| Field Name | Current Value | New Value |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Unique Record(s)

N/A

Table 13: Unique Record ID

| Field Name(s) | Current Value | New Value |
| --- | --- | --- |
| N/A | N/A | N/A |

##### File or Global Size Changes

CR updated the following:

Table 14: File or Global Size Changes

| File/Global Name(s) | Estimated Increase | Estimated Decrease |
| --- | --- | --- |
| 811.4 | No file definition or field changes; increased by 1 record | None |
| 811.9 | No file definition or field changes; increased by 1 record | None |

##### Mail Groups

No mail groups are affected.

Table 15 (Grouping): Mail Groups

| Mail Groups | Activities | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Mail Group Name** | N/A | | | | | |
| **Enhancement Category** | New | | Modify | | Delete | No Change |
| **Related Options** | N/A | | | | | |
| Related Routines | Routines “Called By” | | | Routines “Called” | | |
| N/A | N/A | | | N/A | | |
| Mail Groups | Instructions | | | | | |
| **Data Dictionary (DD) References** | N/A | | | | | |
| **Related Protocols** | N/A | | | | | |
| **Mail Group Description** | N/A | | | | | |
| **Self-Enrollment Allowed** | Yes | No | | | | |
| **Type** | Public | Private | | | | |

##### Security Keys

N/A

Table 16 (Grouping): Security Keys

| Security Keys | Activities | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Security Key Name** | N/A | | | | | | | | | |
| **Enhancement Category** | New | | | Modify | | | | Delete | | No Change |
| **Related Options** | N/A | | | | | | | | | |
| Related Routines | Routines “Called By” | | | | | | Routines “Called” | | | |
| N/A | N/A | | | | | | N/A | | | |
| **Data Passing** | Input | | Output | | Both | Global Reference | | | Local Reference | |
| **Security Key Description** | N/A | | | | | | | | | |
| **Subordinate Keys** | N/A | | | | | | | | | |
| **Mutually Exclusive Keys** | N/A | | | | | | | | | |
| **Granting Condition Logic** | N/A | | | | | | | | | |
| Current Logic | | | | | | | | | | |
| N/A | | | | | | | | | | |
| Modified Logic (Changes are in bold) | | | | | | | | | | |
| N/A | | | | | | | | | | |
| **Hierarchical Precedence** | | N/A | | | | | | | | |

##### Options

N/A

Table 17 (Grouping): Options

| Options | Activities | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Option Name** | N/A | | | | | | | | | | |
| **Enhancement Category** | New | | | Modify | | | | Delete | | | No Change |
| **Associated Menu Options that will invoke this reference** | N/A | | | | | | | | | | |
| **Data Passing** | Input | Output | | | Both | | Global Reference | | | Local Reference | |
| **Menu Text Description** | N/A | | | | | | | | | | |
| **Option Type** | Edit | | Print | | | Menu | | | Inquire | | |
| Action | | Run Routine | | | Other | | |  | | |
| **Associated Routine** | N/A | | | | | | | | | | |
| **Option Definition** | N/A | | | | | | | | | | |
| Current Entry Action Logic | | | | | | | | | | | |
| N/A | | | | | | | | | | | |
| Modified Entry Action Logic (Changes are in bold) | | | | | | | | | | | |
| N/A | | | | | | | | | | | |
| Current Exit Action Logic | | | | | | | | | | | |
| N/A | | | | | | | | | | | |
| Modified Exit Action Logic (Changes are in bold) | | | | | | | | | | | |
| N/A | | | | | | | | | | | |

##### Protocols

N/A

Table 18 (Grouping): Protocols

| Protocols | Activities |
| --- | --- |
| **Protocol Name** | N/A |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Enhancement Category** | New | Modify | Delete | No Change |

|  |  |
| --- | --- |
| **Associated Protocols** | N/A |
| **Data Passing** | Input  Output  Both  Global Reference  Local Reference |
| **Item Text Description** | N/A |
| **Protocol Type** | Action  Menu  Protocol  Protocol Menu  Limited Protocol  Extended Action  Dialog  Other |
| **Associated Routine** | N/A |

| Current Entry Action Logic |
| --- |
| N/A |
| Modified Entry Action Logic (Changes are in bold) |
| N/A |
| Current Exit Action Logic |
| N/A |
| Modified Exit Action Logic (Changes are in bold) |
| N/A |

##### Remote Procedure Call (RPC)

N/A

Table 19: RPCs

| RPCs | Activities | | |
| --- | --- | --- | --- |
| **Name** | N/A | | |
| **TAG^RTN** | N/A | | |
| **Input Parameters** | N/A | | |
| **Results Array** | Single Value | Array | Word Processing |
| Global Array | Global Instance |  |
| **Description** | N/A | | |
| RPCs | Activities | | |
| **Name** |  | | |
| **TAG^RTN** |  | | |
| **Input Parameters** |  | | |
| **Results Array** | Single Value | Array | Word Processing |
| Global Array | Global Instance |  |
| **Description** |  | | |

##### Constants Defined in Interface

N/A

Table 20: Constants Defined in Interface

| Name | Description |
| --- | --- |
| N/A | N/A |

##### Variables Defined in Interface

N/A

Table 21: Variables Defined in Interface

| Name | Type | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Types Defined in Interface

N/A

Table 22: Types Defined in Interface

| Name | Type | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### GUI

N/A

Table 23: GUI

| Unit Name | Description |
| --- | --- |
| N/A | N/A |

##### GUI Classes

N/A

Table 38: GUI Classes

| GUI Classes | Instructions |
| --- | --- |
| **Class Name** | N/A |
| **Derived From Class** | N/A |
| **Purpose** | N/A |

##### Current Form

N/A

##### Modified Form

N/A

##### Components on Form

N/A

Table 24: Components on Form

| Name | Type | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Events

N/A

Table 25: Events

| Name | Type | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Methods

N/A

Table 26: Methods

| Method Name | Procedure/Function | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Special References

N/A

Table 27: Special References

| Special Reference Name | Type | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Class Events

N/A

Table 28: Class Events

| Name | Type | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Class Methods

N/A

Table 29: Class Methods

| Name | Procedure/Function | Description |
| --- | --- | --- |
| N/A | N/A | N/A |

##### Class Properties

Table 30: Class Properties

| Class Properties Name | Type | Visibility | Description |
| --- | --- | --- | --- |
| N/A | N/A | N/A | N/A |

##### Uses Clause

N/A

##### Forms

N/A

Table 31 (Grouping): Forms

| Forms | Description | | | |
| --- | --- | --- | --- | --- |
| **Form Name** | N/A | | | |
| **Enhancement Category** | New | Modify | Delete | No Change |
| **Form Functionality** | N/A | | | |
| Current Form Layout | | | | |
| N/A | | | | |
| Modified Form Layout (Changes are in bold) | | | | |
| N/A | | | | |

##### Functions

Table 32 (Grouping): Functions

| Function Name | Activities | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Short Description** | N/A | | | | | | | | |
| **Enhancement Category** | New | | Modify | | | Delete | | No Change | |
| **Related Options** | N/A | | | | | | | | |
| Related Routines | Routines “Called By” | | | | | Routines “Called” | | | |
| N/A | N/A | | | | | N/A | | | |
| **Data Dictionary (DD) References** | N/A | | | | | | | |
| **Related Protocols** | N/A | | | | | | | |
| **Related Integration Control Registrations (ICRs)** | N/A | | | | | | | |
| **Data Passing** | Input | Output | | Both | Global Reference | | Local Reference | |
| **Input Attribute Name and Definition** | Name: N/A | | | | | | | |
| Definition: N/A | | | | | | | |
| **Output Attribute Name and Definition** | Name N/A | | | | | | | |
| Definition: N/A | | | | | | | |
| Current Logic | | | | | | | | | |
| N/A | | | | | | | | | |
| Modified Logic (Changes are in bold) | | | | | | | | | |
| N/A | | | | | | | | | |

##### Dialog

N/A

Table 33: Dialog

| Dialog | Instructions | | | |
| --- | --- | --- | --- | --- |
| **Dialog Message (Description)** | N/A | | | |
| **Enhancement Category** | New | Modify | Delete | No Change |
| **Dialog Message (Description) Condition** | N/A | | | |
| **Current Dialog Message (Description)** | N/A | | | |
| **Modified Dialog Message (Description)  (Changes are in bold)** | N/A | | | |

##### Help Frame

N/A

Table 34 (Grouping): Help Frame

| Help Frame | Description | | | |
| --- | --- | --- | --- | --- |
| **Help Frame Text** | N/A | | | |
| **Enhancement Category** | New | Modify | Delete | No Change |
| **Help Frame Text Calling Mechanism** | N/A | | | |
| Current Help Frame Text | | | | |
| N/A | | | | |
| Modified Help Frame Text (Changes are in bold) | | | | |
| N/A | | | | |

##### HL7 Application Parameter

N/A

Table 35 (Grouping): HL7 Application Parameter

| HL7 Application Parameter Name | Description | | | | |
| --- | --- | --- | --- | --- | --- |
| **Enhancement Category** | New | Modify | | Delete | No Change |
| **Application Status** | Active | Inactive | | Active | Inactive |
| Enhancement Category | Current | | Modified | | |
| **Facility Name** | N/A | | N/A | | |
| **Country Code** | N/A | | N/A | | |
| **HL7 Field Separator** | N/A | | N/A | | |
| **HL7 Encoding Characters** | N/A | | N/A | | |
| **Mail Group** | N/A | | N/A | | |

##### HL7 Logical Link

N/A

Table 36 (Grouping): HL7 Logical Link

| HL7 Logical Link | Description | | | | |
| --- | --- | --- | --- | --- | --- |
| **HL7 Logical Link Parameter Name** | N/A | | | | |
| **Enhancement Category** | New | Modify | | Delete | No Change |
| Enhancement Category | Current | | Modified | | |
| **Node** | N/A | | N/A | | |
| **Institution** | N/A | | N/A | | |
| **Domain** | N/A | | N/A | | |
| **Autostart** | N/A | | N/A | | |
| **Queue Size** | N/A | | N/A | | |
| **LLP Type** | N/A | | N/A | | |

##### COTS Interface

N/A

Table 37: COTS Interface

| COTS Interface | Description |
| --- | --- |
| **Communication Method** | N/A |
| **Application Interface** | N/A |

## Network Detailed Design

No change in all subsections from previous releases.

## Security and Privacy

No special considerations apply for security and privacy for the CL-V Increment 4 enhancements.

### Security

N/A

### Privacy

N/A

## Service Oriented Architecture / ESS Detailed Design

The current CR package is a VistA legacy application and not based on a Service Oriented Architecture. No enterprise shared services are consumed or provided as part of this project.

### Service Description

Not applicable to VistA.

### Service Design for

Not applicable to VistA.

#### Introduction

##### Purpose and Scope of Service

Not applicable to VistA.

##### Links to Other Documents

Not applicable to VistA.

#### Service Details

##### Service Identification

Not applicable to VistA.

Table 38: Service Identification

| Service Attribute | Value |
| --- | --- |
| N/A | N/A |
| Overview | N/A |
| Version | N/A |
| Latest Status | N/A |
| Service Type | N/A |
| Architecture Layer | N/A |
| Business Domain | N/A |
| Service Domain | N/A |
| Business Organization and Owner | N/A |
| Technical Organization and Owner | N/A |
| Development Organization and Owner | N/A |
| Support Organization and Owner | N/A |
| Target Consumer Organization(s) and Owner(s) | N/A |

##### Service Versions

Not applicable to VistA.

Table 39: Service Versions

|  |  |  |
| --- | --- | --- |
| Version Numbers | Current Status of Version | A Brief Description of the Change Implemented in that Version |
| N/A | N/A | N/A |

##### Summary of Design and Platform Details

###### SOA Pattern(s) Implemented

Not applicable to VistA.

###### COTS Platform Vendor Names and Versions for Hosting Platform

Not applicable to VistA.

#### Dependencies

Not applicable to VistA.

#### Service Design Details

Not applicable to VistA.

##### Interface Technical Specs

Not applicable to VistA.

###### Service Invocation Type

Not applicable to VistA.

###### Service Interface Type

Not applicable to VistA.

###### Service Name

Not applicable to VistA.

###### Interface

Not applicable to VistA.

###### End Points

Not applicable to VistA.

###### Operations or Methods

Not applicable to VistA.

Table 40: Operations

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Operation Name | Inputs | Outputs | Transactional Qualities if relevant (Updating?, Atomic?, Can participate in transaction?) | Pre and Post Conditions | Exception (s) |
| N/A | N/A | N/A | N/A | N/A | N/A |

###### Message Schemas

Not applicable to VistA.

##### Information Model

Not applicable to VistA.

###### Class Diagram and Description of Entities Involved

Not applicable to VistA.

###### Mappings from ELDM to Standards Based Schemas

Not applicable to VistA.

##### Behavior Model (AKA Use Case Realization)

Not applicable to VistA.

###### Use Cases (Use Case Model)

Not applicable to VistA.

#### Gap Analysis

Not applicable to VistA.

Table 41: Gap Analysis

| Design Elements🡪  Policies / SLD elements etc.↓ | Design  Element A | Design  Element B | Design  Element C | Comment for Non-Conformance |
| --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | N/A |

##### Variances from Enterprise Target Architecture

Not applicable to VistA.

##### Variances from SLDs

Not applicable to VistA.

##### Variances from Standards and Policies

Not applicable to VistA.

##### Justification for Exceptions and Mitigation

Not applicable to VistA.

# External System Interface Design

N/A

## Interface Architecture

No change from previous releases.

## Interface Detailed Design

No change from previous releases.

# Human-Machine Interface

There are no changes to the human-machine interface for the CL-V enhancements.

## Interface Design Rules

N/A

## Inputs

N/A

## Outputs

N/A

## Navigation Hierarchy

There are no changes to the human-machine interface for the CL-V enhancements.

### Screen [x.1]

N/A

### Screen [x.2]

N/A

### Screen [x.3]

N/A

# Attachment A – Approval Signatures

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

Signed: Date:

< Business Sponsor >

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

Signed: Date:

, CL-V Project Manager

1. Additional Information

Additional information is provided in the sub-sections that follow.

* 1. Identification of Technology and Standards

The only standard that applies to the patch described in this SDD are the American National Standards Institute [ANSI] standards.

This application conforms to the current VistA Standards and Conventions Committee (SACC) and has passed through all of the VA vetting processes before its national release.

In addition, it utilizes the latest versions of key VistA infrastructure applications (FileMan, Kernel, MailMan, etc.)

* 1. Constraining Policies, Directives and Procedures

Directive: Public Law 112-154: On August 6, 2012, President Obama signed into law the “Honoring America’s Veterans and Caring for Camp Lejeune Families Act of 2012” (P. L. 112-154). This law provides healthcare for Veterans who served on active duty at Camp Lejeune and reimbursement for healthcare to family members who resided at Camp Lejeune for not fewer than 30 days between August 1, 1953 and December 31, 1987. The law authorizes care for 15 medical conditions, even if there is insufficient medical evidence to conclude that such illnesses or conditions are attributable to the Veterans’ military service or family members’ residence at Camp Lejeune.

The Camp Lejeune-Veterans (CL-V) project improves organizational efficiency in providing services to affected Veterans by ensuring they are appropriately identified as Camp Lejeune eligible, assigning them to Priority Group 6, and waiving co-payments for their conditions related to Camp Lejeune. This helps to address the mandated House Resolution (H.R.) 1627 [now Public Law (P.L.) 112-154, Honoring America’s Veterans], which requires the Department of Veterans Affairs (VA) to provide hospital care and medical services to Veterans who meet the specified conditions.

The changes to the CR package, the subject of this SDD, is one of the backend processing systems for Camp Lejeune related care that allows implementation of Camp Lejeune system changes.

* 1. Requirements Traceability Matrix

The CL-V Increment 4 RTM is found on the CL-V TSPR site. The requirements traceability for the CR patch is found on the Clinical Reminders tab of the RTM.

* 1. Packaging and Installation

Not applicable to VistA.

* 1. Design Metrics

Not applicable to VistA.