VistA Lab Enhancements – Microbiology

Releases: LR*5.2*463 and MMRS*1.0*4

Technical Manual
And
Security Guide

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Revision History

Date	Revision	Description	Author
01/30/2017	1.0	Document baselined.	Elizabeth Adams Van Blargan

Artifact Rational

A Technical Manual is a required end-user document for all OI&T software releases. The intended audience for this document is local IT support, management, and development personnel for nationally released software. It provides sufficient technical information about the software for developers and technical personnel to operate and maintain the software with only minimal assistance from Product Support staff.

Table of Contents

List of Tables

List of Figures

1.   Introduction

The LR*5.2*463 patch includes the necessary microbiology enhancements to allow Department of Veterans Affairs (VA) labs the ability to document and utilize standard data in VistA/Computerized Patient Record System (CPRS) for CRE and other Multi-Drug Resistant Organisms (MDROs). In addition, it includes the ability to distribute nationally these microbiology enhancements and other MDRO standardized reporting etiologies without requiring each individual lab to update its own local files manually.

Patch MMRS*1.0*4 shall support the timely identification of multi-drug resistant organisms (MDROs), provide enhanced reporting capabilities for Carbapenem Resistant Enterobacteriaceae (CRE) and Clostridium Difficile Infection (CDI) positive cases, and streamline the MDRO initiative by updating the existing MRSA Program Tools menu options and naming conventions to MDRO where applicable.

1.1.   Purpose

The purpose of the guide is to familiarize users with the important features and navigational elements of LR*5.2*463 and MMRS*1.0*4.

1.2.   System Overview

After the LR*5.2*463 patch has been installed and post-installation procedures have been applied, the following organisms will be available for viewing or for report capture purposes:

- Klebsiella pneumoniae, Carbapenem Resistant (CRE)

- Klebsiella oxytoca, Carbapenem Resistant (CRE)

- Escherichia coli, Carbapenem Resistant (CRE)

- Enterobacter cloacae, Carbapenem Resistant (CRE)

- Enterobacter spp, Carbapenem Resistant (CRE)

The features and functionality provided in the MMRS*1.0*4 patch will provide technicians, MDRO Prevention Coordinators (MPCs) and Infection Prevention (IP) personnel automated tools thereby increasing efficiency and reducing the labor hours required previously with manual data mining.

In regards to enhanced reporting capabilities, the MMRS*1.0*4 patch shall provide the following new reporting capabilities:

- CDI reporting functionality shall capture positive cases for the wards of a particular facility.
- CRE reporting functionality shall capture positive cases within a facility.

   Note: As indicated in the Installation Guide, it is required that patch LR*5.2*463 and MMRS*1.0*3 are installed prior to patch MMRS*1.0*4.

1.3. Document Orientation

The intended audience for the Technical Manual and Security Guide are the following:

- Laboratory Information Managers (LIMs)
- Microbiology Technologists
- Automated Data Processing Application Coordinators (ADPACs)
- Information Resources Management (IRM) staff

Installation of the patches requires interactive participation between IRM staff and LIM or ADPAC personnel.

1.4. Text Conventions

Throughout this document, the following fonts and other text conventions are used:

Table 1: Text Conventions

Font	Use	Example
Blue text, underlined	Hyperlink to another document or URL	For further instructions, refer to the link: http://www.va.gov/vdl
Courier New	Menu options	`MDRO Tools Parameter Setup`
	Screen prompts	`Want KIDS to INHIBIT LOGONs during the install? YES//`
	VistA filenames	`XYZ file #798.1`
	VistA field names	"In the `Indicator` field, enter the logic that is to be used to determine if the test was positive for the selected MDRO."
Courier New, bold	User responses to screen prompts	**`NO`**
Courier New, bold	Keyboard keys	**< F1 >, < Alt >, < L >, <Tab>, <Enter>**
Courier New	Report names	`Procedures` report
Times New Roman	Body text (Normal text)	"There are no changes in the performance of the system once the installation process is complete."
Times New Roman Bold	Emphasis	**Note**: You can also type the access code, followed by a semicolon, followed by the verify code.

1.4.1. Disclaimers

1.4.1.1. Software Disclaimer

This software was developed at the Department of Veterans Affairs (VA) by employees of the Federal Government in the course of their official duties. Pursuant to title 17 Section 105 of the United States Code this software is not subject to copyright protection and is in the public domain. VA assumes no responsibility whatsoever for its use by other parties, and makes no guarantees, expressed or implied, about its quality, reliability, or any other characteristic. We would appreciate acknowledgement if the software is used. This software can be redistributed and/or modified freely provided that any derivative works bear some notice that they are derived from it, and any modified versions bear some notice that they have been modified.

1.4.1.2. Documentation Disclaimer

The appearance of external hyperlink references in this manual does not constitute endorsement by the Department of Veterans Affairs (VA) of this Web site or the information, products, or services contained therein. The VA does not exercise any editorial control over the information you may find at these locations. Such links are provided and are consistent with the stated purpose of the VA.

1.4.2. References

The following references were used in preparation of this document:

- LR*5.2*463 Patch Description. February 2016.
- MMRS*1.0*4 Patch Description. December 2016.
- Microbiology Systems Design Document (SDD). March 2016, version 0.6.
- MMRS*1.0*3 User Manual. July 2010, version 1.0
- MMRS*1.0*3 Technical Manual. July 2010, version 1.0.

2. Implementation and Maintenance

The following diagram depicts the overall data flows between the VistA Lab package and CPRS.

Figure 1: High-level Process Flowchart
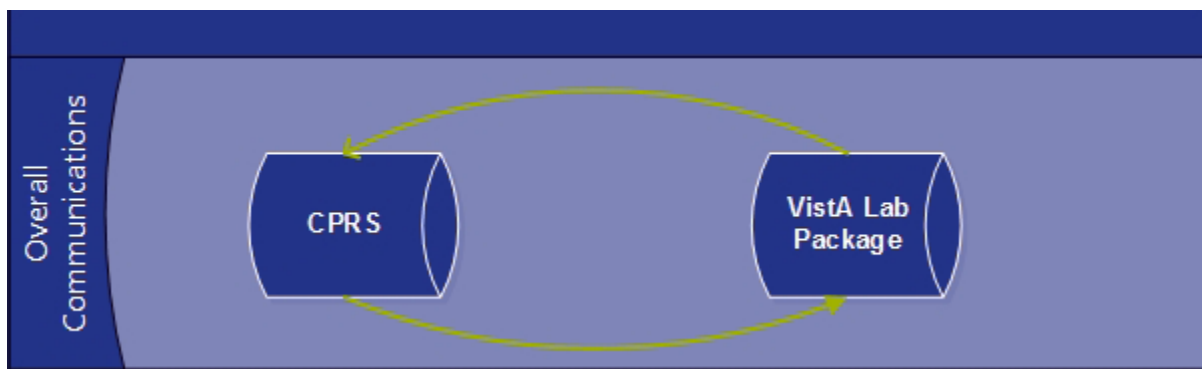
2.1. System Requirements

The VistA software is a Kernel Installation and Distribution System (KIDS) software release and will be distributed as a PackMan message via Forum.

2.1.1. Hardware Requirements

The LR*5.2*463 and MMRS*1.0*4 patches operate on the current VA computer hardware systems.

2.1.2. Software Requirements

The LR*5.2*463 and MMRS*1.0*4 patches operate on the current VA computer systems, which includes Kernel 8.0 and FileMan 22.

The following prerquisite releases are required prior to the installation of MMRS*1.0*4:
- MMRS*1.0*3
- LR*5.2*463

2.1.3. Database Requirements

VA FileMan 22 is the only database requirement for the LR*5.2*463 and MMRS*1.0*4 patches.

2.2. System Setup and Configuration

Installation of the patches requires interactive participation between IRM staff and LIM or ADPAC personnel.

You may wish to install the patches during non-peak hours.

3. Files

3.1. Kernel Patches

Kernel patches must be current on the target system to avoid problems loading and/or installing the patches.

3.2. Global Growth

There is no significant change to global growth.

4. Routines

The following list of routines applies to the LR*5.2*463 and MMRS*1.0*4 releases:

Table 2: List of Routines

Routine	Release	Brief Description
MMRSCDI	MMRS*1.0*4	This routine was created for the CDI report to capture positive C. diff. cases as well as to track the patients' movement.
MMRSCDI1	MMRS*1.0*4	This routine is a continuation of MMRSCDI.
MMRSCRE	MMRS*1.0*4	This routine was created for the CRE report for admitted patients to capture the number of cases.
MMRSCRE2	MMRS*1.0*4	This routine is a continuation of MMRSCRE.
MMRSCRE3	MMRS*1.0*4	This routine is a continuation of MMRSCRE2.
MMRSCRE4	MMRS*1.0*4	This routine is a continuation of MMRSCRE3.
MMRSCRE5	MMRS*1.0*4	This routine was created for the CRE report (tasked) and for Taskman to schedule the report.
MMRSIPCP	MMRS*1.0*4	This routine was created for the CRE report for multiple specimens.
MMRSP4	MMRS*1.0*4	This routine was created for the Setup MDRO Tools Software Parameters.
LR463ETI	LR*5.2*463	This routine is for the post install to change the package name.

5. Templates

New templates were not created for the releases.

6. Parameters

New parameters are not associated with the releases.

7.   Data Dictionary

The figure below is an illustration of the Data Dictionary for file #104, MDRO Site Parameters. Changes to fields are highlighted.

Figure 2: Data Dictionary for #104

```
STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                      JAN 26,2017@11:13:27  PAGE 1
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                  (VERSION 1.0)


DATA           NAME                 GLOBAL      DATA
ELEMENT        TITLE                LOCATION    TYPE
-------------------------------------------------------------------------------
This file holds the set of parameters which modify the operation of the MRSA
Program Tools to suit the needs of your site. For multi-divisional facilities,
each division should have a separate entry in this file.



            DD ACCESS: @
            RD ACCESS: @
            WR ACCESS: @
           DEL ACCESS: @
         LAYGO ACCESS: @
         AUDIT ACCESS: @


      (NOTE: Kernel's File Access Security has been installed in this UCI.)



POINTED TO BY: DIVISION field (#1) of the MDRO TOOLS LAB SEARCH/EXTRACT File
              (#104.1)


STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                      JAN 26,2017@11:13:28  PAGE 2
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                  (VERSION 1.0)


DATA           NAME                 GLOBAL      DATA
ELEMENT        TITLE                LOCATION    TYPE
-------------------------------------------------------------------------------
            DIVISION field (#.01) of the DIVISION sub-field (#104.22) of
```

```
                 the MDRO TYPES File (#104.2)

                 DIVISION field (#1) of the MDRO WARD MAPPINGS File (#104.3)



CROSS
REFERENCED BY: SPECIMEN(AB), SPECIMEN(AC), DIVISION(B)


104,.01       DIVISION               0;1 POINTER TO MEDICAL CENTER DIVISION FIL
                                      E (#40.8) (Required)



             LAST EDITED:       OCT 28, 2008



STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                             JAN 26,2017@11:13:30  PAGE 3
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                             (VERSION 1.0)


DATA          NAME                   GLOBAL      DATA
ELEMENT       TITLE                  LOCATION    TYPE
--------------------------------------------------------------------------------
             HELP-PROMPT:       Enter the division the parameters are for.
             DESCRIPTION:       This field contains the division the parameters
                                are defined for.


             CROSS-REFERENCE:  104^B
                               1)= S ^MMRS(104,"B",$E(X,1,30),DA)=""
                               2)= K ^MMRS(104,"B",$E(X,1,30),DA)



104,1         RECEIVING UNIT SCREEN  0;2 SET


                               '0' FOR NO;



STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                             JAN 26,2017@11:13:31  PAGE 4
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                             (VERSION 1.0)
```

```
DATA            NAME                    GLOBAL      DATA
ELEMENT         TITLE                   LOCATION    TYPE
--------------------------------------------------------------------------
                                '1' FOR YES;
                LAST EDITED:    MAR 04, 2009
                HELP-PROMPT:    Enter 'Yes' if at your site the admitting (or
                                receiving) unit screens patients on
                                unit-to-unit transfers.
                DESCRIPTION:    This field should be set to 'Yes' if at your
                                site the admitting (or receiving) unit screens
                                patients on unit-to-unit transfers.


104,2           DISCHARGING UNIT SCREEN 0;3 SET


                                '0' FOR NO;


STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                          JAN 26,2017@11:13:32  PAGE 5
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                   (VERSION 1.0)


DATA            NAME                    GLOBAL      DATA
ELEMENT         TITLE                   LOCATION    TYPE
--------------------------------------------------------------------------
                                '1' FOR YES;
                LAST EDITED:    OCT 28, 2008
                HELP-PROMPT:    Enter 'Yes' if at your site the discharging
                                unit screens patients on unit-to-unit
                                transfers.
                DESCRIPTION:    This field should be set to 'Yes' if at your
                                site the discharging unit screens patients on
                                unit-to-unit transfers.



104,3           SCREEN POS ON TRANSFER IN 0;4 SET


                                '0' FOR NO;
```

```
STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                          JAN 26,2017@11:13:32  PAGE 6
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                               (VERSION 1.0)


DATA           NAME                   GLOBAL       DATA
ELEMENT        TITLE                  LOCATION     TYPE
-------------------------------------------------------------------------------
                              '1' FOR YES;
               LAST EDITED:   MAR 04, 2009
               HELP-PROMPT:   Enter 'Yes' if at your site you are screening
                              all patients on transfers into the unit,
                              regardless of MRSA status.
               DESCRIPTION:   This field should be set to 'Yes' if at your
                              site you are screening all patients on
                              transfers into the unit, regardless of MRSA
                              status. This field should be set to 'No' if you
                              only screen patients not known to be infected
                              and/or colonized with MRSA on transfers into
                              the unit.




STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                          JAN 26,2017@11:13:34  PAGE 7
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                               (VERSION 1.0)


DATA           NAME                   GLOBAL       DATA
ELEMENT        TITLE                  LOCATION     TYPE
-------------------------------------------------------------------------------


104,4          SCREEN POS ON DISCHARGE 0;5 SET


                              '0' FOR NO;
                              '1' FOR YES;
               LAST EDITED:   MAR 16, 2009
               HELP-PROMPT:   Enter 'Yes' if at your site you are screening
                              patients on discharge, death, or transfer out
                              from the unit, regardless of MRSA status.
```

```
                DESCRIPTION:      This field should be set to 'Yes' if at your
                                  site you are screening patients on discharge,
                                  death, or transfer out from the unit,
                                  regardless of MRSA status.


STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                                 JAN 26,2017@11:13:35  PAGE 8
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                         (VERSION 1.0)


DATA            NAME                      GLOBAL       DATA
ELEMENT         TITLE                     LOCATION     TYPE
-------------------------------------------------------------------------------
                                  This field should be set to 'No' if you only
                                  screen patients not known to be infected and/or
                                  colonized with MRSA on discharge, death, or
                                  transfer out from the unit.



104,5       ISOLATION ORDERS      1;0 POINTER Multiple #104.05
                                (Add New Entry without Asking)



104.05,.01     ISOLATION ORDER       0;1 POINTER TO ORDERABLE ITEMS FILE (#10
                                1.43)



STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                                 JAN 26,2017@11:13:38  PAGE 9
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                         (VERSION 1.0)


DATA            NAME                      GLOBAL       DATA
ELEMENT         TITLE                     LOCATION     TYPE
-------------------------------------------------------------------------------
                                  (Required) (Multiply asked)


            LAST EDITED:      MAR 04, 2009
            HELP-PROMPT:      Enter the isolation orderable item.
```

```
            DESCRIPTION:      The orderable item that is used at your
                              facility for isolation purposes.


            CROSS-REFERENCE:  104.05^B
                              1)= S ^MMRS(104,DA(1),1,"B",$E(X,1,30),DA)=""
                              2)= K ^MMRS(104,DA(1),1,"B",$E(X,1,30),DA)



104.05,1      EXPANDED PRECAUTION TYPE 0;2 SET


                              '1' FOR CONTACT PRECAUTIONS;


STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                    JAN 26,2017@11:13:39  PAGE 10
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                    (VERSION 1.0)


DATA          NAME                    GLOBAL       DATA
ELEMENT       TITLE                   LOCATION     TYPE
-------------------------------------------------------------------------------
                              '2' FOR CONTACT PRECAUTIONS SPECIAL;
                              '3' FOR AIRBORNE INFECTION;
                              '4' FOR DROPLET;
                              '5' FOR PROTECTIVE ENVIRONMENT;
                              '6' FOR ISOLATION ORDER;
            LAST EDITED:      AUG 17, 2009
            HELP-PROMPT:      Enter the expanded precaution type this order
                              is used for.
            DESCRIPTION:      The expanded precaution type this order is
                              used for.


STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                    JAN 26,2017@11:13:40  PAGE 11
STORED IN ^MMRS(104,  (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                    (VERSION 1.0)


DATA          NAME                    GLOBAL       DATA
ELEMENT       TITLE                   LOCATION     TYPE
-------------------------------------------------------------------------------
```

```
104,216061    SPECIMEN                61;0 POINTER Multiple #104.0216061


            DESCRIPTION:      This subfile contains specimen(s) for each
                              division.



104.0216061,.01 SPECIMEN            0;1 POINTER TO TOPOGRAPHY FIELD FILE (#6
                              1) (Multiply asked)


            LAST EDITED:      AUG 25, 2016
            HELP-PROMPT:      Select the specimen to be associated with
                              this division.


STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                        JAN 26,2017@11:13:47  PAGE 12
STORED IN ^MMRS(104,   (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                      (VERSION 1.0)


DATA          NAME                GLOBAL      DATA
ELEMENT       TITLE               LOCATION    TYPE
-------------------------------------------------------------------------------
            DESCRIPTION:      This field contains the specimens mapped to
                              this particular institution.


            CROSS-REFERENCE:  104.0216061^B
                              1)= S ^MMRS(104,DA(1),61,"B",$E(X,1,30),DA)="
                              "


                              2)= K ^MMRS(104,DA(1),61,"B",$E(X,1,30),DA)


            CROSS-REFERENCE:  104^AB
                              1)= S ^MMRS(104,"AB",$E(X,1,30),DA(1),DA)=""



STANDARD DATA DICTIONARY #104 -- MDRO SITE PARAMETERS FILE
                                        JAN 26,2017@11:13:47  PAGE 13
STORED IN ^MMRS(104,   (5 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: VISTA,
ROU                                                      (VERSION 1.0)
```

```
DATA           NAME                  GLOBAL        DATA
ELEMENT        TITLE                 LOCATION      TYPE
-------------------------------------------------------------------------------
                                     2)= K ^MMRS(104,"AB",$E(X,1,30),DA(1),DA)
                                     This cross reference is on the entire file by
                                     specimen - division



               CROSS-REFERENCE:  104^AC^MUMPS
                                     1)= S ^MMRS(104,"AC",DA(1),$E(X,1,30),DA)=""
                                     2)= K ^MMRS(104,"AC",DA(1),$E(X,1,30),DA)
                                     This cross reference is on the entire file
                                     sorted by division, specimen, IEN.


       FILES POINTED TO                       FIELDS


MEDICAL CENTER DIVISION (#40.8)    DIVISION (#.01)


ORDERABLE ITEMS (#101.43)          ISOLATION ORDERS:ISOLATION ORDER (#.01)


TOPOGRAPHY FIELD (#61)             SPECIMEN:SPECIMEN (#.01)


INDEX AND CROSS-REFERENCE LIST -- FILE #104              01/26/17   PAGE 14
-------------------------------------------------------------------------------
INPUT TEMPLATE(S):


PRINT TEMPLATE(S):


SORT TEMPLATE(S):


FORM(S)/BLOCK(S):
MMRSISLTORD                   MAR 02, 2009@11:09  USER #0
  MMRSISLTORDHDR                 DD #104
  MMRSISLTORDEDITHDR             DD #104
  MMRSISLTORDEDIT2               DD #104.05
```

8. Exported Options

Patches LR*5.2*463 and MMRS*1.0*4 do not contain any associated exported options or protocols.

9. Menus

The following new menus will be available after the installation of MMRS*1.0*4:

- MMRS CDI REPORT
- MMRS CDI REPORT (Tasked)
- MMRS CRE REPORT
- MMRS MDRO HIST DAYS EDIT
- MMRS MDRO LAB PARAMETER SETUP
- MMRS CRE SITE PARAMETER SETUP
- MMRS MDRO WARD MAPPING SETUP

10. Forms

The table below lists the forms associated with MMRS*1.0*4:

Figure 3: Forms

Form	Associated File
MMRSISLTORD	104
MMRSLABPARAM	104.1

11. Mail Groups, Alerts, and Bulletins

Mail groups, alerts, and bulletins were not created, required, or used by the software.

12. Public Interfaces

This section describes the public interfaces associated with patches LR*5.2*463 and MMRS*1.0*4.

12.1. Integration Control Registrations

Integration Control Registrations (ICRs) were not required.

12.2. Application Programming Interfaces

API's are not applicable.

12.3. Remote Procedure Calls

RPC's are not applicable.

12.4. Web Services

Web services were not created and/or used.

13. Standards and Conventions Exemptions

SAC exemptions for this software were not required.

13.1. Internal Relationships

All related routines are listed in Section 4, Routines.

13.2. Software-wide Variables

SAC exemptions for this software were not required.

14. Security

Privacy represents information that must be protected and covers the collection, use, and disclosure of personal information. Security represents how information must be protected and encompasses the methods for accessing and protecting the information. A Security Guide aids in controlling the release of sensitive information related to nationally released software. LR*5.2*463 and MMRS*1.0*4 do not contain any highly sensitive information. Information may be obtained through the Freedom of Information Act (FOIA) requests. There are no unique/atypical features or other information that would be of interest to security personnel or other support groups.

14.1. Security Menus and Options

Security menus and options are not distributed with the releases.

14.2. Security Keys and Roles

Various menu options are available to the user. However, it should be noted that users who have not been assigned a `MMRS Setup` security key will only have access to the `MDRO Tools Reports Menu`.

The following security key is required for MMRS*1.0*4:

- MMRS SETUP

14.3. File Security

Any additional file security for the software is not required.

14.4. Electronic Signatures

Electronic signatures are not applicable.

14.5. Secure Data Transmission

The software does not provide any secure data transmission capabilities.

The following websites address encryption of data exchanged over any facility connection:

- Federal Information Security Management Act (FISMA):
  http://csrc.nist.gov/groups/SMA/fisma/index.html

15. Archiving

The software does not provide any data archiving capabilities.

16. Non-Standard Cross-References

Non-standard or special cross-references are not applicable.

17. Troubleshooting

17.1. National Service Desk and Organizational Contacts

The four tiers of support documented herein are intended to restore normal service operation as quickly as possible and minimize the adverse impact on business operations, ensuring that the best possible levels of service quality and availability are maintained.

The table below lists organizational contacts needed by site users for troubleshooting purposes. Support contacts are listed by name of service responsible to fix the problem, description of the incident escalation, associated tier level, and contact information.

Table 3: Tier Support Contact Information

Name	Role	Org	Contact Information
Clinical Application Coordinator	Tier 0 Support	VHA	To be determined (TBD).
OI&T National Service Desk	Tier 1 Support	OI&T	Nationalservicedeskanr@va.gov 1-855-673-4357
OI&T Local Support	Tier 2 Support	OI&T	OI&T Local Helpdesk
Health Product	Tier 2	VHA	Nationalservicedeskanr@va.gov

Name	Role	Org	Contact Information
Support	Support		1-855-673-4357
OI&T System Admin/Field Operation Support	Tier 2 & 3 support	OI&T	Nationalservicedeskanr@va.gov 1-855-673-4357
VistA Patch Maintenance	Tier 3 Application Support	OI&T	Nationalservicedeskanr@va.gov 1-855-673-4357
Enterprise Operations	Tier 3 & 4 Support	OI&T	OI&T Enterprise Operations Helpdesk

17.2. Warning Message that Lab Test or Etiology Parameters are not configured

If the Laboratory Test or Etiology parameters have not been configured, and a user attempts to generate the CDI Report, the following message will be displayed to the user:

Figure 4: Warning Dialog regarding Lab Test/Etiology Configuration

```
The report cannot be run because the Laboratory Test(s) or

the Etiology is not configured in the MDRO TOOLS LAB

SEARCH/EXTRACT file, (104.1).  Use the MDRO Tools Lab Parameter
Setup option to configure.
```

Consult the on `MDRO Tools Lab Parameter Setup` for information on how to enter laboratory and/or etiology parameters for historical reporting of multi-drug resistant organisms (MDROs).

17.3. Warning Message that Etiology Parameter is not configured

If the Etiology parameter has not been configured, and a user attempts to generate the CRE Report, the following message will be displayed to the user:

Figure 5: Warning Dialog regarding Etiology Configuration

```
The report cannot be run because the Etiology has not been

configured in the MDRO TOOLS LAB SEARCH/EXTRACT file,

(#104.1).  Use the MDRO Tools Lab Parameter Setup option to
configure.
```

Correct the issue by configuring the etiology parameters. Consult the section regarding `MDRO Tools Lab Parameter Setup` for more information.

17.4. Warning Message that Specimen is not Configured

If a site has not configured specimen(s), and a user attempts to run the CRE Report, the following message will be displayed to the user:

Figure 6: Warning Dialog regarding Specimen Configuration

```
Make sure a division and/or a Surveillance specimen has been
setup using the option: 'CRE Tools Site Parameter Setup'
```

Consult the section regarding the `CRE Tools Parameter Setup` menu option on how to configure the CRE parameters for division(s).

18. RACI Chart

- **Responsible (R):** The persons or groups who execute the task are responsible for the correct execution of the process and activities.

- **Accountable (A)**: For each activity, only one role (person or group) should be answerable for owning the end result and process quality.

- **Consulted (C):** A person or group that provides additional knowledge and information.

- **Informed (I):** A person or group that only receives process execution and quality information (per activity or in summary form).

Table 4: RACI Chart

Functional Roles	Requirements	Design	Development	Test	Documentation	Training	Deployment
Program Manager	I, C	I, C	I, C	I, C	I, C	I, C	I, C
Project Manager	R	R	R	R, I, C	R	R	R
Project Planner	I	I	I	I	I	I	I
Technical Architect	I, C	A, R	A, R	R, C	I, C	I, C	R, I, C

Functional Roles	Requirements	Design	Development	Test	Documentation	Training	Deployment
Functional Analyst	R, I, C	R, C	R, C	R, C	R, I, C	R, I, C	I, C
Requirements Manager	A, R	R, I, C	I, C	I, C	R, I, C	R, I, C	I, C
Configuration Manager	I	I	I, C	I, C	I, C	I	A, R
Test Manager	I	I	I, C	A, R	R, I, C	I	I, C
Test Analyst	I	I	I	R, C	I, C	I	I
Lead Developer	I, C	I, C	R, C	R, C	R, I, C	I, C	R, I, C
Developer	I, C	I, C	R, C	I, C	I, C	I, C	I, C
Training Manager	I	I, C	I, C	I, C	R, I, C	A, R	I
Technical Writer	I	I	I	I	A, R	I	I

19. Parameter Setup Checklist

The parameter setup section should be completed prior to running any reports. The Information Resource Manager (IRM), MRSA Prevention Coordinator (MPC), or Laboratory Information Manager (LIM) are responsible for each step as noted in the table below.

Table 5: Parameter Setup Checklist

Step #	Description	Responsible	✔
1	Install patch LR*5.2*463 and perform post-installations as outlined in the Deployment, Installation, Back-out, and Rollback Guide.	IRM	
2	Install patch MMRS *1.0*4	IRM	
3	Assign users the appropriate menus and keys.	IRM	
4	Using option `MDRO Tools Parameter Setup` (Main), add the division(s) that the facility will require. For integrated or co-located sites more than one division will most likely need to be added. After the division is added, answer the prompts based on the business rules in place for that division.	MPC/IRM	
5	Using option `MDRO Tools Lab Parameter Setup`, add the appropriate lab parameters for the different MDROs.	MPC/LIM	
6	Using option `MDRO Tools Ward Mapping Setup`, setup the ward mappings. (Remember to separate out OBS units from the geographical units and to create all OBS units as separate units).	MPC	
7	Using option `MDRO Historical Days Edit`, enter the time frame to search for the last positive MDRO result?	MPC	
8	Using option `Isolation Orders Add/Edit` add the orders that are used for isolation purposes. (Only needed if the site uses Isolation Orders).	MPC	
9	Setup the tasked options: `Print Isolation Report (Tasked)` and `Print Nares Screen Compliance List (Tasked)` to the appropriate printers (optional).	IRM/MPC	

Glossary

Glossary of Terms	Definitions
Access Code	A code that allows the computer to identify you as a user authorized to gain access to the computer. Your code is greater than six and less than twenty characters long; can be numeric, alphabetic, or a combination of both; and is usually assigned by a site manager or application coordinator.
ADPAC	Automated Data Processing Coordinator. The ADPAC is the person responsible for planning and implementing new work methods and technology for employees throughout a medical center. ADPACs train employees and assist users when they run into difficulties, and needs to know how all components of the system work. ADPACs maintain open communication with their supervisors and Service Chiefs, as well as their counterparts in Fiscal and Acquisitions and Materiel Management (A&MM), or Information Resource Management (IRM). Also, the designated individual responsible for user-level management and maintenance of an application package (*e.g.*, Laboratory).
FileMan	FileMan is a set of M or MUMPS utilities written in the late 1970s and early 1980s which allow the definition of data structures, menus and security, reports, and forms. Its first use was in the development of medical applications for the Veterans Administration (now the Department of Veterans Affairs). Since it was a work created by the government, the source code cannot be copyrighted, placing that code in the public domain. For this reason, it has been used for rapid development of applications across a number of organizations, including commercial products.
FORUM	FORUM is the VA's national-scale email system. FORUM uses the VistA mail software and provides an excellent interface for threaded messages that can take the form on ongoing discussions. The National Patch Module is a VistA application that helps developers to manage the numbering, inventory, and release of patches. Patches are developed in response to request submissions and an error reporting request system known as National Online Information Sharing. A process called the Kernel

Glossary of Terms	Definitions
	Installation Distribution System (KIDS) is used to roll up patches into text messages that can be sent to sites along with installation instructions. The patch builds are sent as text messages via email, and the recipient (*e.g.,* a site administrator) can run a PackMan function to unpack the KIDS build and install the selected routines.
File Transfer Protocol (FTP)	A client-server protocol which allows a user on one computer to transfer files to and from another computer over a TCP/IP network. Also the client program the user executes to transfer files. It is defined in Internet Standard 9, Request for Comments 959.
Globals	M uses *globals*: variables which are intrinsically stored in files and which persist beyond the program or process completion. Globals appear as normal variables with the caret character in front of the name. For example, the M statement… SET ^A("first_name")="Keeley" …will result in a new record being created and inserted in the persistent just as a file persists in an operating system. Globals are stored, naturally, in highly structured data files by the language and accessed only as M globals. Huge databases grow randomly rather than in a forced serial order, and the strength and efficiency of M is based on its ability to handle all this flawlessly and invisibly to the programmer. For all of these reasons, one of the most common M programs is a database management system. FileMan is one such example. M allows the programmer much wider control of the data; there is no requirement to fit the data into square boxes of rows and columns.
Kernel	The VistA software that enables VistA applications to coexist in a standard operating system independent computing environment.
Kernel Installation and Distribution System (KIDS)	KIDS provides a mechanism to create a distribution of packages and patches; allows distribution via a MailMan message or a host file; and allows queuing the installation of a distribution for off-hours.
LIM	Laboratory Information Manager.

Glossary of Terms	Definitions
	The LIM manages the laboratory files in VistA. Additional duties include creation of new tests, interface set-up and maintenance of instruments, coordination with staff outside of lab to create quick orders, order sets and other Computerized Patient Record System (CPRS) functions.
M	M is a procedural, interpreted, multi-user, general-purpose programming language designed to build and control massive databases. It provides a simple abstraction that all data values are strings of characters, and that all data can be structured as multiple dimensional arrays. M data structures are sparse, using strings of characters as subscripts.
	M was formerly (and is still commonly) called MUMPS, for Massachusetts General Hospital Utility Multiprogramming System.
Massachusetts General Hospital Utility Multi-Programming System (MUMPS)	See M
MailMan	MailMan is an electronic messaging system that transmits messages, computer programs, data dictionaries, and data between users and applications located at the same or at different facilities. Network MailMan disseminates information across any communications medium.
MUMPS	See M
Namespace	A logical partition on a physical device that contains all the artifacts for a complete M system, including globals, routines, and libraries. Each namespace is unique, but data can be shared between namespaces with proper addressing within the routines. In VistA, namespaces are usually dedicated to a particular function. The MMMS namespace, for example, is designed for use by MDRO-PT.
PackMan	A specific type of MailMan message used to distribute KIDS builds.
VAMC	Department of Veterans Affairs Medical Center.