

# VITALS / MEASUREMENTS TECHNICAL MANUAL AND PACKAGE SECURITY GUIDE

Version 5.0 October 2002

Revised September 2009 for GMRV\*5.0\*23

Department of Veterans Affairs Office of Information & Technology Office of Enterprise Development

# **Revision History**

| Date                        | Revision | Description                                 | Author         |
|-----------------------------|----------|---|----------------|
| <sup>1</sup> September 2009 | 5.0*23   | Updated for Patch GMRV*5.0*23:              | A. Bustamante, |
|                             |          | - Functionality list, p. 1-1                | Paul Long (PM) |
|                             |          | - Vitals web link, p. 1-2                   |                |
|                             |          | - Screen captures, Figs. 1-2,               |                |
|                             |          | - Virgin installation steps, p. 2-1         |                |
|                             |          | - Implementation Considerations, p. 2-3     |                |
|                             |          | - Client Requirements, p. 2-4               |                |
|                             |          | - Routine list, Ch. 3                       |                |
|                             |          | - Removed Delphi version number, p. 5-1     |                |
|                             |          | - Remote Procedure Call Descriptions,       |                |
|                             |          | Ch. 5                                       |                |
|                             |          | - Removed archive/purge instructions, Ch. 6 |                |
|                             |          | - External Relations removed and replaced   |                |
|                             |          | with instructions for finding them on       |                |
|                             |          | FORUM, Ch. 8                                |                |
|                             |          | - Removed reference to timestamp, p. 9-1    |                |
|                             |          | - Added Appendix A: Parameter Settings      |                |
| September 2008              | 5.0*22   | Updated for Patch GMRV*5.0*22:              | A. Bustamante, |
|                             |          | - Routine Descriptions, p. 5-9 through 5-34 | Paul Long (PM) |
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|                             |          | - Cover Page                                |                |
|                             |          | - Revision History                          |                |
|                             |          | - Implementation and Maintenance, p. 2-4    |                |
|                             |          | - Routine Descriptions, p. 3-1 through 3-8  |                |
|                             |          | - Exported Options, p. 5-1 through 5-34     |                |
|                             |          | - External Relations, p. 8-47 through 8-96  |                |
|                             |          | - Internal Relations, p. 9-1                |                |
|                             |          | - Software Product Security, p. 12-1        |                |
| October 2002                | 5.0      | Initial Release                             | M. Gaddie      |

Patch GMRV\*5.0\*23 September 2009 Patch 23 release added.

Revision History

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## **Table of Contents**

| 1.  | Introduction                        | 1-1  |
|-----|-------------------------------------|------|
|     | Functionality                       | 1-1  |
|     | Information on GUI software         | 1-2  |
| 2.  | Implementation and Maintenance      | 2-1  |
|     | Description                         |      |
|     | Virgin Installation of Software     |      |
|     | Non-Virgin Installation of Software |      |
|     | Implementation Considerations       |      |
|     | Resource Requirements               |      |
| 3.  | Routine Descriptions                | 3-1  |
| 4.  | File List and Related Information   | 4-1  |
|     | File Descriptions                   |      |
|     | Package Default Definition          | 4-1  |
| 5.  | Exported Options                    | 5-1  |
|     | Delphi Components                   |      |
|     | Remote Procedure Calls (RPC)        |      |
|     | Menu Option by Name                 |      |
| 6.  | Archiving and Purging               | 6-1  |
| 7.  | Callable Routines                   | 7-1  |
| 8.  | External Relations                  | 8-1  |
| 9.  | Internal Relations                  | 9-1  |
|     | . Package-wide Variables            |      |
|     | . SAC Exemptions                    |      |
|     | •                                   |      |
| 12. | . Software Product Security         |      |
|     | Security Management                 |      |
|     | Security Features                   |      |
| 13. | . Glossary                          | 13-1 |
| 14. | . Appendix A – Parameter Settings   | 14-1 |

i

Table of Contents

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## 1. Introduction

The Vitals/Measurements application is designed to store in the patient's electronic medical record all vital signs and various measurements associated with a patient's hospital stay or outpatient clinic visit. Data can be accessed by several VISTA (Veterans Health Information Systems and Technology Architecture) applications (e.g., CPRS, Health Summary) that interface with the Vitals/Measurements application.

## **Functionality**<sup>1</sup>

- Contains a GUI (Graphical User Interface) to make editing and viewing of data easier. Additional information on GUI software is contained at the end of this chapter.
- Supports documentation of a patient's vital signs (e.g., temperature, pulse, and respiration).
- Tracks a patient's height, weight, central venous pressure (CVP), circumference/girth and oxygen saturation via oximetry with supplemental oxygen information.
- Supports documentation of detailed or positional blood pressures for a patient (i.e., bilateral blood pressures taken in a sitting, standing and lying position).
- Associates qualifiers (alpha characters appended to the measurement's numeric value) to provide a more detailed description of the patient's vitals/measurements.
- Contains detailed help windows to assist users in associating appropriate qualifiers with the patient vitals/measurements.
- Prints temperature, height, and weight in both metric equivalents and U.S. customary units.
- Prints patient's cumulative measurements on the Vitals Signs Record and the Cumulative Vitals Report.
- Displays latest information on all of the patient's vitals/measurements in both metric equivalents and U.S. customary units (when appropriate) along with the date/time the information was obtained.

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<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Updated Functionality list, including the removal of support for archive/purge functionality.

- The displays include the patient's intake and output when present in the patient's database (refer to the Intake and Output application).
- Allows facilities to establish hospital-wide high and low values for each vital sign or measurement.
- Identifies abnormal patient values on vitals/measurements reports (those values outside the high and low range).
- Displays graphic reports on workstation monitors.
- Provides APIs so other VistA applications can send or receive patient data.
- Records a reason for the omission of a patient's vitals/measurements.
- Supports an interface to vital signs monitor connected to the workstation.

#### **Information on GUI software**

#### **Internet WWW Documentation**

Documentation for this product (including user manual, technical manual and package security guide, release notes, and installation guide) is available on the Internet (World Wide Web) from the VHA Software Document Library (VDL) <a href="http://www.va.gov/vdl/">http://www.va.gov/vdl/</a>:

#### **GUI and Windows**

GUI stands for Graphical User Interface, most frequently seen as the Windows screen. If you have already used programs with these screens, then the Vitals GUI screen will seem familiar to you. The Vitals GUI is only implemented on the Microsoft Windows platform at this time.

If you have little or no familiarity with Windows, you can browse through the Windows help file for information about the basics of using Windows. Also, see the next few paragraphs for brief descriptions of some GUI features.

To access the Windows Help File, click the Start button in the taskbar and click Help. Use this help file as a reference whenever you have general questions about Windows.

The following is an example of what a GUI screen looks like (Fig. 1-1):

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<sup>&</sup>lt;sup>1</sup>http://vista.med.va.gov/clinicalspecialties/vitals/index.asp

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Redirected documentation links to VDL instead of intranet.

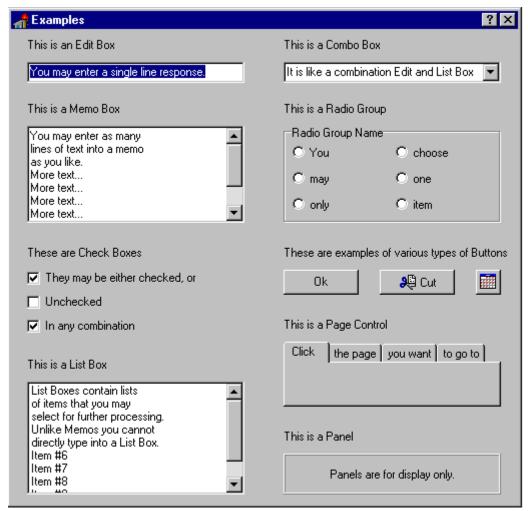


Fig. 1-1

#### Windows

An "application window" is the area on your computer screen used by a program. If you have more than one program running at the same time, you can go from one program to another by clicking in each application window. The currently active window contains a colored bar (usually blue) at the top of the window. An inactive window contains a gray bar at the top of the window. You can also move, close, or minimize the application window to make room for another window. (See Help in Windows for further instructions on these functions.)

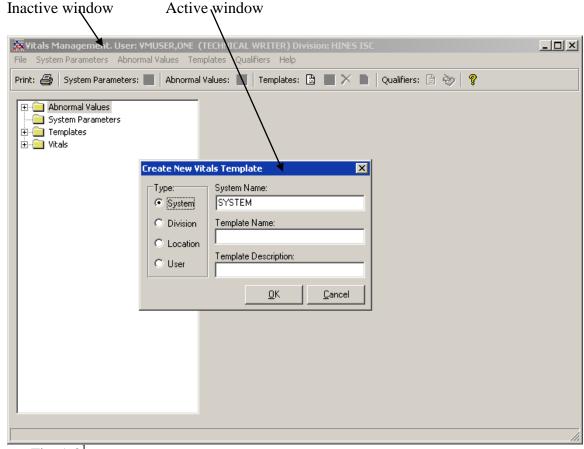


Fig. 1-2<sup>1</sup>

#### **Pop-up Windows**

These are "mini" windows that pop up within a window to provide or request information. Usually they require some action before they will go away. Clicking on buttons with the words <Cancel>, <Exit>, or something similar closes these windows.

#### Menus

Menus are shown in the gray bar near the top of the window. Some examples of menus are: File, Edit, Reports, and Help — typical menus for most Windows applications. When you click on one of these, a list of options is displayed.

#### Help

Online help and documentation are available in several formats: hints, context-sensitive help, menu help, and Internet Web documentation.

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Updated screen capture.

#### Hints

Place the cursor over a specific button, and a pop-up box will appear containing a short description of that button.

#### **Context-Sensitive Help**

Use the "F1" key at any time to obtain help on the current screen.

#### Menu Help

Select the Help Menu at the top of the screen. A Table of Contents opens. Choose one of the contents, or type in a topic you want help on. A screen appears containing help about that subject.

#### **Access Keys**

Use access keys to quickly get to an option through the pull-down menus by holding down the Alt key and pressing the underlined letter of the desired pull-down menu, then (still holding down the Alt key) press the underlined letter of the desired option.

Introduction

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## 2. Implementation and Maintenance

## **Description**

This chapter provides guidelines for implementing the Vitals/Measurements application. It is important to complete all of the steps contained in this chapter before assigning menu options to clinical staff.

## Virgin Installation of Software

The following steps should be followed when the Vitals/Measurements software is installed in an environment where no previous installation of the Vitals/Measurements application has taken place.

1. Setting up the software environment.

Information Resource Management Services (IRMS) staff should install the software using the Installation Guide in a test environment prior to installing the software in the production (VAH) account. The following VISTA packages should reside in the environment where the Vitals/Measurements application is to be installed:

- a. VA FileMan V. 22 or greater,
- b. Kernel V. 8.0 or greater,
- c. Kernel Toolkit V. 7.3 or greater,
- d. Kernel RPC Broker V. 1.1 or greater,
- e. PIMS V. 5.3 or greater,
- f. Intake and Output V. 4.0,
- g Health Summary V. 2.7 or greater,
- h. Nursing V. 4.0 or greater.

Data entered into the test environment CANNOT be transferred into the production environment. It is recommended that a limited amount of data be entered into the test directory in order for the user to become familiar with the application and to establish an acceptable training database.

2. Name spacing and file listing.

Vitals/Measurements is found in the GMV namespace. All routines, templates and options begin with GMV. File numbers are in the range of 120.5 to 120.57 and are stored in the ^GMR and ^GMRD globals.

#### 3. Editing site configurable files.

Site configurable files can be edited through the Vitals Manager module.

#### 4. Queuing TaskMan jobs.

No queued TaskMan jobs are associated with this application.

## 5. <sup>1</sup>Accessing modules.

The Vitals application, i.e., the Vitals and Vitals Manager modules are accessed separately through the GUI executable icons on the user's desktop. The Vitals module is assigned to the clinical staff so they can use the Vitals application, and the Vitals Manager module is assigned to the Clinical Application Coordinator, package coordinator, and Information Resource Management Service (IRMS) staff so they can use the Vitals Manager application to manage the Vitals templates and abnormal values.

#### 6. Assigning modules.

The Vitals Manager module should be assigned to Clinical Application Coordinator, package coordinator, and Information Resource Management Service (IRMS) staff.

The Vitals module should be assigned to clinical staff.

#### 7. Security keys.

There is one security key in this application, it is GMV MANAGER. This new key allows a user to view/create/edit all other user's templates in the Vitals Manager module, without this key the user can only view/create/edit his/her own user templates. This key also allows a user to use (run) other user's templates in the Vitals application. This key should be assigned to the package coordinator.

#### 8. Printer issues.

Users may print some reports on Client (Windows) printers and other reports on VISTA (device file) printers.

#### 9. On-line Help.

Throughout the application, on-line help is available when questions arise. The user can click on the Help button or menu at the top of the screen to see a table of contents and index containing help on how to enter data, print reports, etc..

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Items 5 and 8 were modified.

## **Non-Virgin Installation of Software**

Follow steps 1 through 9 above when installing the software in an environment where a previous version of the application has been installed.

## <sup>1</sup>Implementation Considerations

Some sites prefer to delay implementation of the software until they have a point of care data entry system, but this software can be implemented without a point of care system. Vital sign entry can be accomplished by ancillary service personnel, (e.g., PIMS, Dietetics, Pharmacy). Interested users of this software are encouraged to form a committee to work cooperatively on the implementation and training of the package. Setting up test wards is a good way to begin a cooperative implementation effort. The Vitals/Measurements module is appropriate for all personnel who obtain and record patient vitals/measurements. Conceivably this module could be used by nursing, dietetics, medicine, and other disciplines as appropriate.

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<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Second paragraph removed.

## **Resource Requirements**

The minimal hardware requirements for the software are two data input devices (usually PC workstations running Windows 9x or NT (Ver. 4 or later)) and one printer per location. 12 megabytes of available memory is needed to run the program. The following statistics regarding the disk storage requirements of the software were compiled by an average test site.

#### **Server Requirements**

| Globals | Type of Data   | Size  |
|---------|--|---|
| DDs     | Data Dictionaries  | 40 k  |
| GMR     | Patient data for the Text Generator, Vitals/Measurements, Intake and Output, Adverse Reaction Tracking and Consult/ Request Tracking Modules | 25-75 k/<br>patient                           |
| GMRD    | Static data for the Text Generator, Vitals/Measurements and Intake and Output Modules  | 10 k depending<br>on the global<br>efficiency |

## <sup>1</sup>Client Requirements

The client (disk) storage requirements are approximately:

| Type of Data            | Size   |
|-------------------------|--------|
| Vitals.exe              | 1900 k |
| VitalsManager.exe       | 1200 k |
| GMV_VitalsViewEnter.dll | 1500 k |
|                         |        |
| VITALS.HLP              | 41 k   |
| VITALSMANAGER.HLP       | 22 k   |
| GMV_VitalsViewEnter.hlp | 23 k   |

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Client Requirements list updated.

## 3. <sup>1</sup>Routine Descriptions

```
GMVBMI :HIOFO/YH.FT-EXTRACT HEIGHT TO CALCULATE BMI FOR WEIGHT;
    ;;5.0;GEN. MED. REC. - VITALS;**3,23**;Oct 31, 2002
GMVBP0 :HIOFO/YH.FT-KYOCERA B/P GRAPH - STORE DATA IN ^TMP($J) :
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVBP1 ;HIOFO/YH,FT-CALCULATE KYOCERA B/P GRAPH DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVBP2 ;HIOFO/YH,FT-DEFINE KYOCERA BP GRAPH MACRO ;
    ::5.0;GEN. MED. REC. - VITALS::Oct 31, 2002
GMVBP3 ;HIOFO/YH,FT-DEFINE KYOCERA B/P GRAPH MACRO (CONT.);
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVBP4 ;HIOFO/YH,FT-CALL KYOCERA B/P GRAPH MACRO;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVBP5 ;HIOFO/YH,FT-CALCULATE KYOCERA B/P GRAPH DATA (CONT.);
    ::5.0:GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVCAQU ;HOIFO/YH,FT-DISPLAY CATEGORY/QUALIFIER/SYNONYM TABLE FOR VITAL
TYPE;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVCHAR ;HIOFO/YH,FT-EXTRACT CHARACTERISTIC DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVCLIN ;HOIFO/YH,FT-RETURNS A LIST OF PATIENTS WITH CLINIC APPOINTMENTS
WITHIN A GIVEN PERIOD;
    ;;5.0;GEN. MED. REC. - VITALS;**1**;Oct 31, 2002
GMVDCCHK; HOIFO/DAD,FT-VITALS COMPONENT: CHECK DATA VALUE;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVDCCNV; HOIFO/DAD, FT-VITALS COMPONENT: CONVERT UNITS;
    ::5.0;GEN. MED. REC. - VITALS::Oct 31, 2002
GMVDCEXT ;HOIFO/DAD,FT-VITALS COMPONENT: EXTRACT PATIENT DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVDCHLP; HOIFO/DAD, FT-VITALS COMPONENT: HELP TEXT;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVDCRPC; HOIFO/DAD-VITALS COMPONENT: RPCs;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVDCSAV ;HOIFO/DAD,FT-VITALS COMPONENT: SAVE DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;**9,3,23**;Oct 31, 2002
GMVDCUTL; HOIFO/DAD, FT-VITALS COMPONENT: UTILITIES;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVDCVAL; HOIFO/DAD, FT-VITALS COMPONENT: VALIDATE DATA;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVDCVAM ;HOIFO/DAD,FT-VITALS COMPONENT: VALIDATE DATA (CONT.);
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVDS0 ;HIOFO/YH,FT-DISPLAY LATEST VITALS/MEASUREMENTS ;
    ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVDS1 ;HOIFO/YH,FT-CURRENT VITALS BY PATIENT OR LOCATION;
    ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVDS2 ;HOIFO/RM,YH,FT-VITAL SIGNS DISPLAY ;
```

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<sup>&</sup>lt;sup>1</sup> September 2009 Patch GMRV\*5.0\*23 Updated entire list of routines. Vitals routine list as of 5/23/08

```
::5.0:GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVERO ;HOIFO/FT-VITALS ENTERED IN ERROR FOR A PATIENT ;
    ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVER1 ;HOIFO/RM,YH,FT-ENTERED IN ERROR FOR A PATIENT & DATE RANGE;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVFSYN ;HOIFO/RM,YH,FT-X REFERENCE FOR VITAL TYPE, CATEGORY AND
SYNONYM:
     ;;5.0;GEN. MED. REC. - VITALS;**8**;Oct 31, 2002
GMVFUT0 ;HOIFO/RM,FT-FILE UTILITIES FOR 120.5 FILE;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVFUT2 ;HOIFO/RM,FT-FILE UTILITIES FOR 120.52 FILE;
    ::5.0:GEN. MED. REC. - VITALS::Oct 31, 2002
GMVFUT3 ;HOIFO/RM,FT-FILE UTILITIES FOR 120.53 FILE;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVGETC :HOIFO/FT-GET CATEGORY INFORMATION :
    ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVGETD ;HOIFO/YH,FT-EXTRACTS WARD/ROOM-BED/PT AND PT VITALS ;
    ;;5.0;GEN. MED. REC. - VITALS;**3,22,23**;Oct 31, 2002
GMVGETD1 ;HOIFO/YH-EXTRACT VITALS/MEASUREMENT RECORDS FOR A GIVEN DATE
     ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVGETD2 ;HOIFO/YH-EXTRACT VITALS/MEASUREMENT RECORDS FOR A GIVEN DATE
(CONT.);
    ;;5.0;GEN. MED. REC. - VITALS;**1,23**;Oct 31, 2002
GMVGETQ ;HOIFO/YH,FT-UTILITIES TO OBTAIN DATE/TIME, HOSPITAL, DUZ, VITAL
CATEGORY AND EDIT V/M;
     ;;5.0;GEN. MED. REC. - VITALS;**3**;Oct 31, 2002
GMVGETQL ;HOIFO/FT-GET QUALIFIER INFORMATION ;
    ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVGETVT ;HOIFO/FT-GET VITAL TYPE INFORMATION ;
     ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVGGR1 ;HOIFO/YH,FT-VITAL SIGNS RECORD SF 511;
    ;;5.0;GEN. MED. REC. - VITALS;**3,23**;Oct 31, 2002
GMVGGR2 ;HOIFO/YH,FT-SET ^TMP($J) GLOBAL;
    ::5.0;GEN. MED. REC. - VITALS;**3,23**;Oct 31, 2002
GMVGR0 ;HIOFO/MH,YH,FT-VITALS GRAPH (PART 1);
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVGR1 ;HIOFO/YH,FT-SET ^TMP($J) GLOBAL ;
     ;;5.0;GEN. MED. REC. - VITALS;**1**;Oct 31, 2002
GMVGR2 ;HIOFO/YH,FT-VITALS GRAPH KYOCERA DEFINE MACRO (PART 1) ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVGR3 ;HIOFO/YH,FT-VITALS GRAPH KYOCERA DEFINE MACRO (PART 2) ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVGR4 ;HIOFO/YH,FT-VITALS GRAPH KYOCERA PRINT COMMANDS (PART 1);
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVGR5 :HIOFO/RM,YH,FT-TMP TO EXTRACT DATA FROM IO PACKAGE :
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVGR6 ;HIOFO/YH,FT-VITALS GRAPH KYOCERA PRINT COMMANDS (PART 2);
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
```

```
GMVGR7 :HIOFO/YH.FT-VITALS GRAPH KYOCERA DEFINE MACRO FOR PULSE
OX./CG/CVP;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHB0 ;HIOFO/YH,FT-HP LASER B/P GRAPH - DATA ARRAY ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHB1 ;HIOFO/YH,FT-HP LASER B/P GRAPH - FORM;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHB2 ;HIOFO/YH,FT-HP LASER B/P GRAPH - BOX DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHB3 :HIOFO/YH,FT-HP LASER B/P GRAPH - ID :
    ;;5.0;GEN. MED. REC. - VITALS;**1**;Oct 31, 2002
GMVHB4 :HIOFO/YH.FT-HP LASER B/P GRAPH - ^TMP DATA :
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHDR ;HIOFO/FT-HEALTH DATA REPOSITORY API;
     ;;5.0;GEN. MED. REC. - VITALS;**2,17**;Oct 31, 2002
GMVHG0 ;HIOFO/YH,FT-HP LASER SF 511 GRAPH - DATA ARRAY ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHG1 ;HIOFO/YH,FT-HP LASER SF511 GRAPH - FORM ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHG2 ;HIOFO/YH,FT-HP LASER SF 511 GRAPH - BOX DATA ;
     ::5.0;GEN. MED. REC. - VITALS::Oct 31, 2002
GMVHG3 ;HIOFO/YH,FT-HP LASER SF 511 GRAPH - ID ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHG4 ;HIOFO/YH,FT-HP LASER SF 511 GRAPH - ^TMP DATA ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHPN0 ;HIOFO/YH,FT-HP LASER PAIN CHART - DATA ARRAY :
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHPN1 ;HIOFO/YH,FT-HP LASER PAIN CHART - FORM ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHPN2 ;HIOFO/YH,FT-HP LASER PAIN CHART - ^TMP DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHPO0 ;HIOFO/YH,FT-HP LASER PULSE OXIMETRY/RESP. GRAPH - DATA ARRAY ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHPO1 ;HIOFO/YH,FT-HP LASER PULSE OXIMETRY/RESP. GRAPH - FORM;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHPO2 ;HIOFO/YH,FT-HP LASER PULSE OXIMETRY/RESP. GRAPH - BOX DATA ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHPO3 ;HIOFO/YH,FT-HP LASER PULSE OXIMETRY/RESP. GRAPH - ^TMP DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHS ;HIOFO/FT-RETURN PATIENT DATA UTILITY;
     ;;5.0;GEN. MED. REC. - VITALS;**3,23**;Oct 31, 2002
GMVHS1 ;HIOFO/FT-RETURN PATIENT DATA UTILITY (cont.);
    ;;5.0;GEN. MED. REC. - VITALS;**3,23**;Oct 31, 2002
GMVHW0 ;HIOFO/YH,FT-HP LASER WEIGHT CHART - DATA ARRAY ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHW1 :HIOFO/YH,FT-HP LASER WEIGHT CHART - FORM AND GRAPH ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVHW2 ;HIOFO/YH,FT-HP LASER WEIGHT CHART - BOX DATA ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVKPN0 ;HCIOFO/YH,FT-KYOCERA PAIN CHART - DATA ARRAY ;
```

Technical Manual and Package Security Guide

```
::5.0:GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVKPN1 ;HCIOFO/YH,FT-KYOCERA PAIN CHART MACRO-1;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVKPN2 ;HCIOFO/YH,FT-KYOCERA KYOCERA PAIN CHART PRINT COMMANDS (PART
1);
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVKPO0 :HIOFO/YH.FT-KYOCERA PULSE OXIMETRY/RESP. GRAPH - DATA ARRAY ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVKPO1 ;HIOFO/YH,FT-KYOCERA PULSE OXIMETRY/RESP. GRAPH - GRAPH DATA ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVKPO2 ;HIOFO/YH,FT-KYOCERA PULSE OXIMETRY/RESP. MACRO-1;
    ::5.0:GEN. MED. REC. - VITALS::Oct 31, 2002
GMVKPO3 ;HIOFO/YH,FT-KYOCERA PULSE OXIMETRY/RESP. GRAPH - MACRO 2 ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVKPO4 ;HIOFO/YH,FT-GRAPH KYOCERA PRINT COMMANDS (PART 1) ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLATO ;HOIFO/YH,FT-DISPLAY LATEST VITALS/MEASUREMENTS FOR A PATIENT ;
    ;;5.0;GEN. MED. REC. - VITALS;**1,3,23**;Oct 31, 2002
GMVLATS ;HOIFO/YH,FT-QUEUES LATEST VITALS/MEASUREMENTS ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLBPO :HIOFO/YH,FT-PATIENT BLOOD PRESSURE LINE PRINTER GRAPH - 1;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLBP1 ;HIOFO/YH,FT-SYSTOLIC/DIASTOLIC GRAPH;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLBP2 ;HIOFO/YH,FT-SET GRAPH LOWER BOX DATA ;
    ::5.0:GEN. MED. REC. - VITALS::Oct 31, 2002
GMVLGQU ;HIOFO/YH,FT-UTILITY FOR LEGEND, PO2 AND QUALIFIER;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLPO0 ;HIOFO/YH,FT-DOT MATRIX OXIMETRY/RESP. GRAPH - DATA ARRAY ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLPO1 ;HIOFO/YH,FT-DOT MATRIX PULSE OXIMETRY AND RESPIRATION GRAPH;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLPO2 ;HIOFO/YH,FT-DOT MATRIX HIOFO/YH-PULSE OX. AND RESPIRATION DATA;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLWT0 :HIOFO/YH,FT-DOT MATRIX WEIGHT GRAPH - DATA ARRAY ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLWT1 ;HIOFO/YH,FT-DOT MATRIX PATIENT WEIGHT GRAPH - 2;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLWT2 ;HIOFO/YH,FT-DOT MATRIX WEIGHT GRAPH - 3;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVLWT3 ;HIOFO/YH,FT-DOT MATRIX PATIENT WEIGHT GRAPH - 4 ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVPAR ; HOIFO/DP - XPARameter RPC ;
    ::5.0:GEN. MED. REC. - VITALS;**3**;Oct 31, 2002
GMVPCE3 ;HIOFO/RM,FT-V/M Data Validation for AICS ;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVPXRM ;HIOFO/FT-API to return FILE 120.5 data;
    ;;5.0;GEN. MED. REC. - VITALS;**6,23**;Oct 31, 2002
GMVOUAL :HOIFO/YH,FT-VITAL QUALIFIERS:
    ;;5.0;GEN. MED. REC. - VITALS;**8**;Oct 31, 2002
```

```
GMVRPCHL: HIOFO/FT-RPC FOR HOSPITAL LOCATION SELECTION:
    ;;5.0;GEN. MED. REC. - VITALS;**3,22**;Oct 31, 2002
GMVRPCM; HOIFO/DP - RPC for Vitals Manager;
    ;;5.0;GEN. MED. REC. - VITALS;**1,8,13,3**;Oct 31, 2002
GMVRPCP ;HOIFO/DP-RPC for GMV_PtSelect.pas ;
     ;;5.0;GEN. MED. REC. - VITALS;**1,3,22**;Oct 31, 2002
GMVRPCU; HOIFO/DP - RPC for Vitals User;
    ;;5.0;GEN. MED. REC. - VITALS;**3**;Oct 31, 2002
GMVSAS0 ;HIOFO/RM,YH,FT-CALCULATE ABNORMAL V/S;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVSC0 ;HOIFO/MD,YH,FT-CUMULATIVE VITALS/MEASUREMENTS FOR PATIENT OVER
GIVEN DATE RANGE:
     ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVSC1 ;HOIFO/YH,FT-CUMULATIVE V/M - CONTINUED;
     ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVSC2 ;HIRMFO/YH,FT-CUMULATIVE V/M - CONTINUED ;
     ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVSR0 ;HOIFO/RM,YH,FT-VITAL SIGNS RECORD SF 511;
     ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVSR1 ;HIOFO/RM,YH-PATIENT VITAL SIGNS-I/O SF 511 GRAPH - 1;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVSR2 ;HIOFO/YH,FT-PATIENT VITAL SIGNS-I/O SF 511 GRAPH - 2;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVUID :HIOFO/FT-VUID-RELATED UTILITIES :
    ;;5.0;GEN. MED. REC. - VITALS;**8**;Oct 31, 2002
GMVUT0 ;HIOFO/RM,YH,FT-INPUT TRANSFORMS FOR VITAL TYPES ;
     ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVUT2 ;HOIFO/YH,RM,FT-ENTRY TO GATHER PATIENT VITAL/MEASURMENT DATA;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVUT3 ;HIOFO/YH,FT-VITAL MEASUREMENT SITE/QUALIFIER SELECTION;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVUTL ;HOIFO/RM,MD,FT-CALLABLE ENTRY POINTS FOR PROGRAMMER UTILITIES ;
    ;;5.0;GEN. MED. REC. - VITALS;**23**;Oct 31, 2002
GMVUTL1 ;HOIFO/YH,FT-EXTRACT CLINIC LIST AND MARK VITALS ENTERED IN ERROR
    ;;5.0;GEN. MED. REC. - VITALS;**1,3**;Oct 31, 2002
GMVUTL2 ;HOIFO/YH,FT-BP HIGH/LOW LIMITS AND DEFAULT QUALIFIER;
    ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002
GMVUTL3 ;HOIFO/YH,FT-RPCBROKER UTILITY ROUTINE TO EXTRACT NURSING
UNIT/ROOM-BED - 3:
     ;;5.0;GEN. MED. REC. - VITALS;**3**;Oct 31, 2002
GMVUTL7 ;HIOFO/DS,FT-RPC API TO RETURN ALL VITALS/CATEGORIES/QUALIFIERS ;
    ;;5.0;GEN. MED. REC. - VITALS;**3**;Oct 31, 2002
GMVUTL8 ;HIOFO/DS,FT-RPC API TO RETURN ALL VITALS/CATEGORIES/QUALIFIERS ;
     ;;5.0;GEN. MED. REC. - VITALS;**1,3**;Oct 31, 2002
GMVVDEF1: BPOIFO/JG,HIOFO/FT - BUILD HL7 ORU^R01 MESSAGE FOR VITALS;
     ;;5.0;GEN. MED. REC. - VITALS;**5,8,12,17,11**;Oct 31, 2002
GMVVDEFK ;BPOIFO/JG,HIOFO/FT - KIDS POST INSTALL FOR VDEF PATCH ;
     ;;5.0;GEN. MED. REC. - VITALS;**5**;Oct 31, 2002
GMVVS1 ;HIOFO/YH,FT-PATIENT VITAL SIGNS-I/O SF 511 GRAPH - 1;
```

;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVVS2 ;HIOFO/YH,FT-PATIENT VITAL SIGNS-I/O SF 511 GRAPH - 2; ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVVS3 ;HIOFO/YH,FT-PATIENT VITAL SIGNS-I/O SF 511 GRAPH - 3; ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVVS4 ;HIOFO/YH,FT-PATIENT VITAL SIGNS-GRAPH; ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVWT0 ;HIOFO/YH,FT-KYOCERA WEIGHT GRAPH - DATA ARRAY ; ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVWT1 ;HIOFO/YH,FT-KYOCERA WEIGHT GRAPH - GRAPH DATA; ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVWT2 ;HIOFO/YH,FT-KYOCERA WEIGHT GRAPH - MACRO; ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVWT3 ;HIOFO/YH,FT-KYOCERA WEIGHT GRAPH - MACRO (CONT.); ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002 GMVWT4 ;HIOFO/YH,FT-KYOCERA WEIGHT GRAPH - MACRO CALL; ;;5.0;GEN. MED. REC. - VITALS;;Oct 31, 2002

## 4. File List and Related Information

## **File Descriptions**

#### GMRV VITAL MEASUREMENT 120.5

This file contains vital sign information and other measurement data for a patient.

#### GMRV VITAL TYPE 120.51

This file contains a list of vital sign types, and various parameters which mold the data entry.

#### GMRV VITAL QUALIFIER 120.52

This file contains a list of qualifiers for vitals/measurements.

#### GMRV VITAL CATEGORY 120.53

This file contains a list of qualities or characteristics that can be affixed to a vital measurement.

#### GMRV VITALS PARAMETERS 120.57

This file contains the various site configurable parameters for the Vitals/Measurements application.

## **Package Default Definition**

| FILE # | NAME                   | UP<br>DATE<br>DD | SEND<br>SEC.<br>CODE | DATA<br>COMES<br>W/FILE | SITE<br>DATA | RSLV<br>PTS | USER<br>OVER<br>RIDE |
|--------|------------------------|------------------|----------------------|-------------------------|--------------|-------------|----------------------|
|        |                        |                  |                      |                         |              |             |                      |
| 120.5  | GMRV VITAL MEASUREMENT | YES              | YES                  | NO                      |              |             |                      |
| 120.51 | GMRV VITAL TYPE        | YES              | YES                  | YES                     | ADD          | NO          | NO                   |
| 120.52 | GMRV VITAL QUALIFIER   | YES              | YES                  | YES                     | ADD          | NO          | YES                  |
| 120.53 | GMRV VITAL CATEGORY    | YES              | YES                  | YES                     | ADD          | NO          | NO                   |
| 120.57 | GMRV VITALS PARAMETERS | YES              | YES                  | YES                     | ADD          | NO          | YES                  |

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## 5. Exported Options

## **Delphi Components**

<sup>1</sup>Vitals/Measurements uses RPC Broker and VA FileMan Delphi Components in the display and navigation of screens. Vitals utilizes only the standard components as supplied with Delphi. Below is a list of the Delphi components this application currently uses along with a short description.

TeeChart Displays charts and graphs. It is used in Vitals/Measurements to

graphically plot various measurements versus time.

ResizerPanel Resizes its client components when the form is resized or the screen

resolution is changed. This takes care of proper size and position of components with regard to the font size used in Windows. It is there so

users can resize the application Windows to meet their needs.

VersionInfoResource Retrieves VERSIONINFO data from the executable. It is used in the

about boxes in Vitals/Measurements to display version information.

RPCBroker Used for all non-FTP communication with the server.

FMDC Used for saving, deleting, validating, and retrieving data in FileMan data

dictionaries.

DateTime Allows the user to visually select a date and time. It is provided as an

option on all date/time fields.

PatientSelectionFrame Allows user to select a patient, by unit, team, ward, clinic or name. The

frame is on a resize panel.

ReportFrame Allows users to view patients vitals data and create a configurable graph

of data.

## **Remote Procedure Calls (RPC)**

NAME: GMV ADD VM TAG: EN1

ROUTINE: GMVDCSAV RETURN VALUE TYPE: SINGLE VALUE

AVAILABILITY: SUBSCRIPTION INACTIVE: ACTIVE

WORD WRAP ON: TRUE

DESCRIPTION:

This remote procedure call is used to enter a new Vital/Measurement record in the GMRV Vital Measurement file (#120.5).

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Deleted Delphi version number.

```
<sup>1</sup>This remote procedure call is documented in Integration Agreement 3996.
 MAXIMUM DATA LENGTH: 255

SECHENCE NUMBER

1. Integration Agreem
PARAMETER TYPE: LITERAL
REQUIRED. WITERAL
INPUT PARAMETER: GMRVDATA
  SEQUENCE NUMBER: 1
 DESCRIPTION:
 This variable contains the data needed to create a Vital/Measurement
 record in the GMRV Vital Measurement (#120.5) file. The values are parsed
 out of the GMRVDATA variable and filed.
 GMRVDATA has the following data:
 piece1^piece2^piece3^piece4^piece5
  where:
  piece1 = date/time in FileMan internal format
  piece2 = patient number from FILE 2 (i.e., DFN)
  piece3 = vital type, a semi-colon, the reading, a semi-colon, and
            oxygen flow rate and percentage values [optional] (e.g.,
            21;99;1 1/min 90%)
  piece4 = hospital location (FILE 44) pointer value
  piece5 = user number from FILE 200 (i.e., DUZ), an asterisk, and the
            qualifier (File 120.52) internal entry numbers separated by
            colons (e.g., 547*50:65)
 RETURN PARAMETER DESCRIPTION:
 RESULT does not return a value.
 The data is filed in the GMRV VITAL MEASUREMENT (#120.5) file.
 Example:
  > S GMRVDATA="3051011.1635^134^1;120/80;^67^87*2:38:50:75"
  > D EN1^GMVDCSAV(.RESULT,GMRVDATA)
NAME: GMV ALLERGY
                                         TAG: ALLERGY
 ROUTINE: GMVUTL3
                                         RETURN VALUE TYPE: ARRAY
 AVAILABILITY: SUBSCRIPTION
                                        INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 This remote procedure call retrieves the patient's allergy information.
 This remote procedure call is documented in Integration Agreement 4350.
INPUT PARAMETER: DFN
                                        PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 30
                                         REQUIRED: YES
 SEQUENCE NUMBER: 1
 DESCRIPTION:
 DFN is a pointer to the PATIENT file (#2).
 RETURN PARAMETER DESCRIPTION:
 Returns the patient allergy information in the array specified.
  The result array returns:
  RESULT(n)=This patient has the following allergy(ies):
       (n+1) = piece1
   where piece1 = the allergy name
              n = sequential number starting at 1.
 If there is no data, then the following is returned:
 RESULT(1) = No Allergy Assessment
```

\_

<sup>&</sup>lt;sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

```
Example:
 > S DFN=134
  > D ALLERGY^GMVUTL3(.RESULT, DFN) ZW RESULT
  > RESULT(1)="This patient has the following allergy(ies): "
  > RESULT(2)="PENICILLIN"
NAME: GMV CHECK DEVICE TAG: CHKDEV
ROUTINE: GMVUTL2 RETURN VALUE TYPE: ARRAY
 AVAILABILITY: RESTRICTED
                                       INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 <sup>1</sup>DESCRIPTION:
 This RPC calls a KERNEL utility to return a list of printers the user may
 select to print output. Returns a maximum of twenty entries.
INPUT PARAMETER: GMVIEN
                                        PARAMETER TYPE: LITERAL
 REQUIRED: YES
                                        SEQUENCE NUMBER: 1
 DESCRIPTION:
The value to begin the search in the Device file (#3.5). Can be null.
                                       PARAMETER TYPE: LITERAL
INPUT PARAMETER: GMVDIR
 MAXIMUM DATA LENGTH: 1
                                        REOUIRED: YES
 SEQUENCE NUMBER: 2
 DESCRIPTION:
 Direction of the search (1 = forward, -1 = backwards).
If DIR is null, then set to 1.
INPUT PARAMETER: GMVRMAR
                                        PARAMETER TYPE: LITERAL
 REQUIRED: YES
                                        SEQUENCE NUMBER: 3
 DESCRIPTION:
 Right margin as a single number or range (e.g, 80, 132 or "80-132").
 RETURN PARAMETER DESCRIPTION:
 RESULT (n) =P1^P2^P3^P4^P5^P6
  where n = a sequential number starting with 1
       P1 = File 3.5 IEN
       P2 = File 3.5 name (.01 value)
       P3 = File 3.5 name (.01 value) or flag to indicate last entry in
           the array
       P4 = location of terminal
       P5 = right margin
       P6 = page length
NAME: GMV CLINIC PT
                                      TAG: CLINPTS
 AME: GMV CLINIC PT

ROUTINE: GMVCLIN

TAG: CLINPTS

RETURN VALUE TYPE: ARRAY
 AVAILABILITY: RESTRICTED
                                        INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 This procedure lists patients who have an appointment for a selected
 clinic and a given period of time.
INPUT PARAMETER: CLIN
 NPUT PARAMETER: CLIN
MAXIMUM DATA LENGTH: 30
                                       PARAMETER TYPE: LITERAL
                                       REQUIRED: YES
 SEQUENCE NUMBER: 1
 DESCRIPTION:
 CLIN contains the name of the selected clinic from the Hospital Location
 file (#44).
INPUT PARAMETER: BDATE
MAXIMUM DATA LENGTH: 30
                                       PARAMETER TYPE: LITERAL
                                       REQUIRED: YES
 SEQUENCE NUMBER: 2
 DESCRIPTION:
 BDATE contains TODAY, TOMORROW, YESTERDAY, PAST WEEK or PAST MONTH.
```

<sup>&</sup>lt;sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

RETURN PARAMETER DESCRIPTION:

Returns a list of patient names and DFNs for the selected clinic and the given date span in the array specified.

<sup>1</sup>NAME: **GMV CLOSEST READING** TAG: CLOSEST

ROUTINE: GMVGETD RETURN VALUE TYPE: SINGLE VALUE

AVAILABILITY: RESTRICTED INACTIVE: ACTIVE

DESCRIPTION:

This remote procedure call returns the observation date/time and reading of the record closest to the date/time specified for the patient and vital

NPUT PARAMETER: GMVDFN PARAMETER TYPE: LITERAL REQUIRED: YES INPUT PARAMETER: GMVDFN

SEOUENCE NUMBER: 1

DESCRIPTION:

A pointer to the Patient (#2) file (i.e., DFN).

INPUT PARAMETER: GMVDT NPUT PAKAMETER: GMVDT MAXIMUM DATA LENGTH: 14 PARAMETER TYPE: LITERAL

REOUIRED: NO

SEQUENCE NUMBER: 2

DESCRIPTION:

The date/time to search from. The default is NOW.

INPUT PARAMETER: GMVT PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 5 REQUIRED: YES

SEOUENCE NUMBER: 3

DESCRIPTION:

The vital type abbreviation as it appears in FILE 120.51, Field 1 (e.g.,

INPUT PARAMETER: GMVFLAG
MAXIMUM DATA LENGTH: 1 PARAMETER TYPE: LITERAL

REQUIRED: NO

SEQUENCE NUMBER: 4

DESCRIPTION:

A flag to indicate if the search should look before or after the date/time specified in the GMVDT value where 1 indicates before, 2 indicates after and 0 indicates either direction.

RETURN PARAMETER DESCRIPTION:

Returns a string composed of two pieces. The first piece contains the observation date/time (FILE 120.5, Field .01) of the record that was found. The second piece contains the rate (FILE 120.5, Field 1.2) of the record. If there is an error, the first piece will be -1 and the second piece will be the error text.

#### Example:

- > S GMVDFN=134,GMVDT=3090225.08,GMVT="WT",GMVFLAG=0
- > D CLOSEST (.TEST, GMVDFN, GMVDT, GMVT, GMVFLAG) ZW TEST
- > TEST="3081106.142926^135"

NAME: GMV CONVERT DATE
ROUTINE: GMVGETO TAG: GETDT

ROUTINE: GMVGETO RETURN VALUE TYPE: SINGLE VALUE

AVAILABILITY: SUBSCRIPTION INACTIVE: ACTIVE

WORD WRAP ON: TRUE

<sup>2</sup>DESCRIPTION:

This remote procedure call converts a user-supplied date/time into VA FileMan's internal and external date format.

This remote procedure call is documented in Integration Agreement 4353. INPUT PARAMETER: GMRDATE PARAMETER TYPE: LITERAL

<sup>&</sup>lt;sup>1</sup> September 2009 Patch GMRV\*5.0\*23 Added new routine and description.

<sup>&</sup>lt;sup>2</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

MAXIMUM DATA LENGTH: 30 REQUIRED: YES

SEQUENCE NUMBER: 1

DESCRIPTION:

GMRDATE is the user-supplied date/time text.

RETURN PARAMETER DESCRIPTION:

RESULT=Date in internal FileMan format^Date in external FileMan format

#### Example:

- > S GMRDATE="10/11/2005@10:30AM"
- > D GETDT^GMVGETQ(.RESULT,GMRDATE) ZW RESULT
- > RESULT="3051011.103^OCT 11, 2005@10:30:00"

#### NAME: GMV CUMULATIVE REPORT

RETURN VALUE TYPE: SINGLE VALUE ROUTINE: GMVSC0

AVAILABILITY: RESTRICTED INACTIVE: ACTIVE

DESCRIPTION:

Prints the Cumulative Vitals Report.

INPUT PARAMETER: GMVDATA PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 150 REQUIRED: YES

SEQUENCE NUMBER: 1

DESCRIPTION:

A multi-piece variable that identifies the values needed to run the report.

Piece 1: DFN

- 2: Start date/time of the report range (FileMan format)
- 3: End date/time of the report range (FileMan format)
- 4: n/a
- 5: Device name (File 3.5, Field .01)
- 6: Device internal entry number
- 7: date/time to print the report (FileMan format)
- 8: ward internal entry number (File 42)
- 9: hospital location internal entry number (File 44)
- 10: list of rooms separated by a comma (e.g., 200,210,220)

#### RETURN PARAMETER DESCRIPTION:

Returns a message stating the outcome of the request to gueue the report. If the report was successfully queued, RESULT will be "Report sent to device. Task #: " ZTSK" where ZTSK is the task number of the job. If the report could not be queued, RESULT will be "Unable to task the report."

<sup>1</sup>NAME: **GMV DLL VERSION** TAG: DLL

ROUTINE: GMVUTL8 RETURN VALUE TYPE: SINGLE VALUE

AVAILABILITY: SUBSCRIPTION INACTIVE: ACTIVE

DESCRIPTION:

Returns a YES or NO response to indicate if the Dynamic Link Library (DLL) file should be used.

This remote procedure call is documented in Integration Agreement 4420.

NPUT PARAMETER: GMVX PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 50 REOUIRED: YES INPUT PARAMETER: GMVX

SEQUENCE NUMBER: 1

DESCRIPTION:

This value is the name of the file and the date/time associated with it (e.g., GMV VITALSVIEWENTER.DLL:v. 07/21/05 10:34).

RETURN PARAMETER DESCRIPTION:

Returns YES if the file can be used. Returns NO, if the file cannot be used. Returns null if the file was not found.

<sup>&</sup>lt;sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Added new routine and description.

```
Example:
 > S GMVX="GMV VITALSVIEWENTER.DLL:v. 07/21/05 10:34"
  > D DLL^GMVUTL8(.RESULT,GMVX) ZW RESULT
  > RESULT="NO"
NAME: GMV ENTERED IN ERROR-PATIENT
                                       TAG: EN1
 ROUTINE: GMVERO
                                      RETURN VALUE TYPE: SINGLE VALUE
 AVAILABILITY: RESTRICTED
                                       INACTIVE: ACTIVE
 DESCRIPTION:
 Prints a report of all vitals/measurements entered in error for the
 selected patient for a given date/time range.
                           PARAMETER TYPE: LITERAL REQUIRED VES
INPUT PARAMETER: GMVDATA
 MAXIMUM DATA LENGTH: 150
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 A multi-piece variable that identifies the values needed to run the
 report.
   Piece 1: DFN
          2: Start date/time of the report range (FileMan format)
          3: End date/time of the report range (FileMan format)
          4: n/a
          5: Device name (File 3.5, Field .01)
          6: Device internal entry number
         7: date/time to print the report (FileMan format)
          8: n/a
         9: n/a
        10: n/a
 RETURN PARAMETER DESCRIPTION:
 Returns a message stating the outcome of the request to queue the report.
 If the report was successfully queued, RESULT will be "Report sent to
 device. Task #: " ZTSK" where ZTSK is the task number of the job. If the
 report could not be queued, RESULT will be "Unable to task the report."
NAME: GMV EXTRACT REC
                                       TAG: GETVM
 ROUTINE: GMVGETD
                                       RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: SUBSCRIPTION
                                       INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
<sup>1</sup>DESCRIPTION:
 This remote procedure call retrieves vital records from the GMRV Vital
Measurement (#120.5) file for a selected patient within a given date span.
 This remote procedure call is documented in Integration Agreement 4416.
INPUT PARAMETER: GMRVDATA PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 30
                                       REQUIRED: YES
 SEQUENCE NUMBER: 1
 DESCRIPTION:
 GMRVDATA consists of 4 pieces of information:
 piece1^piece2^piece3^piece4
  where piece1 = Patient (#2) file pointer (i.e., DFN)
       piece2 = End date of search (FileMan internal format)
       piece3 = single vital type abbreviation (File 120.51, Field 1)
                 [optional] If not defined, the default is
                 "T;P;R;BP;HT;WT;PN;PO2;CG;CVP"
       piece4 = Start date of search (FileMan internal format)
 RETURN PARAMETER DESCRIPTION:
 Returns the name of the global array (i.e., ^TMP(\$J, "GRPC")) containing a
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

```
list of vital records for the selected patient within the defined date
 range.
  The TMP global contains:
  ^TMP($J, "GRPC", n) = piece1^piece2
  where piece1 = File 120.5 IEN
        piece2 = a string of text in the following format:
                 Date/time taken (external) Vital Type Abbreviation:
                 Rate U.S. units (Metric value) (Qualifiers)
             n = sequential number starting at 1.
  Example:
  > S GMRVDATA="134^3051028^BP^3051001"
  > D GETVM^GMVGETD(.RESULT,GMRVDATA) ZW RESULT
  > RESULT="^TMP(538999278, "GRPC")"
  > D ^%G
  > Global ^TMP($J,"GRPC"
  > ^TMP(538999278, "GRPC", 1) = 8858^10/11/05@16:35 B/P: 120/80* (L ARM,
    SITTING, CAROTID, CALF) VITPROVIDER, ONE
                          2)=8961^10/20/05@14:47 B/P: 128/81* (L ARM,
    SITTING, PALPATED) VITPROVIDER, TWO
 If there is no data, then the following is returned:
 ^TMP($J, "GRPC",1)=0^NO VITALS/MEASUREMENTS ENTERED WITHIN THIS PERIOD
<sup>1</sup>NAME: GMV GET CATEGORY IEN
                                         TAG: CATEGORY
 ROUTINE: GMVUTL8
                                        RETURN VALUE TYPE: SINGLE VALUE
 AVAILABILITY: SUBSCRIPTION
                                        INACTIVE: ACTIVE
 DESCRIPTION:
 Returns the IEN if the value is found in the GMRV VITAL CATEGORY (#120.53)
 file.
 This remote procedure call is documented in Integration Agreement 4354.
INPUT PARAMETER: GMVCAT
MAXIMUM DATA LENGTH: 45
                                        PARAMETER TYPE: LITERAL
                                        REQUIRED: YES
  SEQUENCE NUMBER: 1
 DESCRIPTION:
 GMVCAT = Name of Category (from FILE 120.53) (e.g., METHOD)
 RETURN PARAMETER DESCRIPTION:
 Returns the IEN if GMVCAT exists in FILE 120.53
 Example:
 > S GMVCAT="METHOD"
  > D CATEGORY^GMVUTL8(.RESULT,GMVCAT) ZW RESULT
  > RESULT=2
NAME: GMV GET CURRENT TIME
                                        TAG: TIME
  ROUTINE: GMVUTL7
                                       RETURN VALUE TYPE: SINGLE VALUE
  AVAILABILITY: SUBSCRIPTION
                                       INACTIVE: ACTIVE
 WORD WRAP ON: FALSE
 <sup>2</sup>DESCRIPTION:
 Gets the current date and time from the server.
 This remote procedure call is documented in Integration Agreement 4355.
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Added new routine and description.

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<sup>&</sup>lt;sup>2</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

```
RETURN PARAMETER DESCRIPTION:
 Returns current date and time in FileMan internal and external format.
 > D TIME^GMVUTL7(.RESULT) ZW RESULT
  > RESULT=3051011.143332
 Note: There is an input parameter, P2, listed in the TIME line tag of the
 GMVUTL7 routine. However, it is not used. It can be set to any value or
 omitted. It remains for backwards compatibility.
<sup>1</sup>NAME: GMV GET VITAL TYPE IEN
                                         TAG: TYPE
 ROUTINE: GMVUTL8
                                        RETURN VALUE TYPE: SINGLE VALUE
 AVAILABILITY: SUBSCRIPTION
                                        INACTIVE: ACTIVE
 DESCRIPTION:
 Returns the IEN if the value is found in the GMRV VITAL TYPE (#120.51)
 file.
This remote procedure call is documented in Integration Agreement 4357.
INPUT PARAMETER: GMVTYPE PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 55 REQUIRED: YES
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 GMVTYPE = Name of Vital Type (from FILE 120.51) (e.g., WEIGHT)
 RETURN PARAMETER DESCRIPTION:
 Returns the IEN if GMVTYPE exists in FILE 120.51.
 Example:
 > S GMVTYPE="WEIGHT"
  > D TYPE^GMVUTL8(.RESULT,GMVTYPE) ZW RESULT
  > RESULT=9
NAME: GMV LATEST VITALS BY LOCATION
                                        TAG: EN1
 ROUTINE: GMVDS1
                                        RETURN VALUE TYPE: SINGLE VALUE
 AVAILABILITY: RESTRICTED
                                        INACTIVE: ACTIVE
 DESCRIPTION:
 Prints the latest vitals/measurements for all patients on a given ward
 location.
INPUT PARAMETER: GMVDATA
                                       PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 150
                                       REQUIRED: YES
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 A multi-piece variable that identifies the values needed to run the
 report.
   Piece 1: n/a
          2: n/a
          3: n/a
          4: n/a
          5: Device name (File 3.5, Field .01)
          6: Device internal entry number
          7: date/time to print the report (FileMan format)
          8: ward internal entry number (File 42)
          9: hospital location internal entry number (File 44)
         10: n/a
 RETURN PARAMETER DESCRIPTION:
 Returns a message stating the outcome of the request to queue the report.
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Added new routine and description.

Technical Manual and Package Security Guide

If the report was successfully queued, RESULT will be "Report sent to

device. Task #: " ZTSK" where ZTSK is the task number of the job. If the report could not be queued, RESULT will be "Unable to task the report."

```
NAME: GMV LATEST VITALS FOR PATIENT
                                        TAG: EN1
  ROUTINE: GMVDS1
                                        RETURN VALUE TYPE: SINGLE VALUE
 AVAILABILITY: RESTRICTED
                                        INACTIVE: ACTIVE
 DESCRIPTION:
Prints the latest vitals/measurements for the selected patient.
INPUT PARAMETER: GMVDATA
                                       PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 150
                                      REOUIRED: YES
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 A multi-piece variable that identifies the values needed to run the
 report.
   Piece 1: DFN
          2: n/a
          3: n/a
          4: n/a
          5: Device name (File 3.5, Field .01)
          6: Device internal entry number
          7: date/time to print the report (FileMan format)
          8: n/a
          9: n/a
         10: n/a
 RETURN PARAMETER DESCRIPTION:
 Returns a message stating the outcome of the request to queue the report.
 If the report was successfully queued, RESULT will be "Report sent to
 device. Task #: " ZTSK" where ZTSK is the task number of the job. If the
 report could not be queued, RESULT will be "Unable to task the report."
<sup>1</sup>NAME: GMV LATEST VM
                                        TAG: GETLAT
  ROUTINE: GMVGETD
                                       RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: SUBSCRIPTION
                                       INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 This remote procedure call retrieves the latest vital records for a given
 patient.
 This remote procedure call is documented in Integration Agreement 4358.
INPUT PARAMETER: GMRDFN
MAXIMUM DATA LENGTH: 10
                                       PARAMETER TYPE: LITERAL
                                       REQUIRED: YES
  SEOUENCE NUMBER: 1
 DESCRIPTION:
 GMRDFN variable is a pointer to the Patient (#2) file (i.e., DFN).
 RETURN PARAMETER DESCRIPTION:
 Returns the name of the global array (i.e., ^TMP($J, "GRPC")) containing
 the latest vitals for the selected patient.
  The TMP global contains:
   ^TMP($J,"GRPC",n)=piece1
     where piece1 = is a formatted line of text.
              n = sequential number starting at 1.
 The formatted line of text includes the vital type, value and unit
 (U.S.), value and unit (metric), qualifiers, supplemental oxygen, body
 mass index value, person who entered the record and the database where
```

the record is stored.

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Updated routine description.

```
If there is no data for the patient, the following is returned:
  ^TMP($J,"GRPC",1)=There are no results to report
 Example:
  > S GMRDFN=134
  > D GETLAT^GMVGETD(.RESULT,GMRDFN) ZW RESULT
  > RESULT="^TMP(539349605, "GRPC")"
  > Global ^TMP($J,"GRPC"
  > ^TMP(539349605, "GRPC",1)=Temp.: (08/09/05@08:00) 102 F (38.9 C)*
    (ORAL) VITPROVIDER, ONE Vitals
                          2)=Pulse:
                                          (07/14/05@16:33) 55
    (LEFT, CAROTID, PALPATED, LYING) _VITPROVIDER, ONE_Vitals
Enter RETURN to continue or '^' to exit:
                          3) = Resp.:
                                          (07/14/05@16:33) 31
    (SPONTANEOUS, SITTING) VITPROVIDER, ONE Vitals
                          \overline{4}) = Pulse Ox: \overline{(08/22/05@13:48)} 99% with
    supplemental O2 1 L/min 90% NASAL CANNULA VITPROVIDER, ONE Vitals
                          5)=B/P: (09/2\overline{6}/05@11:30) 120\overline{7}80* (L
   ARM, SITTING, CAROTID, CALF) VITPROVIDER, TWO Vitals
                          6)=Ht.: (09/14/05@17:\overline{18}) 5 ft 6 in (167.64
    cm) (ACTUAL) _VITPROVIDER,ONE_Vitals
                          7)=Wt.: (09/14/05@17:18) 135 lb (61.36 kg)
                      _VITPROVIDER,ONE Vitals
    (ACTUAL, STANDING)
                          8) =Body Mass Index:
                          9)=CVP: (08/22/05@17:09) 15 cmH2O (11.0
    mmHg) VITPROVIDER, ONE Vitals
                         10) = \text{Circ/Girth}: (07/22/05@10:22) 1 in (2.54 cm)
                    VITPROVIDER, TWO Vitals
   (DRY, ABDO MINAL)
                         11) = Pain: (0\overline{9}/15/05@16:43) 5
   VITPROVIDER, ONE Vitals
<sup>1</sup>NAME: GMV LOCATION SELECT
ROUTINE: GMVRPCHL
                                        TAG: RPC
                                       RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: SUBSCRIPTION
                                        INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
<sup>2</sup>DESCRIPTION:
Select a hospital location by name, from a patient appointment or from a
patient admission. Can also generate a list of active clinics.
This remote procedure is documented in Integration Agreement 4461.
INPUT PARAMETER: OPTION
                                        PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 10
                                         REQUIRED: YES
 SEQUENCE NUMBER: 1
 DESCRIPTION:
Routine tag line in GMVRPCHL to call.
INPUT PARAMETER: DATA
                                 PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 100
                                       REQUIRED: YES
 SEQUENCE NUMBER: 2
 DESCRIPTION:
Other data as required for the call.
RETURN PARAMETER DESCRIPTION:
This remote procedure call allows the user to select a hospital location.
The entry point is RPC^GMVRPCHL. It has input parameters of RESULTS,
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Added new routine and description.

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<sup>&</sup>lt;sup>2</sup> June 2008 Patch GMRV\*5.0\*22 Updated routine description.

OPTION and DATA (ex. RPC^GMVRPCHL(.RESULTS,OPTION,DATA).

The RESULTS variable will contain the ^TMP("GMVHLOC", \$J) global array reference. The ^TMP("GMVHLOC", \$J) global array contains the results.

The OPTION variable identifies a line label in the GMVRPCHL routine that will be invoked to process the call.

The DATA variable contains any additional values needed by the OPTION variable to process the call.

1) When the OPTION value is NAME, this RPC will do a file lookup.

The DATA value is a three part value separated by carets(^). The first part is a file number. The second part is a value to look up. The third part is the field or fields to do the look up on. If the third piece is not defined, the lookup is done on the .01 field of the file.

```
The TMP global contains:
 ^TMP("GMVHLOC", $J, 0) = piece1
^TMP("GMVHLOC", $J, n) = piece2^piece3
 where piece1 = number of entries found
        piece2 = file number, a semi-colon and record IEN
        piece3 = field value
Example:
>S OPTION="NAME", DATA="44^OUTPATIENT^.01"
>D RPC^GMVRPCHL(.RESULT,OPTION,DATA) ZW RESULT
>RESULT="^TMP("GMVHLOC",539052767)"
>D ^%G
>Global ^TMP("GMVHLOC",$J
>^TMP("GMVHLOC", 539052767, 0) = 3
                          1) =44;75^OUTPATIENT NUC MED
                          2)=44;74^OUTPATIENT RADIOLOGY
                          3)=44;80^OUTPATIENT ULTRASOUND
```

2) When the OPTION value is APPT, this RPC will return a list of clinic appointments for the patient.

The DATA value is a four part value separated by carets(^). The first piece is DFN. The second piece is the start date of the search. If not defined, this value defaults to 365 days prior to today. The third piece is the end date of the search. If not defined, the value defaults to today. Both dates are in FileMan internal format. The fourth piece is a string of numbers to indicate what types of appointments to return. If not defined, the value defaults to "123456789" (i.e., all appointment types) where:

```
1 - Active/Kept
2 - Inpatient appts. only
3 - No-shows
4 - No-shows, auto-rebook
5 - Cancelled by clinic
6 - Cancelled by clinic, auto rebook
7 - Cancelled by patient
8 - Cancelled by patient, auto rebook
9 - No action taken
```

The TMP global contains:

```
^TMP("GMVHLOC",$J,0)=piece1
 ^TMP("GMVHLOC", $J, n) = piece2^piece3^piece4^piece5^piece6^piece7
                      ^piece8^piece9^
  where piece1 = number of entries found
        piece2 = date/time of appt (FM internal)
        piece3 = date/time of appt (external)
        piece4 = hospital location IEN (FILE 44)
        piece5 = hospital location name (FILE 44, Field .01)
        piece6 = appt status (internal)
        piece7 = appt status (external)
        piece8 = appt type (internal)
        piece9 = appt type (external)
Example:
> S OPTION="APPT", DATA="78^3051201^3051206^"
> D RPC^GMVRPCHL(.RESULT,OPTION,DATA) ZW RESULT
> RESULT="^TMP("GMVHLOC",539052767)"
> D ^%G
> Global ^TMP("GMVHLOC",$J
> ^TMP("GMVHLOC",539052767,0)=1
                           1) = 3051206.1^DEC 6,2005@10:00^88^WEIGHT
                              CLINIC^^^9^REGULAR
3) When the OPTION value is ADMIT, this RPC will return a list of
hospital admissions for the patient specified.
The DATA value is the patient's DFN.
The TMP global contains:
 ^TMP("GMVHLOC", $J, 0) = piece1
^TMP("GMVHLOC", $J, n) = piece2^piece3^piece4^piece5^piece6
 where piecel = number of entries found
        piece2 = date/time of admission (external)
        piece3 = hospital location IEN (FILE 44)
        piece4 = hospital location name (FILE 44, Field .01)
        piece5 = type of movement (FILE 405.1, Field .01)
        piece6 = movement IEN (FILE 405)
Example:
> S OPTION="ADMIT", DATA=134
> D RPC^GMVRPCHL(.RESULT,OPTION,DATA) ZW RESULT
> RESULT="^TMP("GMVHLOC",539052767)"
> D ^%G
> Global ^TMP("GMVHLOC",$J
> ^TMP("GMVHLOC", 539052767, 0) =1
                           1) = Apr 09, 2001 1:48:43 pm^67^
                              2-ASM^DIRECT^1712
4) When the OPTION value is CLINIC, this RPC will return a list of
active clinics.
The DATA value is FROM^MAXIMUM^DIRECTION.
  Where:
         FROM = Value to begin the search (optional). Default is
               null (i.e., start with the first entry in the B x-ref).
      MAXIMUM = Maximum number of entries to return. (optional)
               Default is 100.
    DIRECTION = Direction of search (optional). 1 means forward and -1
```

```
means backwards. Default is 1.
  The TMP global contains:
   ^TMP("GMVHLOC", $J, 0) = piece1
   ^TMP("GMVHLOC", $J, n) = piece2^piece3
    where piecel = number of entries found
          piece2 = 44; ien (44, a semi-colon and the entry number)
          piece3 = location name (FILE 44, Field .01)
          n is a sequential number starting with zero
  Example:
  > S OPTION="CLINIC", DATA="A^5^1"
  > K RESULTS D RPC^GMVRPCHL(.RESULTS,OPTION,DATA) ZW RESULTS
  > RESULTS="^TMP("GMVHLOC",540221719)"
  > D ^%G
  > Global ^TMP("GMVHLOC",$J
  > ^TMP("GMVHLOC", 540221719, 0) = 5
                              1)=44;140^ANDY'S AUDIO NON-COUNT CLINIC
                              2)=44;139^ANDY'S AUDIOLOGY COUNT CLINIC
                              3)=44;76^AUDIOLOGY AND SPEECH PATHOLOGY
                              4) = 44; 87 ^ BARB'S CLINIC
                              5) =44;217^BOISE OUTPATIENT
If an error is encountered for NAME, ADMIT, APPT or CLINIC, a "-1"
 followed by a caret and the error message text (i.e., -1^error message) is
 returned in RESULT(0).
NAME: GMV MANAGER
                                         TAG: RPC
 ROUTINE: GMVRPCM
                                        RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: SUBSCRIPTION
                                         INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 <sup>1</sup>DESCRIPTION:
 Performs many functions for the Manager module.
 This remote procedure call is documented in Integration Agreement 4360.
INPUT PARAMETER: OPTION
MAXIMUM DATA LENGTH: 10
                                        PARAMETER TYPE: LITERAL
                                         REQUIRED: YES
 SEQUENCE NUMBER: 1
 DESCRIPTION:
 Routine tag line in GMVRPCM to call.
 NPUT PARAMETER: DATA PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 100 REQUIRED: YES
INPUT PARAMETER: DATA
 SEQUENCE NUMBER: 2
 DESCRIPTION:
 Other data as required for the call.
 RETURN PARAMETER DESCRIPTION:
 This remote procedure call performs various actions such as building
 selection lists and modifying package parameters. The entry point is
 RPC^GMVRPCM. It has input parameters of RESULTS, OPTION and DATA (ex:
 RPC^GMVRPCM(.RESULTS,OPTION,DATA).
 The RESULTS variable will contain the ^TMP("GMVMGR", $J) global array
 reference. The ^TMP("GMVMGR", $J) global array contains the results.
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

that will be invoked to process the call.

\_

The OPTION variable identifies a line label in the GMVRPCM routine

### **Exported Options**

The DATA variable contains any additional values needed by the OPTION variable to process the call.

1) When the OPTION value is ADDQUAL, this RPC will link a GMRV VITAL QUALIFIER (#120.52) file entry to a GMRV VITAL TYPE (#120.51) file entry.

The DATA value is a three part value separated by semi-colons(;). The first value is the FILE 120.51 internal entry number (IEN). The second value is the GMRV VITAL CATEGORY (#120.53) IEN. The third value is the GMRV VITAL QUALIFIER (#120.52).

### Example:

- > S DATA="1;1;1"
- > S OPTION="ADDQUAL"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539356158,0)=1^Qualifier Assigned

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

2) When the OPTION value is DELQUAL, this RPC will unlink a qualifier to a GMRV VITAL TYPE (#120.51) file entry.

The DATA value is a three part value separated by semi-colons. The first value is the FILE 120.51 internal entry number (IEN). The second value is the GMRV VITAL CATEGORY (#120.53) IEN. The third value is the GMRV VITAL QUALIFIER (#120.52) IEN.

### Example:

- > S DATA="1;1;1"
- > S OPTION="DELQUAL"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539356158,0)=1^Qualifier removed.

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

3) When the OPTION value is DELTEMP, this RPC will delete a data input template definition.

The DATA value is a two part value separated by a caret (^). The first value is the ENTITY value. See IA #2263 for a list of entity values. The second value is the name of the data input template.

#### Example:

- > S DATA="USR^PAIN ONLY"
- > S OPTION="DELTEMP"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J

```
> ^TMP("GMVMGR",539356158,0)=1^Template Removed.
If an error is encountered, a "-1" followed by a caret and the error
message text (i.e., -1^error message) is returned.
4) When the OPTION value is GETCATS, this RPC will return a list of
qualifiers (FILE 120.52) associated with a vital type (FILE 120.51).
The DATA value is a one part value. It is a pointer value to FILE 120.51
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = piece1^piece2
 ^TMP("GMVMGR", $J, n) = piece3^piece4^piece5
 where piece1 = number of categories (FILE 120.53) associated with this
                vital type
       piece2 = vital type name
      piece3 = category IEN (FILE 120.53)
      piece4 = category name (FILE 120.53, Field .01)
       piece5 = qualifier names (FILE 120.52, Field .01) separated by a
               comma and space
            n = sequential number starting with 1
Example:
> S DATA="21"
 > S OPTION="GETCATS"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539356158)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539356158,0)=1^PULSE OXIMETRY
                        1)=2^METHOD^AEROSOL/HUMIDIFIED MASK, CPAP, FACE
   TENT, L ARM, MASK, NASAL CANNULA, NON RE-BREATHER, PARTIAL RE-BREATHER,
  ROOM AIR, T-PIECE, TRACHEOSTOMY COLLAR, VENTILATOR, VENTURI MASK
If an error is encountered, a "-1" followed by a caret and the error
message text (i.e., -1^error message) is returned.
5) When the OPTION value is GETDATA, this RPC will return the value of
the entry you specify.
The DATA value is a three part value. The first part is the file number.
The second part is the IEN number of the entry. The third part is the
field number.
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = external value of the field
Example:
> S DATA="120.51^1^1"
 > D RPC(.RESULT, "GETDATA", DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539339804)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539339804,0)=BP
```

If a value cannot be found, then a null value is returned.

```
6) When the OPTION value is GETDEF, this RPC will return default template
names.
The DATA value is a one part value. If it is null, then all default
templates for that user will be returned.
The TMP global contains:
 ^TMP("GMVMGR",$J,0)=piece1
 ^TMP("GMVMGR", $J, n) = piece2^piece3
 where piece1 = number of templates found
       piece2 = an IEN value, a semi-colon, and a global reference
       piece3 = template name
            n = sequential number starting with 1
Example A:
> S DATA=""
 > S OPTION="GETDEF"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539356158)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539356158,0)=4
                            1) = 125; SC (^WARD 10A
                            2) = 334; DIC(4.2, ^TEST)
                            3) = 4601; VA(200, ^Height ONLY)
                            4) = 547; VA (200, ^All Vital Signs
If the DATA value is an entity value (see IA 2263 for a list of entity
values), then the default template name for that entity will be returned.
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = template name
Example B:
 > S DATA="USR"
 > S OPTION="GETDEF"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539356158)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539356158,0)=MY DEFAULT
If an error is encountered, a "-1" followed by a caret and the error
message text (i.e., -1^error message) is returned.
7) When the OPTION value is GETHILO, this RPC will return the abnormal
high or low value for a vital type.
The DATA value is a one part value which identifies a field number in
the GMRV VITALS PARAMETERS (#120.57) field.
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = field value
Example:
> S DATA=5.2
 > S OPTION="GETHILO"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539356158)"
```

```
> D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539356158,0)=94
A zero is returned if there is no value in the field.
8) When the OPTION value is GETLIST, this RPC returns a list of entries
for the file number specified.
The DATA value is a one part value. It is a file number.
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = piece1^piece2
 ^TMP("GMVMGR", $J, n) = piece3^piece4
 where piece1 = number of entries returned
       piece2 = file name [not returned in all cases]
       piece3 = file number, a semi-colon and record IEN
       piece4 = the .01 value of the record
            n = sequential number starting with 1
Examples:
Retrieve a list of wards.
 > S DATA=42
 > S OPTION="GETLIST"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539363784)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539363784,0)=26^WARD LOCATION
                            1) = 42; 14^10A
                            n) = 42:15^10B
                            26) = 42;39^10Z
Retrieve a list of clinics.
 > S DATA=44
 > S OPTION="GETLIST"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539363784)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539363784,0)=61
                            1) = 44:6^{HOUSE/A}
                            n) = 44:8^HOUSE/C
                            61) = 44;39^{HOUSE/ZZ}
Retrieve a list vital types.
 > S DATA=120.51
 > S OPTION="GETLIST"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539363784)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539363784,0)=10^GMRV VITAL TYPE
                            1)=120.51;1^BLOOD PRESSURE
                           N)=120.51;19^CENTRAL VENOUS PRESSURE
                            10)=120.51;9^WEIGHT
 Retrieve a list of qualifiers.
 > S DATA=120.52
```

```
> S OPTION="GETLIST"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539363784)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539363784,0)=80^GMRV VITAL QUALIFIER
                           1)=120.52;74^ABDOMINAL
                           n) = 120.52;42^ACTUAL
                           80) = 120.52;99^{WRIST}
 Retrieve a list of CPRS teams.
 > S DATA=100.21
 > S OPTION="GETLIST"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539363784)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539363784,0)=103
                           1) = 100.21;28^1AS
                           n) = 100.21;60^1ASO
                           103)=100.21;96^consult team
 Retrieve a list of nursing units.
 > S DATA=211.4
 > S OPTION="GETLIST"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539363784)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539363784,0)=21
                           1) = 211.4;7^10E
                           n) = 211.4:17^10W
                           21) = 211.4; 9^SICU
If an error is encountered, a "-1" followed by a caret and the error
message text (i.e., -1^error message) is returned.
9) When the OPTION value is GETQUAL, this RPC returns a list of
qualifiers associated with this vital type.
The DATA value is a two part value separated by a semi-colon. The first
part is vital type (FILE 120.51) IEN. The second part is a category (FILE
120.53) IEN.
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = piece1^piece2
 ^TMP("GMVMGR", $J, n) = piece3^piece4
 where piece1 = number of entries found
        piece2 = category name (FILE 120.53, Field .01)
        piece3 = qualifier IEN
        piece4 = qualifier name (FILE 120.52, Field .01)
             n = sequential number starting with 1
Example:
> S DATA="1;1",OPTION="GETOUAL"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539356158)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
```

```
> ^TMP("GMVMGR",539356158,0)=6^LOCATION
                           1)=139^Test Oualifier
                           2) = 53^FEMORAL
                           3)=2^L ARM
                           4)=4^L LEG
                           5) = 24^{PERIPHERAL}
                           6)=1^R ARM
If an error is encountered, a "-1" followed by a caret and the error
message text (i.e., -1^error message) is returned.
10) When the OPTION value is GETTEMP, this RPC will return a list data
input templates defintions.
The DATA value is a two part value separated by a caret. The first part
is an entity value. See IA 2263 for a list of entities. The second part is
a data input template name.
When DATA is null, all data input template definitions are returned.
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = piece1
 ^TMP("GMVMGR",$J,n)=piece2^piece3^piece4^piece5^piece6
 where piece1 = number of entries returned
       piece2 = 1, 2, 3, or 4. (1 = Domain, 2 = Institution, 3 = Hospital
                 location and 4 = New Person)
        piece3 = file IEN, a semi-colon and global reference
        piece4 = Field .01 value of the file specified in piece3
       piece5 = template name
       piece6 = template description text, a bar, vital type IEN (FILE
120.51), a colon, a metric flag (0=U.S. and 1=metric), category IEN
(FILE 120.53), a coma, and a qualifier IEN (FILE 120.52), a tilde
indicates additional category and qualifier combinations for the vital
type. A semi-colon indicates the start of the next vital type.
             n = sequential number starting with 1
Example:
> S DATA="USR", OPTION="GETTEMP"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539356158)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
```

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

11) When the OPTION value is LOOKUP, this RPC will do a file lookup

The DATA value is a three part value separated by a caret. The first part is a file number. The second part is a value to look up. The third part is the field or fields to do the look up on. If the third piece is not defined, the lookup is done on the .01 field of the file.

1) =  $4^547$ ; VA(200, ^VITUSER, ONE^MY DEFAULT^ALL

VITALS | 1:0:1, 2~2, 59~3, 50; 20:1 |

The TMP global contains:

> ^TMP("GMVMGR",539356158,0)=1

```
^TMP("GMVMGR", $J, 0) = piece1
 ^TMP("GMVMGR", $J, n) = piece2^piece3
 where piece1 = number of entries found
        piece2 = file number, a semi-colon and record IEN
        piece3 = field value
Example:
 > S DATA="44^OUTPAT^.01",OPTION="LOOKUP"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539359648)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539359648,0)=3
                           1)=44;75^OUTPATIENT NUC MED
                           2) = 44;74 OUTPATIENT RADIOLOGY
                           3) =44;80^OUTPATIENT ULTRASOUND
If an error is encountered, a "-1" followed by a caret and the error
message text (i.e., -1^error message) is returned.
12) When the OPTION value is NEWQUAL, this RPC will always return an
error message instructing the user to use the New Term Rapid Turnaround
process.
The DATA value is always null.
Example:
> S DATA=""
 > S OPTION="NEWOUAL"
 > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
 > RESULT="^TMP("GMVMGR",539356158)"
 > D ^%G
 > Global ^TMP("GMVMGR",$J
 > ^TMP("GMVMGR",539356158,0)=-1^Use the New Term Rapid Turnaround (NTRT)
  process to add qualifiers
13) When the OPTION value is NEWTEMP, this RPC will file a new data
input template.
The DATA value is a three part value separated by a caret. The first part
is an entity. See IA 2263 for a list of entities. The second part is
the name of the data input template. The third part is the description
text. If the third part is null, the template description will default to
"No Description".
The TMP global contains:
 ^TMP("GMVMGR", $J, 0) = piece1^piece2^piece3^piece4
 where piece1 = 1, 2, 3, or 4 (1 = DOMAIN (#4.2), 2 = INSTITUTION (#4),
                 3 = HOSPITAL LOCATION, and <math>4 = NEW PERSON)
        piece2 = IEN, a semi-colon, and global reference (e.g., 3;DIC(4.2))
        piece3 = the .01 field value for the record in piece2
        piece4 = data input name
Example:
> S DATA="USR^1 EAST^All Vital Types"
 > S OPTION="NEWTEMP"
```

> D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT

- > RESULT="^TMP("GMVMGR",539343036)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539343036,0)=4^547;VA(200,^VITUSER,ONE^1 EAST

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

14) When the OPTION value is RENTEMP, this RPC will rename a data input template.

The DATA value is a three part value separated by a caret. The first part is an entity. See IA 2263 for a list of entities. The second part is the current template name. The third part is the new name of the template.

The TMP global contains: ^TMP("GMVMGR",\$J,0)=1^Renamed

#### Example:

- > S DATA="USR^FRANK'S DEFAULT^MY DEFAULT"
- > S OPTION="RENTEMP"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539356158,0)=1^Renamed

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

15) When the OPTION value is SETDATA, this RPC always returns an error message that instructs the user to use the New Term Rapid Turnaround process.

The DATA value is null.

### Example:

- > S DATA=""
- > S OPTION="SETDATA"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539356158,0)=-1^Use the New Term Rapid Turnaround (NTRT) process to add qualifiers
- 16) When the OPTION value is SETDEF, this RPC will set that data input template as a default.

The DATA value is a two part value separated by a caret. The first part is an entity. See IA 2263 for a list of entities. The second part is the name of the template that will become the default template.

The TMP global contains: ^TMP("GMVMGR", \$J, 0) = 1 ^ Set As Default

#### Example:

> S DATA="USR^FRANK'S LIST"

#### **Exported Options**

- > S OPTION="SETDEF"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539356158,0)=1^Set As Default.

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

17) When the OPTION value is SETHILO, this RPC will set the high and low abnormal values for a vital type.

The DATA value is a two part value separated by a caret. The first part is a field number in the GMRV VITALS PARAMETERS (#120.57) file. The second part is the value that field should be set to.

The TMP global contains:
 ^TMP("GMVMGR",\$J,0)=1^Update Complete.

### Example:

- > S DATA="5.1^102",OPTION="SETHILO"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539356158,0)=1^Update Complete.

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

18) When the OPTION value is SETTEMP, this RPC will save the input template definition.

DATA is a three part value separated by a caret. The first part is an entity. See IA 2263 for a list of entities. The second part is the template name. The third part is the template definition.

### Example:

- > S DATA="USR^ONE VITAL TYPE ONLY^CONTAINS ONLY ONE VITAL TYPE|2:0:1,102"|
- > S OPTION="SETTEMP"
- > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVMGR",539356158)"
- > D ^%G
- > Global ^TMP("GMVMGR",\$J
- > ^TMP("GMVMGR",539356158,0)=1^Template Saved.

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

19) When the OPTION value is VALID, this RPC will validate data.

DATA is a four part value separated by a caret. The first part is the a file number. The second part is a record number. The third part is a

```
field number. The fourth part is the value to validate.
 The TMP global contains:
  ^TMP("GMVMGR", $J, 0) = 1 ^ Valid Data
 Example:
  > S DATA="120.5^8864^.01^3051012.1034",OPTION="VALID"
  > D RPC^GMVRPCM(.RESULT,OPTION,DATA) ZW RESULT
  > RESULT="^TMP("GMVMGR",539343036)"
  > D ^%G
  > Global ^TMP("GMVMGR",$J
  > ^TMP("GMVMGR",539343036,0)=1^Valid Data
 If an error is encountered, a "-1" followed by a caret and the error
 message text (i.e., -1^error message) is returned.
NAME: GMV MARK ERROR
 ROUTINE: GMVUTL1
                                         RETURN VALUE TYPE: SINGLE VALUE
 AVAILABILITY: SUBSCRIPTION
                                         INACTIVE: ACTIVE
 <sup>1</sup>DESCRIPTION:
 This remote procedure call marks a selected vitals record in the GMRV
 Vital Measurement (#120.5) file as entered-in-error.
 This remote procedure call is documented in Integration Agreement 4414.
INPUT PARAMETER: GMVDATA PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 60 REQUIRED: YES
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 GMVDATA contains the following information:
 piece1^piece2^piece3
  where piece1 = FILE 120.5 IEN
        piece2 = FILE 200 IEN (i.e., DUZ)
        piece3 = A single value to indicate the reason for the error.
                 1 = INCORRECT DATE/TIME, 2 = INCORRECT READING, 3 =
                 INCORRECT PATIENT and 4 = INVALID RECORD
 RETURN PARAMETER DESCRIPTION:
 If the record is marked as entered in error, RESULT is set to "OK".
 Otherwise, RESULT is set to "Record Not Found"
 Example:
  > S GMVDATA="1560^547^1"
  > D ERROR^GMVUTL1(.RESULT,GMVDATA) ZW RESULT
  > RESULT="OK"
NAME: GMV NUR UNIT PT
                                        TAG: APTLIST
  ROUTINE: GMVUTL8
                                       RETURN VALUE TYPE: ARRAY
 AVAILABILITY: RESTRICTED
                                        INACTIVE: ACTIVE
 <sup>2</sup>DESCRIPTION:
 Returns a list of active patients for a nursing location.
INPUT PARAMETER: LOC
                                        PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 60
                                       REQUIRED: YES
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 NURS LOCATION file (#211.4) ien.
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

<sup>&</sup>lt;sup>2</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

RETURN PARAMETER DESCRIPTION:

ARRAY - Subscripted by sequential number with DFN in first piece and patient name in second piece.

example: ARRAY(#)=DFN^patient name^SSN^DOB^SEX AND AGE^ATTENDING^VETERAN ^INTERNAL DATE/TIME DECEASED^EXTERNAL DATE/TIME DECEASED

NAME: GMV PARAMETER TAG: RPC

ROUTINE: GMVPAR RETURN VALUE TYPE: GLOBAL ARRAY

AVAILABILITY: SUBSCRIPTION INACTIVE: ACTIVE

WORD WRAP ON: TRUE

<sup>1</sup>DESCRIPTION:

Sets and retrieves parameter values used by the graphical user interface.

This remote procedure call is documented in Integration Agreement 4367.

INPUT PARAMETER: OPTION PARAMETER TYPE: LITERAL

NEUT PARAMETER: OPTION MAXIMUM DATA LENGTH: 10 REQUIRED: YES

SEQUENCE NUMBER: 1

DESCRIPTION:

Routine tag line to call.

INPUT PARAMETER: ENT PARAMETER TYPE: LITERAL

SEOUENCE NUMBER: 2

DESCRIPTION:

The entity value to use. See Integration Agreement 2263 and FILE 8989.518

for a list of entity values.

INPUT PARAMETER: PAR PARAMETER TYPE: LITERAL

SEQUENCE NUMBER: 3

DESCRIPTION:

The parameter value to use. See FILE 8989.51 for a list of parameter values. This value must start with the letters "GMV" (no quotes).

INPUT PARAMETER: INST PARAMETER TYPE: LITERAL

SEQUENCE NUMBER: 4

DESCRIPTION:

The instance to use.

PARAMETER TYPE: LITERAL INPUT PARAMETER: VAL

SEQUENCE NUMBER: 6

DESCRIPTION:

The value assigned to a parameter. Values are stored in FILE 8989.5.

RETURN PARAMETER DESCRIPTION:

This remote procedure call sets and retrieves parameter settings that are used in the graphical user interface.

The entry point is RPC^GMVPAR.. It has input parameters of RESULTS, OPTION, ENT, PAR, INST and VAL (ex: RPC^GMVPAR (RESULTS, OPTION, ENT, PAR, INST, VAL) .

The RESULTS variable contains the results of the call or the location where the results can be found.

The OPTION variable identifies the entry point in the GMVPAR routine that will be invoked to process the call.

If an error occurrs, the ^TMP global contains:  $^{TMP}(\$J,0) = -1^{error}$  message text

1) When the OPTION value is DELPAR, this RPC deletes the value for the instance, parameter and entity specified.

<sup>&</sup>lt;sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

```
The TMP global contains:
 ^TMP(\$J,0)=1^Instance deleted
 > S OPTION="DELPAR", ENT="SYS", PAR="GMV DLL VERSION"
 > S INST="GMV VITALSVIEWENTER.DLL:v. 07/21/05 10:34"
 > D RPC^GMVPAR(.RESULT,OPTION,ENT,PAR,INST) ZW RESULT
 > RESULT="^TMP(538999278)"
 > D ^%G
 > Global ^TMP($J
 > ^TMP(538999278,0)=1^Instance deleted
2) When the OPTION value is ENTVAL, this RPC returns the external value
of the entity specified.
The TMP global contains:
TMP(\$J,0) = external value
Example:
> S OPTION="ENTVAL", ENT="USR"
 > D RPC(.RESULT,OPTION,ENT) ZW RESULT
 > RESULT="^TMP(538993252)"
 > D ^%G
 > Global ^TMP($J
 > ^TMP(538993252,0)=TRAXLER,FRANK
3) When the OPTION value is GETLST, this RPC returns a list of instances
and their values for the parameter and entity specified.
The TMP global contains:
 ^TMP(\$J,0) = piece1
 ^TMP($J,n)=piece2^piece3
 where piece1 = number of entries returned
        piece2 = instance name
        piece3 = instance value
             n = sequential number starting with 1
Example:
> S OPTION="GETLST", ENT="USR", PAR="GMV USER DEFAULTS"
 > D RPC(.RESULT,OPTION,ENT,PAR) ZW RESULT
 > RESULT="^TMP(538993252)"
 > D ^%G
 > Global ^TMP($J
 > ^TMP(538993252,0)=44
                  1) = DefaultTemplate^547; VA(200, |MY DEFAULT|
                  n) =UNIT INDEX^0
                  44) = WARD INDEX^-1
4) When the OPTION value is GETPAR, this RPC will get the value for the
instance, parameter and entity specified.
The TMP global contains:
 ^TMP($J,0)=piece1
 where piece1 = value
```

```
Example:
 > S ENT="USR", PAR="GMV USER DEFAULTS", INST="DefaultTemplate"
  > S OPTION="GETPAR"
  > D RPC(.RESULT,OPTION,ENT,PAR,INST) ZW RESULT
  > RESULT="^TMP(538993252)"
  > D ^%G
  > Global ^TMP($J
  > ^TMP(538993252,0)=547;VA(200,|MY DEFAULT|
 5) When the OPTION value is SETPAR, this RPC set the value of an instance
 for the instance, parameter and entity specified.
 The TMP global contains:
  ^TMP($J,0)=1^Parameter updated
 Example:
 > S OPTION="SETPAR", ENT="USR", PAR="GMV USER DEFAULTS", INST="SearchDelay"
  > S VAL=1.5
  > D RPC^GMVPAR(.RESULT.OPTION.ENT.PAR.INST.VAL) ZW RESULT
  > RESULT="^TMP(538999278)"
  > D ^%G
  > Global ^TMP($J
  > ^TMP(538999278,0)=1^Parameter updated
NAME: GMV PT GRAPH
                                        TAG: EN1
                                        RETURN VALUE TYPE: SINGLE VALUE
 ROUTINE: GMVSR0
 AVAILABILITY: RESTRICTED
                                        INACTIVE: ACTIVE
DESCRIPTION:
Prints Vitals/Measurements Graphic Reports.
INPUT PARAMETER: GMVDATA
                                       PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 150
                                      REOUIRED: YES
 SEQUENCE NUMBER: 1
 DESCRIPTION:
A multi-piece variable that identifies the values needed to run the
 report.
   Piece 1: DFN
          2: Start date/time of the report range (FileMan format)
          3: End date/time of the report range (FileMan format)
          4: Number indicating graph type *
          5: Device name (File 3.5, Field .01)
          6: Device internal entry number
          7: date/time to print the report (FileMan format)
          8: ward internal entry number (File 42)
          9: hospital location internal entry number (File 44)
         10: list of rooms separated by a comma (e.g., 200,210,220)
 * Graph = 1 prints Vital Signs Record
         = 2 prints B/P Plotting Chart
         = 3 prints Weight Chart
         = 4 prints Pulse Oximetry/Respiratory Graph
        = 5 prints Pain Chart
 RETURN PARAMETER DESCRIPTION:
 Returns a message stating the outcome of the request to queue the report.
 If the report was successfully queued, RESULT will be "Report sent to
 device. Task #: " ZTSK" where ZTSK is the task number of the job. If the
 report could not be queued, RESULT will be "Unable to task the report."
NAME: GMV PTSELECT
                                        TAG: RPC
```

RETURN VALUE TYPE: GLOBAL ARRAY

ROUTINE: GMVRPCP

```
AVAILABILITY: RESTRICTED
                               INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 Used as a method of processing a patient DFN and returning all warnings
 and notices (i.e. sensitivity or same last 4 of SSN) to the client
 application for processing. Also includes a call to log access of
 sensitive patients to the DG SECURITY LOG file.
 NPUT PARAMETER: RESULT PARAMETER TYPE: REFERENCE MAXIMUM DATA LENGTH: 30 REQUIRED: YES
INPUT PARAMETER: RESULT
  SEQUENCE NUMBER: 1
 DESCRIPTION:
This is the RPC return array variable.
INPUT PARAMETER: OPTION
MAXIMUM DATA LENGTH: 30
                                        PARAMETER TYPE: LITERAL
                                       REOUIRED: YES
  SEQUENCE NUMBER: 2
 DESCRIPTION:
 Contains the appropriate method to perform within this RPC call.
   SELECT: Performs a select of the supplied DFN (param 3) and returns the
          notices and warnings for the DFN
  LOGSEC: Logs a security entry in the DG SECURITY LOG file.
 NPUT PARAMETER: DFN
MAXIMUM DATA LENGTH: 12
INPUT PARAMETER: DFN
                                       PARAMETER TYPE: LITERAL
                                        REOUIRED: YES
 SEQUENCE NUMBER: 3
 DESCRIPTION:
 Contains the DFN of the patient to process in the SELECT or LOGSEC method
 of param 2.
INPUT PARAMETER: DATA
MAXIMUM DATA LENGTH: 80
                                       PARAMETER TYPE: LITERAL
                                       REOUIRED: NO
 SEOUENCE NUMBER: 4
 DESCRIPTION:
 Used to pass in the option name to DGSEC when logging against the DG
 SECURITY LOG file.
 RETURN PARAMETER DESCRIPTION:
RESULTS (0)
            =Success or failure flag (-1 or 1) from both SELECT & LOGSEC
RESULTS(1..n) = Messages to process by the client from the SELECT method.
NAME: GMV QUALIFIER TABLE
                                         TAG: EN1
 ROUTINE: GMVCAOU
                                       RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: RESTRICTED
                                        INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 Prints a list of categories and qualifiers associated with individual
 vital types (e.g., blood pressure). Data comes from the GMRV Vital
 Qualifier (#120.52) file and the GMRV Vital Category (#120.53) file.
INPUT PARAMETER: GMVDATA PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 150 REQUIRED: YES
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 A multi-piece variable that identifies the values needed to run the
 report.
  Piece 1: n/a
          2: n/a
          3: n/a
          4: n/a
          5: Device name (File 3.5, Field .01)
          6: Device internal entry number
```

```
7: date/time to print the report (FileMan format)
          8: n/a
          9: n/a
         10: n/a
 RETURN PARAMETER DESCRIPTION:
 Returns a message stating the outcome of the request to gueue the report.
 If the report was successfully queued, RESULT will be "Report sent to
 device. Task #: " ZTSK" where ZTSK is the task number of the job. If the
 report could not be queued, RESULT will be "Unable to task the report."
NAME: GMV ROOM/BED
                                        TAG: ROOMBED
 ROUTINE: GMVGETD
AVAILABILITY: RESTRICTED
                                       RETURN VALUE TYPE: GLOBAL ARRAY
                                        INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 This procedure extracts room/bed information from Room-Bed file (#405.4)
for a given MAS ward.
 NPUT PARAMETER: GMRWARD PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 30 REQUIRED: YES
INPUT PARAMETER: GMRWARD
 SEQUENCE NUMBER: 1
 DESCRIPTION:
 GMRWARD is a MAS ward name from the Ward Location file (#42).
 RETURN PARAMETER DESCRIPTION:
 Returns the global array name (i.e., ^TMP($J,"GROOM")) containing a list
 of rooms/beds for the given MAS ward.
 ^TMP($J, "GROOM", n) = Roombed
 n is a sequential number starting at 1.
 If there is no data, then the global array is undefined.
NAME: GMV TEAM PATIENTS
ROUTINE: GMVUTL3
                                        TAG: TEAMPT
 AVAILABILITY: RESTRICTED
                                       RETURN VALUE TYPE: ARRAY
                                        INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 This procedure retrieves patients assigned to a given team.
INPUT PARAMETER: GMVTEAM PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 30 REQUIRED: YES
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 GMVTEAM is the internal entry number of the selected team (File 100.21).
 RETURN PARAMETER DESCRIPTION:
 Returns a list of patients in the array specified.
 RESULT(n)=Patient name^DFN^SSN (w/hyphens)^DOB (external)^SEX and AGE^
           Attending "Veteran" Date of Death (external) Date of Death
           (internal) ^Ward name ^Roombed
 n is a sequential number starting at 1.
NAME: GMV USER
 ROUTINE: GMVRPCU
                                        RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: SUBSCRIPTION
                                       INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 <sup>1</sup>DESCRIPTION:
 Retrieves data about the user (e.g., parameter settings).
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

5-28

```
This remote procedure call is documented in Integration Agreement 4366.
```

MAXIMUM DATA LENGTH: 10

PARAMETER TYPE: LITERAL
REQUIRED. VEC INPUT PARAMETER: OPTION

SEQUENCE NUMBER: 1

DESCRIPTION:

Routine tag line to call in GMVRPCU.

NPUT PARAMETER: DATA PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 100 REQUIRED: YES INPUT PARAMETER: DATA

SEQUENCE NUMBER: 2

DESCRIPTION:

Other data as required for the call.

RETURN PARAMETER DESCRIPTION:

This Remote Procedure Call (RPC) performs various actions focusing on the user. The entry point is RPC^GMVRPCU. It has input parameters of RESULTS, OPTION and DATA (e.g., RPC^GMVRPCU(RESULTS,OPTION,DATA)).

The RESULTS variable contains the results of the call or the location where the results can be found.

The OPTION variable identifies another entry point in the GMVRPCU routine that is invoked to process the call.

The DATA variable contains any values needed by the OPTION variable to process the call.

1) When the OPTION value is SETPAR, this RPC will set and/or delete the value of a GMV USER DEFAULTS setting (e.g., the user's default template).

The DATA value is a two part value separated by a caret. The first part is name of a setting. The second part is the value of the setting. If the second part is null, the existing value of the setting is deleted.

The TMP global contains:

^TMP("GMVUSER", \$J, 0) = 1 ^ Parameter set.

^TMP("GMVUSER", \$J, 0) = 1 Parameter cleared

### Example:

- > S DATA="DefaultTemplate^547; VA(200, | MY DEFAULT", OPTION="SETPAR" |
- > D RPC^GMVRPCU(.RESULT,OPTION,DATA) ZW RESULT
- > RESULT="^TMP("GMVUSER",539374023)"
- > D ^%G
- > Global ^TMP("GMVUSER",\$J
- > ^TMP("GMVUSER",539374023,0)=1^Parameter set.

If an error is encountered, a "-1" followed by a caret and the error message text (i.e., -1^error message) is returned.

2) When the OPTION value is GETPAR, this RPC will return the value of the GMV USER DEFAULTS setting specified in the DATA value.

The DATA value is a one part value. It is the name of a setting (e.g., the user's default template).

The TMP global contains: ^TMP("GMVUSER", \$J, 0) = value of setting or null

Example:

```
> S DATA="DefaultTemplate",OPTION="GETPAR"
  > D RPC^GMVRPCU(.RESULT,OPTION,DATA) ZW RESULT
  > RESULT="^TMP("GMVUSER",539374023)"
  > D ^%G
  > Global ^TMP("GMVUSER",$J
  > ^TMP("GMVUSER",539374023,0)=547; VA(200,|ONE VITAL TYPE ONLY|
 3) When the OPTION value is SIGNON, this RPC will return information about
 the user who is currently signed onto the system.
 The DATA value is not used. The user's IEN (i.e., DUZ) to the NEW PERSON
 (#200) file value must be defined when this call is made.
 The RESULT variable will return the following array:
  RESULT(0)=NEW PERSON (#200) file internal entry number (DUZ)
  RESULT(1) = User's name (FILE 200, Field .01)
  RESULT(2) = Domain (FILE 4.2) internal entry number
  RESULT(3) = Domain name (FILE 4.2, Field .01)
  RESULT(4)=Institution (FILE 4) internal entry number the user is signed
              into (i.e., DUZ(2))
   RESULT(5) = Institution name (FILE 4, Field .01)
   RESULT(6)="0" or "1". "1" indicates the user has the GMV MANAGER or
              programmer key. "0" indicates the user has neither key.
  RESULT(7) = The user's title (FILE 200, Field 8)
  RESULT(8)=This value is always null.
  RESULT(9)=Number of seconds the system will wait for a response from
              the user (i.e., DTIME). The default time is 300 seconds.
   RESULT(10)=INSTITUTION (#4) file IEN^FILE 4 external value^station
               number (e.g., 499^SUPPORT ISC^499).
 Example:
 > S OPTION="SIGNON"
  > D RPC(.RESULT,OPTION) ZW RESULT
  > RESULT="^TMP("GMVUSER",539375907)"
  > D ^%G
  > Global ^TMP("GMVUSER",$J
  > ^TMP("GMVUSER",539375907,0)=547
                              1) = VITUSER, ONE
                              2) = 334
                              3) = DEV.DEV.FO-HINES.MED.VA.GOV
                              4) = 499
                              5)=SUPPORT ISC
                              6) = 1
                              7) = PROGRAMMER
                              8) =
                              9) = 9999
                             10)=499^SUPPORT ISC^499
<sup>1</sup>NAME: GMV V/M ALLDATA
                                         TAG: VMDATA
 ROUTINE: GMVGGR1
                                        RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: SUBSCRIPTION
                                        INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 This remote procedure call lists all vitals/measurements data for a given
 date/time span.
```

<sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Updated routine description.

\_

```
This remote procedure call is documented in Integration Agreement 4654.
INPUT PARAMETER: GMVDATA
                                        PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 60
                                        REQUIRED: YES
 SEQUENCE NUMBER: 1
DESCRIPTION:
GMVDATA consists of 4 pieces of data:
 piece1^piece2^piece3^piece4
 where piece1 = File 2 IEN (i.e., DFN)
       piece2 = Start date/time for search (FileMan internal format)
       piece3 = End date/time for search (FileMan internal format)
       piece4 = 0 (zero)
RETURN PARAMETER DESCRIPTION:
RESULT array returns the data or a "NO DATA" message.
Case A: The NO DATA message is returned.
The TMP global returns:
 ^TMP($J,1)=lastname, first social security number date of birth age
             "(Yrs)" gender
 ^TMP($J,2)="Unit:" unit "Room:" room
 ^TMP($J,3)="Division:" division
 ^TMP(\$J,4) = search date range
 ^TMP(\$J,5) = "NO DATA"
Example:
 > S GMVDATA="90^3051012^3051012^0"
 > D VMDATA^GMVGGR1(.RESULT,GMVDATA) ZW RESULT
 > RESULT="^TMP(539349605)"
 > D ^%G
 > Global ^TMP($J
 > ^TMP(539349605,1)=VITPATIENT,ONE 000-11-1234 JAN 2,1934 71 (Yrs)
                     MALE
                   2) = Unit:
                             Room:
                   3) = Division:
                   4) =OCT 11,2005 - OCT 11,2005
                   5) = NO DATA
Case B: Fourth piece of GMVDATA (Flag) is 0
The TMP global returns:
 ^TMP($J,1) = lastname, first social security number date of birth age
             "(Yrs)" sex
 ^TMP($J,2)="Unit:" unit "Room:" room
 ^TMP($J,3)="Division:" division
 ^TMP(\$J,4) = search date range
 ^TMP($J,n)=piece1 through piece23
 where piece1 = date of reading in mm-dd-yy format
       piece2 = time of reading in hh:mm:ss format
       piece3 = Temperature value and qualifier abbreviations
       piece4 = Pulse value and qualifier abbreviations
       piece5 = Respiration and qualifier abbreviations
       piece6 = Pulse Oximetry value, qualifier abbreviations, flow rate
                and percentage value
       piece7 = Blood Pressure value and qualifier abbreviations
       piece8 = Weight value (pounds) and qualifier abbreviations
       piece9 = Weight value (kilos)
```

```
piece10 = Body Mass Index calculation
       piece11 = Height value (inches) and qualifier abbreviations
       piece12 = Height value (centimeters)
       piece13 = Circumference Girth value (inches) and qualifier
                 abbreviations
       piece14 = Circumference Girth value (centimeters)
       piece15 = Central Venous Pressure value (cmH2O)
       piece16 = Central Venous Pressure value (mmHq)
       piece17 = Input value (from Intake & Output package)
       piece18 = Output value (from Intake & Output package)
       piece19 = Pain value
       piece20 = always null
       piece21 = always null
       piece22 = hospital location (FILE 44, Field .01)
       piece23 = name of person who entered the data (FILE 200, Field .01)
       piece24 = database where the record is stored
Example:
 > S GMVDATA="134^3050901^3050930^0"
 > D VMDATA^GMVGGR1(.RESULT,GMVDATA) ZW RESULT
 > RESULT="^TMP(539349605)"
 > D ^%G
 > Global ^TMP($J
 > ^TMP(539349605,1)=VITPATIENT,TWO 000-11-1234 JUN 1,1957 48 (Yrs)
                     FEMALE
                  2) = Unit: 2-ASM Room:
                  3) = Division: TEST HINES
                  4) = SEP 1,2005 - SEP 30,2005
                  5)=09-14-05^17:18:00^^^^135- A St^61.36^22^66-
                     A^167.64^^^^^^ ^^ ^^2-ASM^VITPROVIDER,ONE^Vitals
                   Clf^^^^^^^^^^^^^^2-A SM^VITPROVIDER, TWO^Vitals.
NAME: GMV VITALS/CAT/QUAL
                                       TAG: GETVITAL
 ROUTINE: GMVUTL7
                                       RETURN VALUE TYPE: ARRAY
 AVAILABILITY: SUBSCRIPTION
                                      INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
<sup>1</sup>DESCRIPTION:
Returns all qualifier information for the vital types selected.
This remote procedure call is documented in Integration Agreement 4359.
INPUT PARAMETER: GMVLIST
                                       PARAMETER TYPE: LITERAL
 MAXIMUM DATA LENGTH: 60
                                       REQUIRED: YES
 SEQUENCE NUMBER: 1
DESCRIPTION:
A list of vital type abbreviations (FILE 120.51, Field 1) separated by
up-arrows (e.g., "HT^WT" for height and weight). When the value is null,
all qualifier information will be returned for all vital types.
RETURN PARAMETER DESCRIPTION:
Returns the qualifier information for the selected vital types in the
array specified. Includes the abnormal high and low values for the vital
type, if any.
The result array contains:
 RESULT(n)=piece1^piece2^piece3^piece4^piece5^piece6^piece7^piece8^piece9
 RESULT(n.nnn) = pieceA^pieceB^pieceC^pieceD
  where n is a sequential number starting with 1
```

<sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

1

```
piece1 = V for vital type
        piece2 = FILE 120.51 IEN for this vital type
        piece3 = vital type name (FILE 120.51, Field .01)
        piece4 = Abbreviation (FILE 120.51, Field 1)
        piece5 = PCE Abbreviation (FILE 120.51, Field 7)
        piece6 = If vital type is Blood Pressure this is the
                 abnormal systolic high value (File 120.57, Field 5.7).
                 If vital type is Temperature, this is the abnormal high
                 value (File 120.57, Field 5.1)
                 If vital type is Respiration, this is the abnormal high
                 value (File 120.57, Field 5.5)
                 If vital type is Pulse, this is the abnormal high value
                 (File 120.57, Field 5.3)
                 If vital type is Central Venous Pressure, this is the
                 abnormal high value (File 120.57, Field 6.1)
        piece7 = If vital type is Blood Pressure this is the
                 abnormal diastolic high value (File 120.57, Field 5.71).
                 If vital type is Temperature, this is the abnormal low
                 value (File 120.57, Field 5.2)
                 If vital type is Respiration, this is the abnormal low
                 value (File 120.57, Field 5.6)
                 If vital type is Pulse, this is the abnormal low value
                 (File 120.57, Field 5.4)
                 If vital type is Central Venous Pressure, this is the
                 abnormal low value (File 120.57, Field 6.2)
        piece8 = If vital type is Blood Pressure this is the
                 abnormal systolic low value (File 120.57, Field 5.8).
                 If vital type is Central Pressure, this is the abnormal
                 O2 saturation (File 120.57, Field 6.3)
        piece9 = If vital type is Blood Pressure this is the
                 abnormal diastolic low value (File 120.57, Field 5.81).
 RESULT(n.nnn) = pieceA^pieceB^pieceC^pieceD
  where pieceA = C for CATEGORY or Q for QUALIFIER
  if pieceA is C, then
        pieceB = FILE 120.53 IEN for this category
        pieceC = category name (FILE 120.53, Field .01)
       pieceD = null
  if pieceB is Q, then
        pieceB = FILE 120.52 IEN for this qualifier
        pieceC = qualifier name (FILE 120.52, Field .01)
        pieceD = synonym (FILE 120.52, Field .02)
Example:
> S GMVLIST="HT^WT"
 > D GETVITAL^GMVUTL7 (.RESULT, GMVLIST) ZW RESULT
 > RESULT(1)="V^8^HEIGHT^HT^HT^"
 > RESULT(1.001) = "C^4^QUALITY"
 > RESULT(1.002)="0^42^ACTUAL^A"
 > RESULT(1.003)="0^43^ESTIMATED^E"
 > RESULT(1.004)="0^107^Stated^St"
 > RESULT(2)="V^9^WEIGHT^WT^WT^"
 > RESULT(2.001) = "C^2^METHOD"
 > RESULT(2.002)="0^39^OTHER^Oth"
 > RESULT(2.003)="0^50^SITTING^Si"
 > RESULT(2.004)="0^51^STANDING^St"
 > RESULT(2.005)="C^4^QUALITY"
 > RESULT(2.006)="Q^42^ACTUAL^A"
```

```
NAME: GMV WARD LOCATION
                                         TAG: WARDLOC
                                        RETURN VALUE TYPE: GLOBAL ARRAY
 ROUTINE: GMVGETD
 AVAILABILITY: RESTRICTED
                                         INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
<sup>1</sup>DESCRIPTION:
This procedure extracts MAS ward locations from the Ward Location file
INPUT PARAMETER: DUMMY
                                          PARAMETER TYPE: LITERAL
 NPOT PARAMETER: DUMMY
MAXIMUM DATA LENGTH: 1
                                         REQUIRED: NO
 SEOUENCE NUMBER: 1
 DESCRIPTION:
 When this input parameter is set to the letter "P", only wards that have
 patients will be returned. Otherwise, all active wards will be returned.
 RETURN PARAMETER DESCRIPTION:
 Returns the global array name containing a list of MAS wards (i.e.,
 ^TMP($J, "GWARD")).
 ^TMP($J, "GWARD", n) = piece1^piece2^piece3
 where:
  piece1 = ward IEN (FILE 42)
  piece2 = ward name (FILE 42, Field .01)
  piece3 = hospital location IEN (FILE 44)
  n is a sequential number starting at 1.
 Example:
  > S DUMMY="P"
  > D WARDLOC^GMVGETD(.RESULT, DUMMY) ZW RESULT
  > RESULT="^TMP(540221719, "GWARD")"
  > D ^%G
  > Global ^TMP($J,"GWARD"
  > ^TMP(540221719, "GWARD", 1) = 2^1AS^2
                            2) = 1^2 - AS^1
                            3) = 13^2 - ASM^67
                            4) = 25^2 14 - 2 DOM<sup>1</sup>49
                            5) = 3^3AS^128
                            6) = 4^4 AS - 1^4
                            7) = 22^4B^153
                            8) = 23^4C^155
                            9) = 24^4D^154
                            10) = 12^5NM^63
                            11)=6^6AS^10
                            12) = 7^7 AS^1
                            13) = 8^DOM^23
                            14) = 10^{MICU^{3}}
                            15) = 5^{NHCU^{5}}
NAME: GMV WARD PT
                                          TAG: WARDPT
 ROUTINE: GMVGETD
                                         RETURN VALUE TYPE: GLOBAL ARRAY
 AVAILABILITY: RESTRICTED
                                          INACTIVE: ACTIVE
 WORD WRAP ON: TRUE
 DESCRIPTION:
 This procedure lists patients registered on a particular MAS ward.
INPUT PARAMETER: GMRWARD PARAMETER TYPE: LITERAL MAXIMUM DATA LENGTH: 30 REQUIRED: YES
 SEQUENCE NUMBER: 1
 DESCRIPTION:
 GMRWARD contains the name of ward from Ward Location file (#42).
 RETURN PARAMETER DESCRIPTION:
```

<sup>1</sup> June 2008 Patch GMRV\*5.0\*22 Updated description.

Returns the name of the global array containing the list of patients on the selected ward (i.e., ^TMP(\$J, "GMRPT")).

^TMP(\$J,"GMRPT",n)=DFN^Name^SSN (w/hyphens)^DOB^Sex and Age^Attending^ Veteran^Date of Death (internal)^Date of Death (external) 'Ward name' Roombed

n is a sequential number starting at 1.

If there are no patients on the ward, then the global array is undefined.

NAME: GMV WARD/ROOM PATIENTS TAG: ROOMPT

ROUTINE: GMVUTL7 RETURN VALUE TYPE: ARRAY

AVAILABILITY: RESTRICTED INACTIVE: ACTIVE

<sup>1</sup>DESCRIPTION:

Returns a list of patients in the ward and rooms specified. INPUT PARAMETER: GMVWRD PARAMETER TYPE: LITERAL NPUT PARAMETER: GMVWRD
MAXIMUM DATA LENGTH: 60

REQUIRED: YES

SEQUENCE NUMBER: 1

DESCRIPTION:

Name of the ward (e.g., 2EAST).

INPUT PARAMETER: GMVRLST
MAXIMUM DATA LENGTH: 150 PARAMETER TYPE: LITERAL

REQUIRED: YES

SEQUENCE NUMBER: 2

DESCRIPTION:

The room numbers of the ward separated by comma (e.g., 200,210,220).

RETURN PARAMETER DESCRIPTION:

RESULT(n) = patient name^DFN^DOB (external) ^SSN (no hyphens) where n is a sequential number beginning with 0 (zero)

## **Menu Option by Name**

```
<sup>2</sup> NAME: GMV V/M GUI
```

MENU TEXT: Vitals/Measurements GUI Application

TYPE: Broker (Client/Server) PACKAGE: GEN. MED. REC. - VITALS

DESCRIPTION: This option controls access to the GUI Vitals/Measurements

application. RPC: GMV MANAGER

RPC: GMV ADD VM

RPC: GMV ALLERGY

RPC: GMV CLINIC PT

RPC: GMV CONVERT DATE

RPC: GMV CUMULATIVE REPORT

RPC: GMV ENTERED IN ERROR-PATIENT

RPC: GMV EXTRACT REC

RPC: GMV GET CURRENT TIME

RPC: GMV LATEST VITALS BY LOCATION

RPC: GMV LATEST VITALS FOR PATIENT

RPC: GMV LATEST VM

RPC: GMV MARK ERROR

RPC: GMV PT GRAPH

RPC: GMV PTSELECT

RPC: GMV QUALIFIER TABLE

RPC: GMV ROOM/BED

RPC: GMV TEAM PATIENTS

<sup>&</sup>lt;sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Updated the routine description.

<sup>&</sup>lt;sup>2</sup> September 2009 Patch GMRV\*5.0\*23 Updated Menu Option By Name list.

### **Exported Options**

```
RPC: GMV V/M ALLDATA
RPC: GMV VITALS/CAT/QUAL
RPC: GMV WARD LOCATION
RPC: GMV WARD PT
RPC: GMV WARD/ROOM PATIENTS
RPC: GMV USER
RPC: GMV NUR UNIT PT
RPC: GMV CHECK DEVICE
RPC: GMV PARAMETER
RPC: ORWPT PTINQ
RPC: GMV GET CATEGORY IEN
RPC: GMV GET VITAL TYPE IEN
RPC: VAFCTFU CONVERT DFN TO ICN
RPC: VAFCTFU CONVERT ICN TO DFN
RPC: GMV DLL VERSION
RPC: GMV LOCATION SELECT
RPC: GMV CLOSEST READING
 UPPERCASE MENU TEXT: VITALS/MEASUREMENTS GUI APPLIC
```

# 6. Archiving and Purging

<sup>1</sup>No provisions for archiving or purging have been made for this release and none are planned for the future.

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Removed archive/purge instructions.

Archiving and Purging

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# 7. Callable Routines

There are no callable routines.

### Callable Routines

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## 8. External Relations

- 1. The following VistA applications must reside in the system before Vitals/Measurements, Version 5.0 can be installed:
  - a. VA FileMan V. 22 or greater,
  - b. Kernel V. 8.0 or greater,
  - c. Kernel Toolkit V. 7.3 or greater,
  - d. Kernel RPC Broker V. 1.1 or greater,
  - e. PIMS V. 5.3 or greater,
  - f. Intake and Output V. 4.0,
  - g Health Summary V. 2.7 or greater,
  - h. Nursing V. 4.0 or greater.
- 2. <sup>1</sup>Interface Control Registrations (formerly known as Integration Agreements) between the Vitals/Measurements software and other VistA applications exist. Database Interface Control Registrations (DICR) are available on the DBA menu on Forum. For complete information regarding the DICRs for Vitals V. 5.0, please refer to the *Integration Control Registrations* (Agreements) Menu [DBA IA ISC] option under the DBA [DBA] option on FORUM.

The following screen capture shows one way to access the DBA option in FORUM:

```
Select Software Services Primary Menu Option: DBA MENU
  NAME NAMESPACE AND FILESPACE REGISTRATIONS ...
  IAs
         INTEGRATION CONTROL REGISTRATIONS ...
   PKG
        PACKAGE FILE INFORMATION ...
         INSTITUTION FILE INFORMATION ...
   STN
         STANDARDS ...
   STND
Select DBA MENU Option: IAS INTEGRATION CONTROL REGISTRATIONS
  HELP
        Instructions for Entering ICRs
  GET# GET NEW Integration Control Registration #(s)
       ADD/EDIT Pending Integration Control Registration
  ADD
  ROLL Roll up ICR into Mail Message
  FILE File-type Integration Control Registrations Menu ...
  ROU Routine-type ICRs Menu ...
  RPC
        Remote Procedure Call-type ICRs Menu ...
  OTH
         Print 'Other'-type ICRs
  SUPP Supported References Menu ...
  CONT Controlled Subscription ICRs Menu ...
  PRIV Private ICRs Menu ...
  CUST Custodial Package Menu ...
  INQ
         Inquire to an Integration Control Registration
  SUBS Subscriber Package Menu ...
  APIS Supported API Report
  VBLE Lookup ICRs by Variable
  PEND Print ICRs in Pending Status
  ACTV Print Active ICRs
```

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 External Relations list removed and replaced with instructions on obtaining the information online. Integration Agreements renamed Interface Control Registrations.

### **External Relations**

### ALL Print ALL ICRs

Select INTEGRATION CONTROL REGISTRATIONS Option: CUST Custodial Package Menu

- 1 ACTIVE ICRs by Custodial Package
- 2 Print ALL ICRs by Custodial Package
- 3 Supported References Print All

Select Custodial Package Menu Option: 1 ACTIVE ICRs by Custodial Package Select PACKAGE NAME: GMRV GEN. MED. REC. - VITALS GMRV National DEVICE: HOME//

# 9. Internal Relations

The namespace used for version 5 is GMV.

```
12 NAME: GMV V/M GUI
 MENU TEXT: Vitals/Measurements GUI Application
  TYPE: Broker (Client/Server)
 PACKAGE: GEN. MED. REC. - VITALS
 DESCRIPTION:
                This option controls access to the GUI Vitals/Measurements
 application.
RPC: GMV MANAGER
RPC: GMV ADD VM
RPC: GMV ALLERGY
RPC: GMV CLINIC PT
RPC: GMV CONVERT DATE
RPC: GMV CUMULATIVE REPORT
RPC: GMV ENTERED IN ERROR-PATIENT
RPC: GMV EXTRACT REC
RPC: GMV GET CURRENT TIME
RPC: GMV LATEST VITALS BY LOCATION
RPC: GMV LATEST VITALS FOR PATIENT
RPC: GMV LATEST VM
RPC: GMV MARK ERROR
RPC: GMV PT GRAPH
RPC: GMV PTSELECT
RPC: GMV QUALIFIER TABLE
RPC: GMV ROOM/BED
RPC: GMV TEAM PATIENTS
RPC: GMV V/M ALLDATA
RPC: GMV VITALS/CAT/OUAL
RPC: GMV WARD LOCATION
RPC: GMV WARD PT
RPC: GMV WARD/ROOM PATIENTS
RPC: GMV USER
RPC: GMV NUR UNIT PT
RPC: GMV CHECK DEVICE
RPC: GMV PARAMETER
RPC: ORWPT PTINO
RPC: GMV GET CATEGORY IEN
RPC: GMV GET VITAL TYPE IEN
RPC: VAFCTFU CONVERT DFN TO ICN
RPC: VAFCTFU CONVERT ICN TO DFN
RPC: GMV DLL VERSION
RPC: GMV LOCATION SELECT
RPC: GMV CLOSEST READING
  UPPERCASE MENU TEXT: VITALS/MEASUREMENTS GUI APPLIC
```

<sup>&</sup>lt;sup>1</sup> September 2009 Patch GMRV\*5.0\*23 Updated list.

<sup>&</sup>lt;sup>2</sup> Patch GMRV\*5.0\*23 September 2009 Removed reference to timestamp.

**Internal Relations** 

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# 10. Package-wide Variables

No package-wide variables are used in this application.

### **Internal Relations**

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# 11. SAC Exemptions

There is one SAC Exemption associated with this package.

### VITALS/MEASUREMENTS

1 STANDARD SECTION: 1 ANSI

DATE GRANTED: JAN 25, 1996

Vitals/Measurements has been granted a SAC exemption to use the 1995 VA SAC #4.4.2.1 to use \$TEXT on a line that doesn't contain ;; to check for the existence of a routine.

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## 12. Software Product Security

## **Security Management**

No additional security measures are to be applied. Vitals/Measurements uses the standard RPC broker log-in procedure to validate the user and allow access to the system.

No additional licenses are necessary to run the software.

Confidentiality of staff and patient data and the monitoring of this confidentiality is no different than with any other paper reference.

### **Security Features**

a. Mail groups and alerts.

There are no mail groups or alerts associated with this software.

b. Remote systems.

Application data is transmitted to the <sup>1</sup>Health Data Repository (HDR).

c. Archiving/Purging.

Refer to the chapter on Archiving and Purging, in this manual.

d. Contingency Planning.

It is the responsibility of the using service to develop a local contingency plan to be used in the event of application problems.

e. Interfacing.

No specialized (non VA) interfaces are used or required by the application.

f. Electronic signatures.

Electronic signatures are not used by the application.

g. Menus.

There are no options of special note for the Information Security Officers (ISO's) to view.

.

<sup>&</sup>lt;sup>1</sup> April 2006 Patch GMRV\*5.0\*3 Added HDR reference.

### h. Security Keys.

There is one security key in this application, it is GMV MANAGER. This new key allows a user to view/create/edit all other user's templates in the Vitals module, without this key the user can only view/create/edit his/her own user templates. This key also allows a user to use (run) other user's templates in the Vitals application. This key is required to access the Vitals Manager module. This key should be assigned to the package coordinator.

#### i. File Security.

| NUMBER  | NAME   | GLOBAL NAME   | DD<br>ACC      | RD<br>ACC | WR<br>ACC        | DEL<br>ACC       | LAY<br>ACC       | AUD<br>ACC  |
|---|--|---|----------------|-----------|------------------|------------------|------------------|-------------|
| 120.5<br>120.51<br>120.52<br>120.53<br>120.57 | GMRV VITAL MEASUREMENT<br>GMRV VITAL TYPE<br>GMRV VITAL QUALIFIER<br>GMRV VITAL CATEGORY<br>GMRV VITALS PARAMETERS | ^GMR(120.5,<br>^GMRD(120.51,<br>^GMRD(120.52,<br>^GMRD(120.53,<br>^GMRD(120.57, | @ @ @<br>@ @ @ |           | @<br>@<br>@<br>@ | @<br>@<br>@<br>@ | @<br>@<br>@<br>@ | @<br>@<br>@ |

#### j. References.

There are no special reference materials for this package.

#### k. Official Policies.

There are no special official policies for this package.

# 13. <sup>1</sup>Glossary

- Access Code A unique sequence of characters known by and assigned only to the user, the system manager and/or designated alternate(s). The access code (in conjunction with the verify code) is used by the computer to identify authorized users.
- ADP Coordinator/ADPAC/Application Coordinator Automated Data Processing Application Coordinator. The person responsible for implementing a set of computer programs (application package) developed to support a specific functional area such as Nursing, PIMS, etc.
- Application A system of computer programs and files that have been specifically developed to meet the requirements of a user or group of users. Examples of VISTA applications are the PIMS and Vitals/Measurements application.
- Archive The process of moving data to some other storage medium, usually a magnetic disk, and deleting the information from active storage in order to free-up disk space on the system.
- Backup Procedures The provisions made for the recovery of data files and program libraries and for restart or replacement of ADP equipment after the occurrence of a system failure.
- BMI This is the patient's body mass index, which is calculated by dividing the person's weight in kilograms by the square of his height in meters.
- Bulletin A canned message that is automatically sent by MailMan to a user when something happens to the database.
- Contingency Plan A plan which assigns responsibility and defines procedures for use of the backup/restart/recovery and emergency preparedness procedures selected for the computer system based on risk analysis for that system.
- Data Dictionary A description of file structure and data elements within a file.
- Device A hardware input/output component of a computer system (e.g., CRT, printer).
- Edit Used to change/modify data typically stored in a file.
- Field A data element in a file.
- File The M construct in which data is stored for retrieval at a later time. A group of related records.

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Entire glossary updated..

- File Manager or FileMan Within this manual, FileManager or FileMan is a reference to VA FileMan. FileMan is a set of M routines used to enter, edit, print, and sort/ search related data in a file; a data base.
- Global An M term used when referring to a file stored on a storage medium, usually a magnetic disk. In the Vitals software, for example, vitals data is stored in one global, and patient data is stored in another global.
- GMRV This signifies the General Medical Record namespace assigned to the Vitals/Measurements application.
- GMRY This signifies the General Medical Record namespace assigned to the Intake and Output application.
- GMV Vitals/Measurements namespace, parent package to GMRV.
- GUI Graphical User Interface a Windows-like screen that uses pull-down menus, icons, pointer devices, and other metaphor-type elements that can make a computer program more understandable, easier to use, allow multi-processing (more than one window or process available at once), etc.
- I&O The Intake and Output application.
- IRMS Information Resource Management Service.
- Kernel A set of software utilities. These utilities provide data processing support for the application packages developed within the VA. They are also tools used in configuring the local computer site to meet the particular needs of the hospital. The components of this operating system include: MenuMan, TaskMan, Device Handler, Log-on/Security, and other specialized routines.
- LAYGO An acronym for Learn As You Go. A technique used by VA FileMan to acquire new information as it goes about its normal procedure. It permits a user to add new data to a file.
- M Formerly known as MUMPS or the Massachusetts (General Hospital) Utility Multi-Programming System. This is the programming language used to write all VISTA applications.
- MailMan An electronic mail, teleconferencing, and networking system.
- Menu A set of options or functions available to users for editing, formatting, generating reports, etc.
- Module A component of the Vitals software application that covers a single topic or a small section of a broad topic.

- Namespace A naming convention followed in the VA to identify various applications and to avoid collision between applications. It is used as a prefix for all routines and globals used by the application. The Vitals package uses GMV as its namespace.
- OIFO Office of Information Field Office, formerly known as Information Resource Management Field Office, and Information Systems Center.
- Option A functionality that is invoked by the user. The information defined in the option is used to drive the menu system. Options are created, associated with others on menus, or given entry/exit actions. For example, the GMV V/M GUI is the main menu for the Vitals/Measurements application.
- Package Otherwise known as an application. A set of M routines, files, documentation and installation procedures that support a specific function within VISTA (e.g., the ADT and Vitals/Measurements applications).
- Password A protected word or string of characters that identifies or authenticates a user, a specific resource, or an access type (synonymous with Verify Code).
- PIMS Patient Information Management System previously known as the MAS Package.
- Pointer A special data type of VA FileMan that takes its value from another file. This is a method of joining files together and avoiding duplication of information.
- Program A set of M commands and arguments, created, stored, and retrieved as a single unit in M.
- Protocol A single entry point referencing multiple routine entry points to execute several inter related, required processes which perform specific functions. When multiple protocols are associated with a single procedure (i.e., intravenous lines or IV lines), they are found grouped under a single option.
- Qualifier A word that gives a more detailed description of an item.
- Queuing The scheduling of a process/task to occur at a later time. Queuing is normally done if a task uses up a lot of computer resources.
- <RET> Carriage return.
- Routine A set of M commands and arguments, created, stored, and retrieved as a single unit in M.
- Security Key A function which unlocks specific options and makes them accessible to an authorized user.

- Sensitive Information Any information which requires a degree of protection and which should be made available only to authorized users.
- Site Configurable A term used to refer to features in the system that can be modified to meet the needs of each site.
- Software A generic term referring to a related set of computer programs.
- Synonym A qualifier abbreviation appended to vitals/measurements numeric values on graphic reports.
- Task Manager or TaskMan A part of Kernel which allows programs or functions to begin at specified times or when devices become available. See Queuing.
- User A person who enters and/or retrieves data in a system, usually utilizing a CRT.
- Utility An M program that assists in the development and/or maintenance of a computer system.
- Verify Code A unique security code which serves as a second level of security access. Use of this code is site specific; sometimes used interchangeably with a password.
- VISTA Veterans Health Information Systems and Technology Architecture.
- Vital Type A category of vital sign or measurement (e.g., pulse, respiration, blood pressure, temperature).
- Workstation A personal computer running the Windows 9x or NT operating system.

## 14. Appendix A – Parameter Settings<sup>1</sup>

This table contains a list of parameter settings used by the Vitals/Measurement Standalone and Vitals Lite Graphical User Interfaces (GUIs).

**Note:** The GUIs use these parameter settings to start the software. When a GUI is open and the user changes the settings (e.g., checks a checkbox) that change works immediately in the GUI, but the parameter setting is not saved to the server until the user exits the GUI. If you are trying to debug a problem and have a GUI and a Mumps session open with the parameter settings showing at the same time, you will not see the parameter settings change until you close the GUI.

How can you see these parameter settings on the server? Example:

#### >D ^XPAREDIT

--- Edit Parameter Values ---

Select PARAMETER DEFINITION NAME: GMV<return>

- 1 GMV ALLOW USER TEMPLATES Allow individual user templates
- 2 GMV DEFAULT VALUES ENTER GMV DEFAULTS
- 3 GMV DLL VERSION Vitals DLL version check
- 4 GMV GUI VERSION Active Vitals Measurements executables
- 5 GMV TEMPLATE Templates for vitals V5

Press <RETURN> to see more, '^' to exit this list, OR

CHOOSE 1-5: <return>

- 6 GMV TEMPLATE DEFAULT Default Templates for vitals V5
- 7 GMV USER DEFAULTS GMV User Defaults
- 8 GMV WEBLINK Vitals Measurments Home Page

CHOOSE 1-8: 7

Select NEW PERSON NAME: LASTNAME, FIRST < return>

Parameter setting Value
----ABNORMALBGCOLOR

ABNORMALBGCOLOR 15
ABNORMALBOLD OFF
ABNORMALQUALIFIERS ON
ABNORMALTEXTCOLOR 9

CLINIC\_INDEX 9

CPRSMetricStyle CPRSMetricStyle

CanvasAbnormal 15;9;0;1;15

October 2002

<sup>&</sup>lt;sup>1</sup> Patch GMRV\*5.0\*23 September 2009 Added Appendix A – Parameter Settings

CanvasNormal 15;0;0;1;15;15388544;15388544;ORWPT PTINQ

CloseInputWindowAfterSave DoNotCloseInputWindow

ConversionWarningStatus OFF

DefaultTemplate 547;VA(200,|full list

**GRAPH OPTIONS VISIBLE** 0 16777215 **GRAPHCOLOR GRAPHOPTIONS** OFF **GRAPHOPTIONS-1** OFF **GRAPHOPTIONS-2** OFF **GRAPHOPTIONS-3** OFF **GRAPHOPTIONS-4** ON 3 GRAPH\_INDEX

Enter RETURN to continue or '^' to exit:

| Parameter Name     | Example      | Explanation                            |
|--------------------|--------------|--|
| ABNORMALBGCOLOR    | 15           | A number that represents the data grid |
|                    |              | background color for abnormal values.  |
|                    |              | There are 16 colors to choose from.    |
|                    |              | 0 - Black                              |
|                    |              | 1 - Maroon                             |
|                    |              | 2 - Green                              |
|                    |              | 3 - Olive                              |
|                    |              | 4 - Navy                               |
|                    |              | 5 - Purple                             |
|                    |              | 6 - Teal                               |
|                    |              | 7 - Gray                               |
|                    |              | 8 - Silver                             |
|                    |              | 9 - Red                                |
|                    |              | 10 - Lime                              |
|                    |              | 11 - Yellow                            |
|                    |              | 12 - Blue                              |
|                    |              | 13 - Fuchsia                           |
|                    |              | 14 - Aqua                              |
|                    |              | 15 – White                             |
| ABNORMALBOLD       | ON or OFF    | ON means the abnormal values appear    |
|                    |              | in bold font. OFF means the abnormal   |
|                    |              | values appear in regular font.         |
| ABNORMALQUALIFIERS | ON or OFF    | ON means the qualifiers are shown on   |
|                    |              | the data grid for abnormal values. OFF |
|                    |              | means they are not shown for           |
|                    |              | abnormal values.                       |
| ABNORMALTEXTCOLOR  | 0 through 15 | The number that represents the text    |
|                    |              | color for abnormal values shown in     |
|                    |              | the data grid. (See the list above.)   |

| CLINIC_INDEX    | 1   | An RPC returns an array with the list of clinics to select from. This number   |
|-----------------|---|--|
|                 |   | indicates the array node of the clinic selected. It is "-1" if no clinic was ever selected.  |
| CPRSMetricStyle | CPRSMetricStyle or<br>VitalsMetricStyle       | When the "Units as Drop Down List" checkbox in the "Enter Vitals" window is checked this value is "CPRSMetricStyle". If it is not checked the value is "VitalsMetricStyle".  |
| CanvasAbnormal  | 15;9;0;1;15                                   | User preferences for abnormal values. Set from File   User Options   Values Display tab.  1 <sup>st</sup> value (e.g., 15) - Color of the background. Same as ABNORMALBGCOLOR.  2 <sup>nd</sup> value (e.g., 9) - Color of the text. Same as ABNORMALTEXTCOLOR. 3 <sup>rd</sup> value (e.g., 0) - Show text in bold font. Same as ABNORMALBOLD. 4 <sup>th</sup> value (e.g., 1) - Show qualifiers. Same as ABNORMAL QUALIFIERS. 5 <sup>th</sup> value (e.g. 15) - Background color for today's values. Not currently used. User cannot set this value.   |
| CanvasNormal    | 15;0;0;1;15;15388544;1538<br>8544;ORWPT PTINQ | User preferences for normal values. Set from File   User Options   Values Display tab.  1 <sup>st</sup> value (e.g., 15) - Color of the background. Same as NORMALBGCOLOR.  2 <sup>nd</sup> value (e.g., 0) - Color of the text. Same as NORMALTEXTCOLOR.  3 <sup>rd</sup> value (e.g., 0) - Show text in bold font. Same as NORMALBOLD.  4 <sup>th</sup> value (e.g., 1) - Show qualifiers. Same as NORMALQUALIFIERS. 5 <sup>th</sup> value (e.g., 15) - Background color for today's values. Not currently used. User cannot set this value.  The following values are set by the software. The user cannot change them. These values control the File |

|                           |                       | Patient Inquiry display.                            |
|---------------------------|-----------------------|---|
|                           |                       | 6 <sup>th</sup> value (e.g., 15388544) –            |
|                           |                       | Background color                                    |
|                           |                       | 7 <sup>th</sup> value (e.g., 15388544) – Text color |
|                           |                       | 8 <sup>th</sup> value (e.g., ORWPT PTINQ) –         |
|                           |                       | RPC Name  |
| DefaultTemplate           | 547;VA(200, full list | The input template selected by the                  |
|                           | ,                     | user. In this example, the template                 |
|                           |                       | belongs to user 547 in the NEW                      |
|                           |                       | PERSON file (#200). The template                    |
|                           |                       | name is "full list".                                |
| CD A DIL ODTIONE VICIDI E | 0.271                 |   |
| GRAPH OPTIONS VISIBLE     | 0 or 1                | 1 means the "Values", "Time Scale",                 |
|                           |                       | "3D" and "Allow Zoom" checkboxes                    |
|                           |                       | are visible. 0 means they are hidden.               |
|                           |                       | This parameter is set from the Vitals               |
|                           |                       | Lite GUI.   |
| GRAPHCOLOR                | 16777215              | The code for the background color for               |
|                           |                       | the data graph. There are too many                  |
|                           |                       | colors to list.                                     |
| GRAPHOPTIONS              | ON or OFF             | The "Show/Hide Graph Option"                        |
|                           |                       | controls a panel that contains the                  |
|                           |                       | "Values", "3D", "Allow Zoom" and                    |
|                           |                       | "Time Scale" checkboxes. ON means                   |
|                           |                       | the panel will be displayed to the user.            |
|                           |                       | OFF means it will be hidden from                    |
|                           |                       | view.   |
|                           |                       | view.   |
|                           |                       | Same as the GRAPH OPTIONS                           |
|                           |                       | VISIBLE parameter but is set from the               |
|                           |                       | Vitals Standalone GUI.                              |
| GRAPHOPTIONS-1            | ON or OFF             | ON means the "Values" checkbox has                  |
|                           |                       | a checkmark. OFF means it is blank.                 |
| GRAPHOPTIONS-2            | ON or OFF             | ON means the "3D" checkbox has a                    |
| GRAITIOI TIONS-2          | ON OF OTT             | checkmark. OFF means it is blank.                   |
| GRAPHOPTIONS-3            | ON or OFF             | ON means the "Allow Zoom"                           |
| OKAFIIOF HONS-3           | ON OF OTT             | checkbox has a checkmark. OFF                       |
|                           |                       |   |
| CD / DIVODENOVA /         | ON OFF                | means it is blank.                                  |
| GRAPHOPTIONS-4            | ON or OFF             | ON means the "Time Scale" checkbox                  |
|                           |                       | has a checkmark. OFF means it is                    |
|                           |                       | blank.  |
| GRAPH_INDEX               | 0                     | A number to indicate the vital type(s)              |
|                           |                       | that appear on the data graph.                      |
|                           |                       | 0 – Temperature                                     |
|                           |                       | 1 – Pulse   |
|                           |                       | 2 – Respiration                                     |

|                        |              | 2 D/D                                    |
|------------------------|--------------|--|
|                        |              | 3 - B/P                                  |
|                        |              | 4 – Pulse Ox                             |
|                        |              | 5 – Height                               |
|                        |              | 6 – Weight                               |
|                        |              | 7 – BMI                                  |
|                        |              | 8 - Pain                                 |
|                        |              | 9 – Height/Weight                        |
|                        |              | 10 - TPR                                 |
|                        |              | 11 – B/P - Weight                        |
|                        |              | 12 – C/G                                 |
|                        |              | 13 – CVP                                 |
|                        |              | 14 – Intake                              |
|                        |              | 15 – Output                              |
| GRIDSIZE               | 212          | *  |
|                        |              | Width in pixels of the data grid.        |
| GridDateRange          | 12           | Date Range selection. Default value is   |
|                        |              | 12 (Two Years).                          |
|                        |              | 0-Today                                  |
|                        |              | 1 – T-1                                  |
|                        |              | 2-T-2                                    |
|                        |              | 3 - T - 3                                |
|                        |              | 4-T-4                                    |
|                        |              | 5 - T - 5                                |
|                        |              | 6 - T - 6                                |
|                        |              | 7 – T-7                                  |
|                        |              | 8 - T - 8                                |
|                        |              | 9 – T-9                                  |
|                        |              | 10 – Six Months                          |
|                        |              | 11 – One Year                            |
|                        |              | 12 – Two Years                           |
|                        |              | 13 – All Results                         |
|                        |              |  |
| T (X7', 1 T' (TT ' 1 ) | 120          | 14 – Date Range                          |
| LastVitalsListHeight   | 130          | Height in pixels of the "Latest vitals   |
|                        |              | on file for this patient" portion of the |
|                        |              | "Enter Vitals' window.                   |
| NORMALBGCOLOR          | 0 through 15 | The background color for the normal      |
|                        |              | values in the data grid. (See the list   |
|                        |              | above.)                                  |
| NORMALBOLD             | ON or OFF    | ON means the normal values appear in     |
|                        |              | the bold font. OFF means the normal      |
|                        |              | values appear in regular font.           |
| NORMALQUALIFIERS       | ON or OFF    | ON means the qualifiers are shown on     |
|                        |              | the data grid for normal values. OFF     |
|                        |              | means they are not shown for normal      |
|                        |              | values.                                  |
| NORMALTEXTCOLOR        | Othrough 15  |  |
| NORMALIEATCULUK        | 0 through 15 | The number that represents the text      |

|                              | color for normal values shown in the                                   |
|------------------------------|--|
|                              |  |
|                              | data grid. (See the list above.)                                       |
|                              | Not currently used. May be used in the                                 |
|                              | future.  |
| 211                          | Width in pixels of the "Templates"                                     |
|                              | portion of the "Enter Vitals" window.                                  |
| ON or OFF                    | ON means the "Enable R" checkbox                                       |
|                              | in "Enter Vitals" window is checked.                                   |
|                              | OFF means it is not checked.   |
| 4                            | A number that indicates which patient                                  |
|                              | selector tab is selected.  |
|                              | 0 – Unit   |
|                              | 1 – Ward   |
|                              | 2 – Team   |
|                              | 3 – Clinic   |
|                              | 4 – All  |
| 1.0                          | Indicates the number of seconds the                                    |
| 1.0                          | software will wait before trying to                                    |
|                              | automatically look up a patient name                                   |
|                              | using the characters entered by the                                    |
|                              | user. Set by the user in:  |
|                              | File   User Options   Search Delay tab.                                |
| Chawl astVitals or NoI stoot | Show or hide the values for the "Latest                                |
|                              |  |
| vitais                       | vitals on file for this patient" portion of the "Enter Vitals" window. |
| CI T I .                     |  |
|                              | "ShowTemplates" means that the   |
| NoTemplates                  | "Template" list in the "Enter Vitals"                                  |
|                              | window is shown. "NoTemplates"   |
|                              | means it is hidden.  |
| -1                           | An RPC returns an array with the list                                  |
|                              | of teams to select from. This number                                   |
|                              | indicates the array node of the team                                   |
|                              | selected. It is "-1" if no team was ever                               |
|                              | selected.  |
| 800;600;-4;-4;808;574;0      | Parameters of the Vitals Standalone                                    |
|                              | (EXE) window.  |
|                              | 1 <sup>st</sup> value (e.g., 800) – User's                             |
|                              | Windows screen resolution (width)                                      |
|                              | $2^{nd}$ value (e.g., 600) – User's                                    |
|                              | Windows screen resolution (height)                                     |
|                              | 3 <sup>rd</sup> value (e.g., -4) – Position of the left                |
|                              | side of the window   |
|                              | 4 <sup>th</sup> value (e.g., -4) – Position of the top                 |
|                              | side of the window   |
|                              | 5 <sup>th</sup> value (e.g., 808) – Width in pixels                    |
|                              |  |

|                   | 1                     | 0.1   |
|-------------------|-----------------------|---|
|                   |                       | of the window   |
|                   |                       | 6 <sup>th</sup> value (e.g., 574) – Height in pixels  |
|                   |                       | of the window   |
|                   |                       | $7^{\text{th}}$ value (e.g., 0) – Not currently used. |
|                   |                       | Cannot be set by the user.                            |
| UNIT_INDEX        | 7                     | An RPC returns an array with the list                 |
|                   |                       | of (nursing) units to select from. This               |
|                   |                       | number indicates the array node of the                |
|                   |                       | unit selected. It is "-1" if no unit was              |
|                   |                       | ever selected.  |
| UnavailableStatus | ON or OFF             | ON means the "Enable U" checkbox                      |
|                   |                       | in "Enter Vitals" window is checked.                  |
|                   |                       | OFF means it is not checked.                          |
| VIEW-HEIGHT       | 566                   | The height in pixels for the Vitals Lite              |
|                   |                       | (DLL) View window.                                    |
| VIEW-LEFT         | 59                    | The pixel location for the left side of               |
| VIEW EET 1        |                       | the Vitals Lite (DLL). View window.                   |
| VIEW-TOP          | 0                     | The pixel location for the top of the                 |
| VIEW-TOI          | O O                   | Vitals Lite (DLL) View window.                        |
| VIEW-WIDTH        | 741                   |   |
| VIEW-WIDTH        | /41                   | The width in pixels for the Viitals Lite              |
| X7'. 1 T '.       | 200,600,0,0,000,566,0 | (DLL) View window.                                    |
| VitalsLite        | 800;600;0;0;800;566;0 | Parameters of the Vitals Lite (DLL)                   |
|                   |                       | window.   |
|                   |                       | 1 <sup>st</sup> value (e.g., 800) – User's            |
|                   |                       | Windows screen resolution (width)                     |
|                   |                       | 2 <sup>nd</sup> value (e.g., 600) – User's            |
|                   |                       | Windows screen resolution (height)                    |
|                   |                       | $3^{rd}$ value (e.g., 0) – Position of the left       |
|                   |                       | side of the window                                    |
|                   |                       | $4^{th}$ value (e.g., 0) – Position of the top        |
|                   |                       | side of the window                                    |
|                   |                       | 5 <sup>th</sup> value (e.g., 800) – Width in pixels   |
|                   |                       | of the window   |
|                   |                       | 6 <sup>th</sup> value (e.g., 566) – Height in pixels  |
|                   |                       | of the window   |
|                   |                       | 7 <sup>th</sup> value (e.g., 0) – Not currently used. |
|                   |                       | Cannot be set by the user.                            |
| WARD_INDEX        | 6                     | An RPC returns an array with the list                 |
|                   |                       | of wards to select from. This number                  |
|                   |                       | indicates the array node of the ward                  |
|                   |                       | selected. It is "-1" if no ward was ever              |
|                   |                       | selected. It is -1 if no ward was ever                |
|                   |                       | sciected.   |