



RESOURCE AND PATIENT MANAGEMENT SYSTEM

IHS Reference Laboratory

(BLR)

GUI Monitor Guide

Version 5.2 Patch 1033
September 2014

Office of Information Technology
Division of Information Technology
Albuquerque, New Mexico

Table of Contents

- 1.0 Introduction..... 1**
- 2.0 Ensemble GUI Monitor 1**
 - 2.1 Using the Ensemble GUI Monitor 1
 - 2.2 Installing the Ensemble GUI Monitor 7
 - 2.2.1 Installing the Client on the Desktop 8
 - 2.2.2 Setting UP the RPMS Files..... 8
- Glossary..... 10**
- Acronym List 12**
- Contact Information 14**

1.0 Introduction

This document describes the GIS and Ensemble GUI Monitors that are available to users.

2.0 Ensemble GUI Monitor

In December 2011, the Indian Health Service released Laboratory patch 1030 which contains the first reference laboratory interface using Ensemble as the formatting and transport layer for HL7 order and result messages being exchanged over a secure VPN connection between an external reference laboratory and between RPMS at an I/T/U facility. Ensemble passes messages into and out of RPMS using the HL7 Version 1.6 link manager, links, and filers. Because Ensemble is the operating system for the RPMS server, access to review reference laboratory interface status and troubleshoot interface processes is normally limited to IT staff. In addition, the HL7 menu is normally inaccessible to non-IT staff. To facilitate the ability of non-IT staff to review the interface status and restart the LEDI production in the reference laboratory namespace of Ensemble and to restart HL7 links and filers, a GUI monitor has been developed.

Note: This interface currently is only used for Quest Billing and AFL interfaces.

This section is divided into two main sub-sections:

1. Using the Ensemble Reference Laboratory GUI Monitor.
2. Installing and Configuring the Ensemble Reference Laboratory GUI Monitor.

2.1 Using the Ensemble GUI Monitor

Installation of the Reference Laboratory Monitor results in the placement of an icon as shown in Figure 2-1 on the desktop.

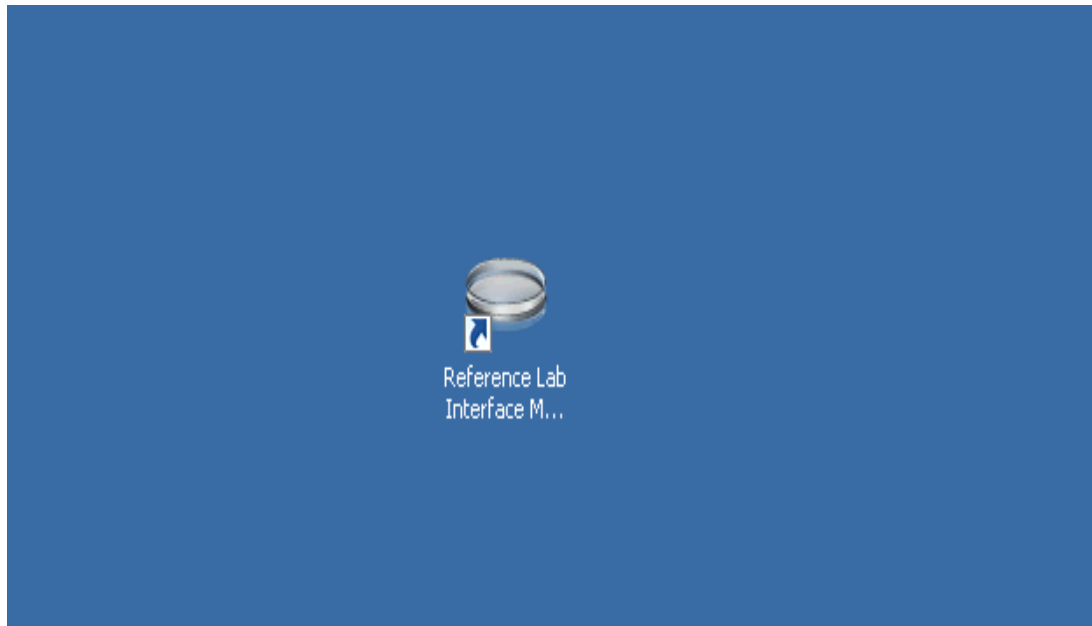


Figure 2-1: Icon for Ensemble Reference Laboratory Monitor

If the Monitor has been correctly configured, when the user double-clicks the icon, the Login screen appears (Figure 2-2).

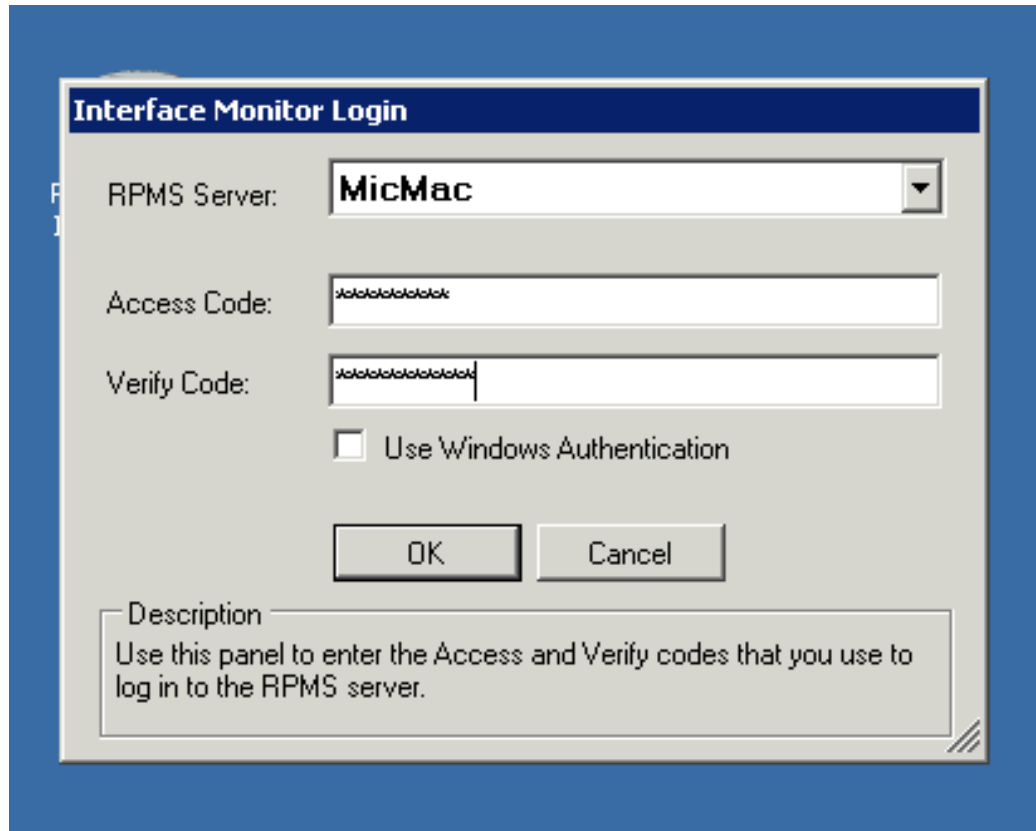


Figure 2-2: Monitor Login screen

This screen identifies the RPMS server by name and the users can enter their RPMS Access and Verify Codes. Pressing Enter or clicking **OK** will open the monitor.

If there is only one site using this server, the user is taken directly to the monitor screen. If the RPMS server is used by more than one facility, each in its own namespace, the user can select the correct facility to be monitored. Figure 2-3 shows an example of a screen to select a facility on a shared server.

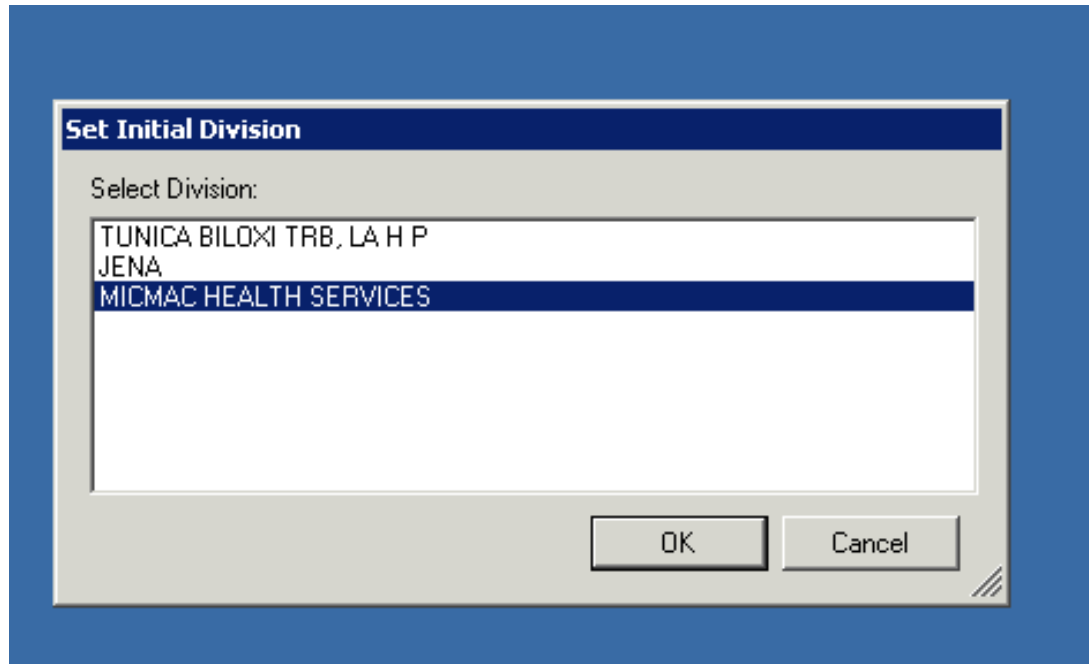


Figure 2-3: Selecting the current facility on a shared server

The user may highlight the desired facility and click **OK** to continue.

When the monitor opens, there are six individual monitor boxes as well as an overall status box in the monitor. In addition, when the monitor opens, a stoplight is displayed in the lower right hand corner of the user's computer screen. (Figure 2-4). The "Master" monitor may be minimized and the stoplight used to monitor the interface in the course of the day.

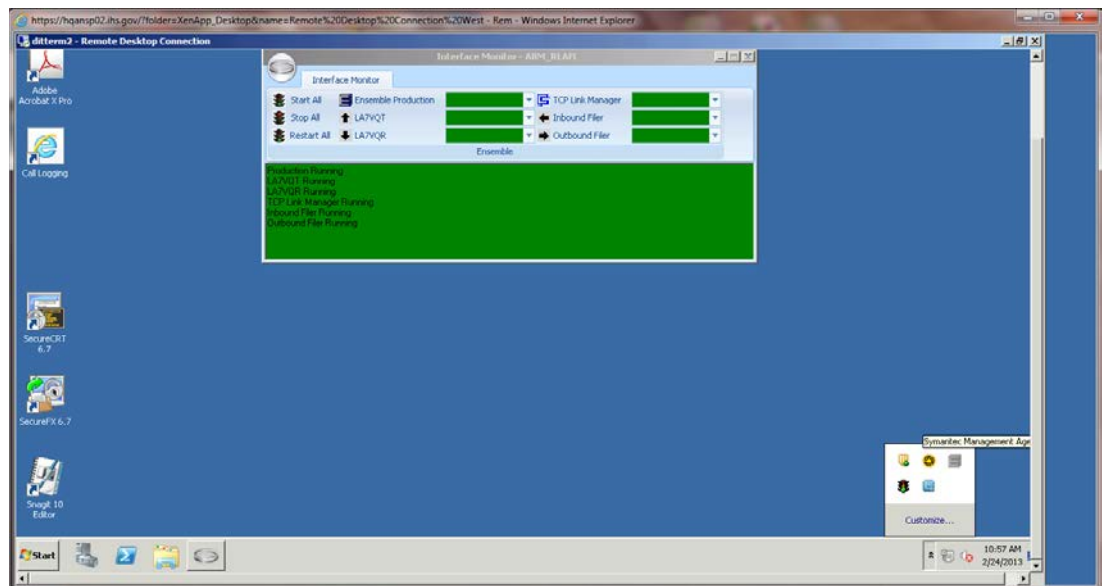


Figure 2-4: Monitor Stoplight in System Management box

Green indicates that a monitor process is running and that the interface process is active.

Figure 2-5 shows the Master Monitor Screen when all processes appear to be running.

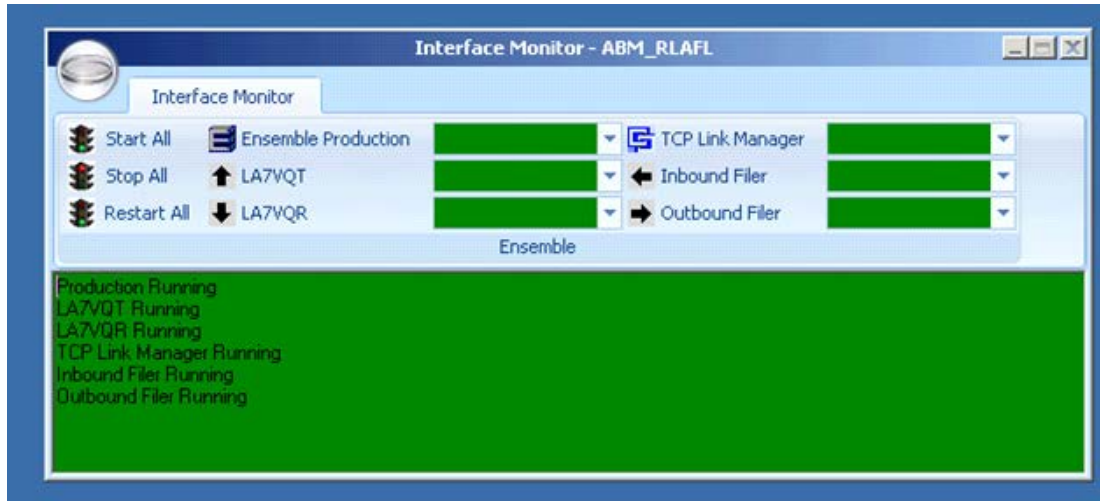


Figure 2-5: Ensemble Interface Monitor with all processes active

Red indicates that a monitor process is not running and must be restarted.

Figure 2-6 shows the Master Monitor screen.

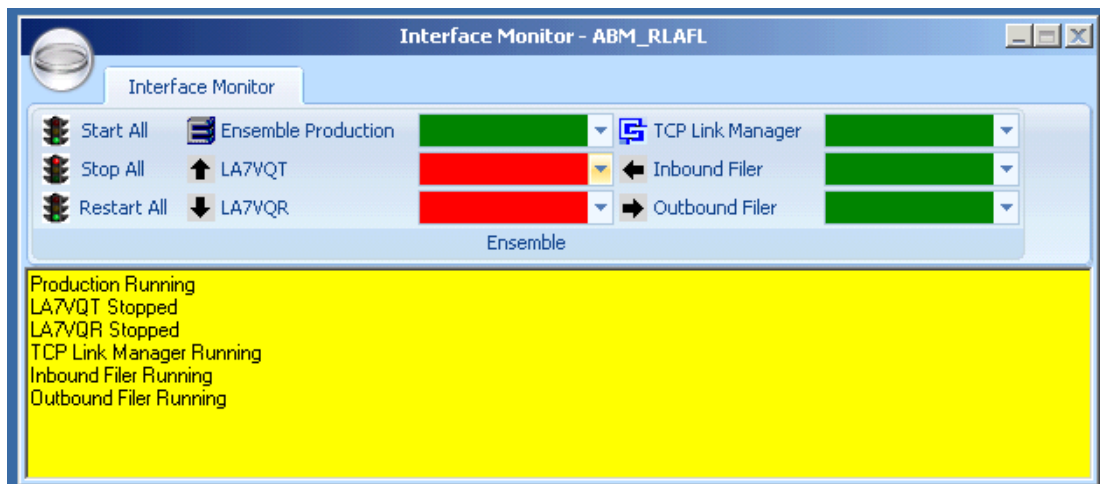


Figure 2-6: Ensemble Interface Monitor with LA7VQT and LA7VQR stopped

Yellow on the stoplight warns the user that one or more processes is not running.

Figure 2-7 shows the yellow stoplight along with the pop-up box showing process status.

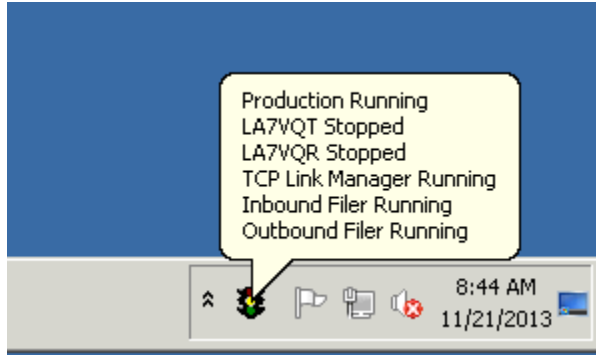


Figure 2-7: Stoplight showing status with one or more processes stopped

Stoplight actions that may be taken include the following:

- Start All
- Stop All
- Restart All - Stops and then restarts each process

Actions may be taken for individual interface processes as well by clicking on the drop down box to the right of each interface process. Actions available include:

- Start
- Stop
- Restart - Stops and then restarts each process

All interface processes must be running to ensure that electronic orders leave the RPMS server when a Manifest is Shipped and in order for results to be returned to RPMS by the external reference laboratory.

The role of each individual interface process is listed below:

- Ensemble Production – formats and routes HL7 order and results messages over the VPN between the external reference laboratory and the RPMS server.
- LA7VQT - Is the transmitter between the inside of RPMS and Ensemble
- LA7VQR - Is the receiver between the inside of RPMS and Ensemble
- TCP Link Manager - Handles the monitoring of TCP HL7 links such as LA7VQT and LA7VQR
- Inbound Filer - Controls the filing of inbound messages into the Laboratory software
- Outbound Filer - Controls the filing of outbound messages out of the Laboratory software

In the upper left hand corner of the monitor is an icon that allows a user to select another interface that may have been set up on this monitor. (Figure 2-8) When the icon is clicked a menu is displayed that allows the user to change the namespace being monitored, refresh the screen after changing namespaces, or exit the monitor. These tools are especially useful for IT staff at area offices that may be responsible for more than one Ensemble interface site.

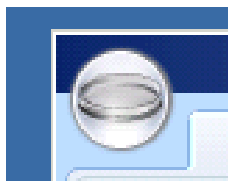


Figure 2-8 Icon to access other Ensemble interfaces

Double clicking on the icon opens a box (Figure 2-9) where the user may select the options to:

- Change Namespace – Use this option to select from other namespaces that may have been configured on this monitor.
- Refresh – Use this option to refresh after changing namespaces.
- Exit – Use this option to exit from the Ensemble Monitor.

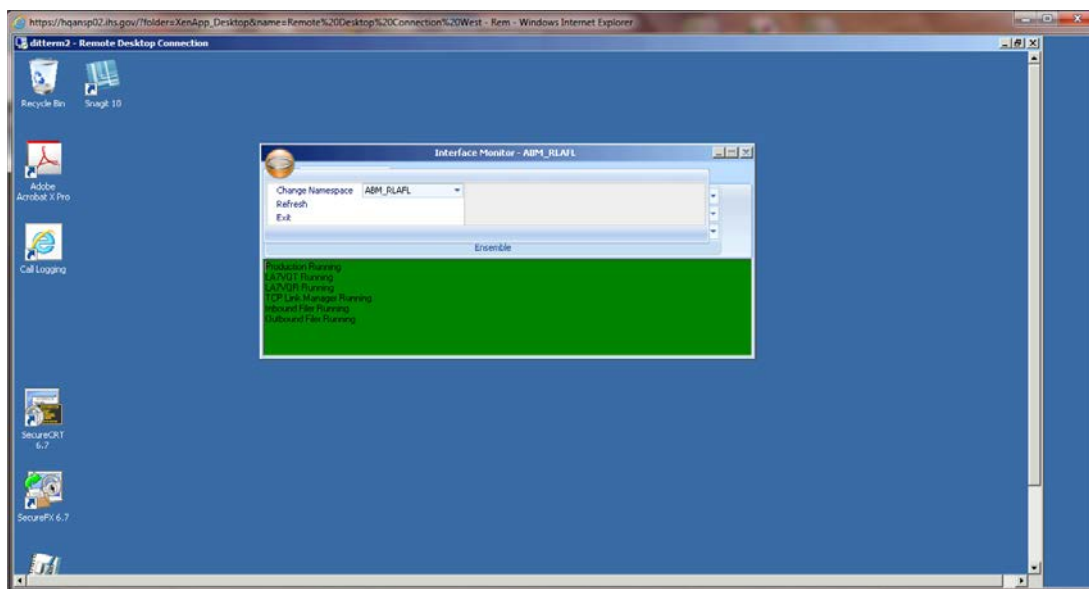


Figure 2-9: Changing Namespace to Monitor

2.2 Installing the Ensemble GUI Monitor

The Interface Monitor software contains three files:

1. The KIDS installation is contained in the BLR 5.2 Patch 1033 kids build, filename is blr_0520.33k.
2. The blr_0520.33client.zip file contains two files: blr_0520.33setup.exe and blr_0520.33.msi.

There are two steps for installing the Ensemble Reference Laboratory Monitor:

1. Installing the client on the desktop.
2. Setting up the “backend” RPMS files

2.2.1 Installing the Client on the Desktop

To install the client on the desktop, unzip the file blr_0520.33client.zip into a directory of your choice on the client’s PC. You will have two files blr_0520.33.msi and blr_0520.33setup.exe. Double click on the blr_0520.33setup.exe icon.

When the Windows installer opens, select the option to install for Everyone.

Follow the prompts to complete installation.

2.2.2 Setting UP the RPMS Files

Assign the option BLR REFLAB MONITOR PARAMS to a menu (BLRREFLAB MENU) or run it on its own.

Use the option, BLR REFLAB MONITOR PARAMS to configure the monitor as follows:

1. At the “Select BLR REFERENCE LAB MONITOR PARAMETERS SITE” prompt, select a site to monitor, this will be the site of the reference lab.
2. At the “Select USER” prompt, enter the user or users that will have access to use the monitor.
3. At the “Select ENSEMBLE PRODUCTION” prompt enter the namespace WHERE the production is running. (i.e., CMIRLQST).

That will allow the user to login and administer the HL7 jobs and production for the reference laboratory via the Monitor.

Figure 2-10 shows an example of configuring the monitor.

```
Select BLR REFERENCE LAB MONITOR PARAMETERS SITE: CIM*DEV
SITE: CIM*DEV//
Select USER: WILLIAMS,MARK A
USER: WILLIAMS,MARK A//
```

Select ENSEMBLE PRODUCTION: CMIRLQOT

Figure 2-10: Configuring the Ensemble Monitor

Glossary

Accession Area

A functional area or department in the laboratory where specific tests are performed.

Accession Number

A unique alpha-numeric (combination of letters and numbers) assigned to an individual patient specimen when it is received in the laboratory.

Alert

Brief on-line notice issued to users as they complete a cycle through the menu system.

File

A set of related records or entries treated as a single unit.

FileMan

The database management system for the VA's VistA system and IHS' RPMS system.

Global

In MUMPS, global refers to a variable stored on disk (global variable) or the array to which the global variable may belong (global array).

Menu

A list of choices for computing activity. A menu is a type of option designed to identify a series of items (other options) for presentation to the user for selection. When displayed, menu-type options are preceded by the word "Select" and followed by the word "option" as in Select Menu Management option: (the menu's select prompt).

Parameter

A name in a function or subroutine definition that is replaced by, or bound to, the corresponding actual argument when the function or subroutine is called.

<PARAMETER>

A Caché error caused by the number of parameters passed to a labeled routine by a user-written function reference or a DO command exceeding the number of formal parameters declared for the labeled line.

<SYNTAX>

A Caché error caused by the malformation of a language construct, such as a misspelled or missing keyword.

<UNDEFINED>

A Caché error caused by a reference to an undefined variable.

VistA

The Veterans Health Information Systems and Technology Architecture. An enterprise-wide information system built around an Electronic Health Record (EHR), used throughout the VA medical system.

Acronym List

ANSI	American National Standards Institute. A private non-profit organization that oversees the development of voluntary consensus standards.
API	Application Program Interface. Program calls provided for use by application programmers in order to carry out standard computing activities without needing to duplicate utilities.
ASCII	American Standard Code for Information Interchange. A code for information exchange between computers.
CPRS	Computerized Patient Record System. The VA's Electronic Health Record (EHR).
EHR	Electronic Health Record. A system that integrates all elements of a patient's health history, including medications, lab work, x-rays, scans, EKGs, medical diagnoses, etc.
EPI	Emerging Pathogens Initiative. The VA's Infectious Disease Program Office Emerging Pathogens Initiative is used to identify new antibiotic-resistant and otherwise problematic pathogens within the Veterans Health Administration (VHA) facilities. Not used by IHS.
HL7	Health Level Seven. An ANSI approved American National Standard for electronic data exchange in health care.
IEN	Internal Entry Number. A unique number used to identify an entry within a file.
IHS	Indian Health Service. An Operating Division (OPDIV) within the U.S. Department of Health and Human Services (HHS).

MUMPS	Massachusetts General Hospital Utility Multi-Programming System. A procedural, interpreted general-purpose programming language oriented towards database applications.
NOIS	National Online Information Sharing. A computer program that provides a means of logging and tracking problems associated with the daily operation of computer systems within VistA. Not used by IHS.
PCE	Patient Care Encounter. The VA's system that helps sites collect, manage, and display outpatient encounter data (including providers, procedure codes, and diagnostic codes) in compliance with the 10/1/96 Ambulatory Care Data Capture mandate from the Under Secretary of Health. Not used by IHS.
POC	Point Of Care. A Laboratory test that is performed at the site of care (examination, treatment, diagnosis, etc.).
RPMS	Resource and Patient Management System. A suite of software applications used at IHS facilities to support administrative, clerical, and clinical functions.
VA	Veteran's Administration. United States Department of Veterans Affairs
VBECs	VistA Blood Establishment Computer Software. The VA's current Blood Bank software system. Not used by IHS.

Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (888) 830-7280 (toll free)

Web: <http://www.ihs.gov/helpdesk/>

Email: support@ihs.gov