



INTAKE AND OUTPUT TECHNICAL MANUAL AND PACKAGE SECURITY GUIDE

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Preface

The Intake and Output Technical Manual and Package Security Guide has been developed for IRMS (Information Resource Management Service) and CIOFO (Chief Information Office Field Office) support personnel and contains technical information on the application. The content covers: software implementation and maintenance, routine descriptions, a file list, an exported option list, cross-references, security issues, archiving and purging, resource requirements, callable routines, external relations, package-wide variables, and on-line documentation.

The Intake and Output Technical Manual and Package Security Guide is one of four manuals associated with the application. Information discussing the functionality of the software's menus and options is found in the Intake and Output User Manual. Information critical to the successful installation of the software can be found in the Intake and Output Installation Guide. New release changes can be found in the Intake and Output Release Notes.

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Introduction

The Intake and Output (I&O) application is designed to store, in the patient's electronic medical record, all patient intake and output information associated with a patient's hospital stay or outpatient visit. This application is not service specific and currently is interfaced with the PIMS (MAS), Nursing, and Pharmacy applications.

Functionality:

- Users may electronically document patient intake (e.g., oral fluids, tube feedings, intravenous fluids, irrigations, and other types of intake defined by the facility) and patient output (e.g., excreted patient material such as urine, nasogastric secretions, emesis, drainage, liquid feces/stool, and other types of output defined by the facility).
- Intake data can be entered through either a quick or detailed route. The quick route documents the total fluid consumed. Detailed information requests the user to enter specific type of fluid intake (e.g., orange juice, water, soup) along with the quantity absorbed.
- The Start/Add/DC IV and Maintenance option contains seven protocols associated with intravenous therapy:
 1. Start IV - Start a new IV line or heparin/saline lock/port.
 2. Solution: Replace/DC/Convert/Finish Solution - DC current solution then replace a new solution to the selected IV line or convert the IV according to the user's choice.
 3. Replace Same Solution - Replace the same solution to a selected IV.
 4. D/C IV Lock/Port and Site - Remove IV/lock/port from a selected IV site.
 5. Care/Maintenance/Flush - Check site condition, dressing change, tube change and flush.
 6. Add Additional Solutions(s) - Add additional solution(s) without discontinuing an existing one.
 7. Restart DC'd IV - Restart an IV which was DC'd due to infiltration or other reasons.
 8. Adjust Infusion Rate - Adjust infusion rate for a selected IV.
 9. Flush - Flush all IV line(s) for a selected infusion site.
- The software supports documentation of intravenous intake via both single and multi-lumen catheters.
- The software is interfaced with the IV module of the Pharmacy software.

- The following reports are included:

- Print I/O Summary by Patient (by Shift and Day(s))
 - Print I/O Summary (Midnight to Present)
 - Print I/O Summary (48 Hrs)
 - 24 Hours Itemized Shift Report
 - Intravenous Infusion Flow Sheet

The last four reports can be printed for all patients on a ward, for patients in selected rooms on a ward, and for an individual patient.

- Patient Intake and Output information is printed on the following Nursing application reports:

- End of Shift Report
 - Vital Signs Record
 - Expanded SF511 Report (Itemized I/O)

This version of Intake and Output is not interfaced with the Health Summary or the Order Entry/Results Reporting applications.

Chapter 1 Implementation and Maintenance

Description:

This chapter provides guidelines for implementing the Intake and Output (I&O) application. It is important to complete all of the steps contained in this chapter before assigning menu options to patient care services staff.

Virgin Installation of Software:

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

1. Setting up the software environment

Information Resource Management Services (IRMS) staff must install the software using the Installation Guide in either a test environment or the production (VAH) directory. The following *VISTA* (Veterans Health Information Systems and Technology Architecture) packages should reside in the environment where the Intake and Output application is to be installed:

- a. Kernel V. 8.0 or greater,
- b. Kernel Toolkit V. 7.3 or greater,
- c. VA FileMan V. 21 or greater,
- d. PIMS (MAS) V. 5.3 or greater,
- e. Inpatient Medications V. 4.5 or greater (optional).

The Intake and Output software must be installed before the Nursing (V. 4.0) application can be installed because specific Nursing (V. 4.0) options are dependent upon the Intake and Output routines. 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 data base.

The Intake and Output application displays ordered IV solutions (for a patient) from the Inpatient Medications software. Without Inpatient Medications loaded, users may still implement the Start/Add/DC IV and Maintenance module of the Intake and Output package.

2. Name spacing and file listing.

Intake and Output is found in the GMRY namespace. All routines, templates and options begin with GMRY. File numbers are in the range of 126 to 126.95 and are stored in the ^GMR and ^GMRD globals.

3. Editing site configurable files

- a. The Intake Type option edits the GMRY Input Type (#126.56) file.
- b. The Output Type option edits the GMRY Output Type (#126.58) file.
- c. The Output Subtype option edits the GMRY Output Subtype (#126.6) file.
- d. The Intake Items option edits the GMRY Intake Items (#126.8) file.
- e. The IV Site option edits the GMRY IV Site (#126.7) file.
- f. The IV Solution option edits the GMRY NUR IV Solution (#126.9) file.
- g. The Shift Starting Hour and Other Parameters option edits the GMRY NUR Shift/Other (#126.95) file.
- h. The IV Site Description option edits the GMRY IV Site Description (#126.72) file.
- i. The IV Catheter option edits the GMRY IV Catheter (#126.74) file.
- j. The IV DC'ed Reason option edits the GMRY IV DC'ed Reason (#126.76) file.

A primary concern for the ADP Coordinator is the Configure I/O Files (Option 9) in the GMRYMGR menu option that contains the options listed in a-j (above). This option allows you to enter: a) various IV or oral fluids and the amount in milliliters associated with containers, b) names of IV sites that may be specific to your facility, c) various needle sizes and other items associated with the Intake and Output software. The package is exported with a few file entries but you have the opportunity to enter information which will meet the needs of your facility since these are site configurable files.

4. Queueing TaskMan jobs.

No scheduled TaskMan options are associated with this application.

5. GMRY and NUR I&O options.

There is a separate set of similar options that are used to document and print I&O data in both the Intake and Output, and the Nursing applications. In the Intake and Output package, the software identifies a patient's ward or clinic location using the Hospital Location (#44) file. The Nursing package uses the Nursing Location (#211.4) file to identify an inpatient's associated nursing unit. Providing access to I&O options through the Nursing application was done for the convenience of nursing package users to streamline their inpatient workload. All data entered through either package is stored in the Intake and Output application's files.

6. Assigning menus.

The GMRYMGR menu contains the following menus and options and is the primary menu for the application's ADP Coordinator.

Select OPTION NAME: **GMRYMGR** Patient Intake/Output Menu

- 1 Enter/Edit Patient Intake
- 2 Enter/Edit Patient Output
- 3 Start/Add/DC IV and Maintenance
- 4 Print I/O Summary by Patient (by Shift & Day(s))
- 5 Print I/O Summary (Midnight to Present)
- 6 Print I/O Summary (48 Hrs)
- 7 24 Hours Itemized Shift Report
- 8 Intravenous Infusion Flow Sheet
- 9 Configure I/O Files (ADP Coordinator Only) ...

Clinical staff should be assigned options 1-8. Option 9 is assigned to the Intake and Output application coordinator. You will note that options 4 through 8 are print options. We suggest that options 4 through 7 be given to physicians, dietitians and others who may have an interest in viewing a patient's or location's Intake and Output.

The following table is a reference for print/sort parameters for the reports using menu option numbers.

OPTION	DATE RANGE	WARD	SELECTED RM	PATIENT	SCREEN PRT	ITEMIZED*
4	YES	NO	NO	YES	YES	NO
5	NO	YES	YES	YES	YES	NO
6	NO	YES	YES	YES	YES	NO
7	YES	YES	YES	YES	YES	YES
8	YES	YES	YES	YES	YES	YES (IV)

*NOTE: For intake to be itemized DETAILED INPUT in the Enter/Edit Patient Intake option must be used. IV solutions will display names from the IV option.

7. Printer related issues

Reports can be printed on a dot matrix printer or a laser printer. There are no linear graphic reports for this version of Intake and Output.

Non-Virgin Installation of Software

Follow steps 1 through 8 (above) when preparing the Intake and Output software for use in an environment where a previous version of the application has been installed.

Resource Requirements

1. Data Entry and Printer Devices:

The minimal hardware requirements for input and output devices is dependent upon the location in which patient care is provided and the quality of reports generated.

Input devices: In an inpatient setting, there should be a sufficient number of data input devices at the point of care, in the nurse's station, physician offices, and conference rooms. Ambulatory Care settings should provide input devices at the point of care, physician offices, conference rooms and reception areas.

Output devices: There should be minimally one to two laser printers on an inpatient unit to support this application. Ambulatory care area should have a printer in both the reception area and a centralized location in each clinic.

2. Disk Storage:

The following statistics regarding the disk storage requirements of the Intake and Output software were compiled by the Alpha/Beta test sites.

<u>Globals</u>	<u>Type of Data</u>	<u>Size</u>
DDs		90 k
GMR	Patient data for the Text Generator, Vitals/Measurements and Intake and Output Modules	5-20 k/ patient

<u>Globals</u>	<u>Type of Data</u>	<u>Size</u>
GMRD	Static data for the Text Generator, Vitals/Measurements and Intake and Output Modules	20 k depending on the global efficiency

Future Plans:

Intake and Output will be enhanced in later versions to meet the needs of the medical facilities. A link with Health Summary is planned.

Chapter 2 Routine Descriptions

GMRYCATH ;HIRMFO/YH-UTILITY FOR CATHETER AND OTHER ;11/6/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYDCIV ;HIRMFO/YH-DISCONTINUE IV LINES AND INFUSION SITE ;8/15/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYDIR ;HIRNFO/YH-REPLACE...WITH ;12/14/95
;;4.0;Intake/Output;;Mar 31, 1997
GMRYED0 ;HIRMFO/YH-INTAKE, OUTPUT AND IV ENTRY POINTS ;5/2/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYED1 ;HIRMFO/YH-ENTER/EDIT PATIENT INTAKE/OUTPUT ;1/17/97
;;4.0;Intake/Output;;Mar 31, 1997
GMRYED2 ;HIRMFO/YH-PATIENT SEARCH/START IV ;1/17/97
;;4.0;Intake/Output;;Mar 31, 1997
GMRYED3 ;HIRMFO/YH-START IV AND IV MAINTENANCE ENTRY POINT ;9/10/92
;;4.0;Intake/Output;;Mar 31, 1997
GMRYED4 ;HIRMFO/YH-INTRAVENOUS INFUSION PROTOCOL ;10/16/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYED5 ;HIRMFO/YH-IV ACCESS, IV SOLUTIONS AND CATHETERS ;10/3/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYED6 ;HIRMFO/YH-D/C IV AND IV SITE MAINTENANCE ;9/10/92
;;4.0;Intake/Output;;Mar 31, 1997
GMRYFILE ;HIRMFO/FT-Set I/O File Security ;3/5/97 16:41
;;4.0;Intake/Output;;Mar 31, 1997
GMRYFLSH ;HIRMFO/YH-FLUSH IV LINES FOR A SELECTED IV SITE ;6/5/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYFLW0 ;HIRMFO/YH-INTRAVENOUS INFUSION FLOW SHEET ;1/25/93
;;4.0;Intake/Output;;Mar 31, 1997
GMRYFLW1 ;HIRMFO/YH-INTRAVENOUS INFUSION FLOW SHEET CONT. ;8/9/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYFLW2 ;HIRMFO/YH-IV FLOW SHEET UTILITY ;8/9/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYINFS ;HIRMFO/YH-ADJUST INFUSION RATE ;4/5/94
;;4.0;Intake/Output;;Mar 31, 1997
GMRYINTK ;HIRMFO/YH-PATIENT INTAKE ;11/6/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYMNT ;HIRMFO/YH-SITE CARE/MAINTENANCE/FLUSH ;8/13/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYMNT1 ;HIRMFO/YH-IV CARE/MAINTENANCE/FLUSH (CONTINUE) ;8/13/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYPSIV ;HIRMFO/YH-DISPLAY ACTIVE PATIENT IV ORDER ;5/22/96
;;4.0;Intake/Output;;Mar 31, 1997
GMRYRP0 ;HIRMFO/YH-PATIENT INTAKE/OUTPUT REPORT ;2/25/91
;;4.0;Intake/Output;;Mar 31, 1997
GMRYRP1 ;HIRMFO/YH-TMP FOR PATIENT INTAKE/OUTPUT REPORTS-1 ;2/28/91
;;4.0;Intake/Output;;Mar 31, 1997
GMRYRP2 ;HIRMFO/YH-TMP FOR PATIENT INTAKE/OUTPUT REPORTS-2 ;2/28/91
;;4.0;Intake/Output;;Mar 31, 1997
GMRYRP3 ;HIRMFO/YH-PATIENT INTAKE/OUTPUT REPORT HEADING ;3/6/91
;;4.0;Intake/Output;;Mar 31, 1997
GMRYRP4 ;HIRMFO/YH-TMP FOR SUMMING UP PATIENT I/O ;3/6/91
;;4.0;Intake/Output;;Mar 31, 1997
GMRYRP5 ;HIRMFO/YH, RM-PATIENT SEARCH BY MAS WARD ;11/7/95
;;4.0;Intake/Output;;Mar 31, 1997
GMRYSE0 ;HIRMFO/YH-ITEMIZED PATIENT I/O REPORT BY SHIFT PART 1 ;5/13/96
;;4.0;Intake/Output;;Mar 31, 1997

Routine Descriptions

GMRYSE1 ;HIRMFO/YH-ITEMIZED PATIENT I/O REPORT BY SHIFT PART 2 ;5/13/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYSE2 ;HIRMFO/YH-ITEMIZED PATIENT I/O REPORT BY SHIFT PART 3 ;3/11/91
;;4.0;Intake/Output;;Mar 31, 1997

GMRYSE3 ;HIRMFO/YH-ITEMIZED PATIENT I/O REPORT BY SHIFT PART 4 ;5/13/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYSTCA ;HIRMFO/YH-IV SITE AND CATHETER SELECTION ;3/1/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT0 ;HIRMFO/YH-PATIENT I/O UTILITIES - PATIENT SEARCH AND IV DISPLAY
;2/12/91
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT1 ;HIRMFO/YH-PATIENT I/O UTILITIES - IV SEARCH BY TYPE ;2/14/91
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT10 ;HIRMFO/YH-IV RESTART ;6/11/93
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT11 ;HIRMFO/YH-IV FLUSH ;10/18/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT12 ;HIRMFO/YH-ROOM SEARCH AND OTHER UTILITIES ;11/6/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT13 ;HIRMFO/YH-INTRAVENOUS INFUSION PROTOCOL ;10/16/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT2 ;HIRMFO/YH-PATIENT I/O UTILITIES - CALLS FROM DD AND IV SITE CHECK
;5/10/91
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT3 ;HIRMFO/YH-PATIENT I/O UTILITIES - DIC CALL ;11/6/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT4 ;HIRMFO/YH,RM-PATIENT SELECTION BY UNIT, ROOM OR SINGLE PATIENT
;11/7/95
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT5 ;HIRMFO/YH-UTILITIES FOR IV INPUT/OUTPUT TRANSFORM ;5/13/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT6 ;HIRMFO/YH-IV SOLUTION SELECT FROM PHARMACY/NURS FILES ;5/13/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT7 ;HIRMFO/YH-IV SOLUTION SELECT TO START ;10/16/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT8 ;HIRMFO/YH-IV/LOCK/PORT ENTER/EDIT ;2/12/91
;;4.0;Intake/Output;;Mar 31, 1997

GMRYUT9 ;HIRMFO/YH-LIST/SELECT IV LINES ;10/15/96
;;4.0;Intake/Output;;Mar 31, 1997

GMRYXENV ;HIRMFO/FT-Environment Check for intake & Output v4.0 ;1/21/97
14:26
;;4.0;Intake/Output;;Mar 31, 1997

GMRYXPOS ;HIRMFO/YH,RM-POST INITIALIZATION FOR INTAKE/OUTPUT ;1/22/97
;;4.0;Intake/Output;;Mar 31, 1997

GMRYXPRE ;HIRMFO/YH,RM-PRE INITIALIZATION FOR INTAKE/OUTPUT ;1/22/97
;;4.0;Intake/Output;;Mar 31, 1997

Chapter 3 File List and Related Information

File Descriptions

GMRY PATIENT I/O FILE 126

This file contains a patient's intake and output measurements.

GMRY INPUT TYPE 126.56

This file contains a list of major input/intake types such as PO, TUBE FEEDING, etc. The ADP Coordinator is allowed to configure the file entries.

GMRY OUTPUT TYPE 126.58

This file contains the major output types such as URINE, STOOL, DRAINS, etc. The ADP Coordinator is allowed to configure the file entries.

GMRY OUTPUT SUBTYPE 126.6

This file contains subtypes associated with the output types. For example, void, foley and suprapubic are subtypes of the output type urine. The ADP Coordinator is allowed to configure the file.

GMRY IV SITE 126.7

This file contains a list of IV infusion sites. The ADP Coordinator is allowed to configure the file.

GMRY IV SITE DESCRIPTION 126.72

This file contains descriptions of IV infusion site conditions. The ADP Coordinator is allowed to enter/edit the file entries.

GMRY IV CATHETER 126.74

This file contains the names of IV catheters in different types and sizes. The ADP Coordinator is allowed to enter/edit the file entries.

GMRY IV DC'ED REASON 126.76

This file contains reasons why the IV infusion site was discontinued. The ADP Coordinator is allowed to enter/edit the file.

GMRY INTAKE ITEMS 126.8

This file contains NON-IV intake items such as tea, coffee, etc. The ADP Coordinator is allowed to configure the file.

GMRY NUR IV SOLUTION 126.9

This file contains names of IV solutions used for the Intake and Output application. An entry is used when no *VISTA* Pharmacy order is available. The ADP Coordinator is allowed to enter/edit the file entries.

GMRY NUR SHIFT/OTHER 126.95

This file contains the various site configurable parameters for the Intake and Output application.

Package Default Definition

FILE #	NAME	UP	SEND	DATA	SITE	RSLV	USER
		DATE	SEC.	COMES			OVER
		DD	CODE	W/FILE	DATA	PTS	RIDE
126	GMRY PATIENT I/O FILE	YES	YES	NO			
126.56	GMRY INPUT TYPE	YES	YES	YES	ADD	YES	YES
126.58	GMRY OUTPUT TYPE	YES	YES	YES	ADD	YES	YES
126.6	GMRY OUTPUT SUBTYPE	YES	YES	YES	ADD	YES	YES
126.7	GMRY IV SITE	YES	YES	YES	ADD	YES	YES
126.72	GMRY IV SITE DESCRIPTION	YES	YES	YES	ADD	YES	YES
126.74	GMRY IV CATHETER	YES	YES	YES	ADD	YES	YES
126.76	GMRY IV DC'ED REASON	YES	YES	YES	ADD	YES	YES
126.8	GMRY INTAKE ITEMS	YES	YES	YES	ADD	YES	YES
126.9	GMRY NUR IV SOLUTION	YES	YES	YES	ADD	YES	YES
126.95	GMRY NUR SHIFT/OTHER	YES	YES	YES	ADD	YES	YES

Chapter 4 Exported Options

Menu Options by Name

NAME: GMRY DC REASON
TYPE: edit
PACKAGE: GEN. MED. REC. - I/O
X ACTION PRESENT: YES
MENU TEXT: IV DC'ed Reason
CREATOR: POSTMASTER
E ACTION PRESENT: YES
DESCRIPTION: This option allows the ADP coordinator to edit reasons for discontinuing an IV into the GMRY IV DC'ED REASON file (#126.76).
EXIT ACTION: K DDEL,DLAYGO
ENTRY ACTION: S (DDEL,DLAYGO)=126.76
DIC {DIC}: GMRD(126.76,
DIE: GMRD(126.76,
UPPERCASE MENU TEXT: IV DC'ED REASON
DIC(0): AEMQL
DR {DIE}: .01;

NAME: GMRY EDIT INTAKE
TYPE: run routine
PACKAGE: GEN. MED. REC. - I/O
X ACTION PRESENT: YES
MENU TEXT: Enter/Edit Patient Intake
CREATOR: POSTMASTER
E ACTION PRESENT: YES
DESCRIPTION: This option allows the user to enter or edit patient IV and NON-IV intake records.
EXIT ACTION: K GMROUT
ENTRY ACTION: I \$G(^GMRD(126.95,1,"OFF")) S XQUIT=1
ROUTINE: EN3^GMRYED0
UPPERCASE MENU TEXT: ENTER/EDIT PATIENT INTAKE
TIMESTAMP: 55106,45597

NAME: GMRY EDIT OUTPUT
TYPE: run routine
PACKAGE: GEN. MED. REC. - I/O
X ACTION PRESENT: YES
MENU TEXT: Enter/Edit Patient Output
CREATOR: POSTMASTER
E ACTION PRESENT: YES
DESCRIPTION: This option allows the user to enter or edit patient output records.
EXIT ACTION: K GMROUT
ENTRY ACTION: I \$G(^GMRD(126.95,1,"OFF")) S XQUIT=1
ROUTINE: EN2^GMRYED0
UPPERCASE MENU TEXT: ENTER/EDIT PATIENT OUTPUT
TIMESTAMP: 55105,46935

NAME: GMRY FILE EDIT
MENU TEXT: Configure I/O Files (ADP Coordinator Only)
TYPE: menu
PACKAGE: GEN. MED. REC. - I/O
X ACTION PRESENT: YES
CREATOR: POSTMASTER
E ACTION PRESENT: YES
DESCRIPTION: This menu is provided for the ADP coordinator to configure the following file entries: GMRY INPUT TYPE (#126.56), GMRY OUTPUT TYPE (#126.58), GMRY OUTPUT SUBTYPE (#126.6), GMRY IV SITE (#126.7), GMRY INTAKE ITEMS (#126.8), GMRY NUR IV SOLUTION (#126.9), GMRY NUR SHIFT/OTHER (#126.95), GMRY IV SITE DESCRIPTION (#126.72), GMRY IV CATHETER (#126.74) and GMRY IV DC'ED REASON (#126.76).
ITEM: GMRY INPUT FILE1
DISPLAY ORDER: 1
SYNONYM: 1
ITEM: GMRY OUTPUT FILE1
DISPLAY ORDER: 2
SYNONYM: 2
ITEM: GMRY OUTPUT FILE2
DISPLAY ORDER: 3
SYNONYM: 3
ITEM: GMRY INTAKE ITEMS
DISPLAY ORDER: 4
SYNONYM: 4
ITEM: GMRY IV SITE
DISPLAY ORDER: 5
SYNONYM: 5
ITEM: GMRY IV SOL
DISPLAY ORDER: 6
SYNONYM: 6
ITEM: GMRY NURSHIFT
DISPLAY ORDER: 7
SYNONYM: 7
ITEM: GMRY SITE DESCRP
DISPLAY ORDER: 8
SYNONYM: 8

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ITEM: GMRY IV CATH                                SYNONYM: 9
  DISPLAY ORDER: 9
ITEM: GMRY DC REASON                              SYNONYM: 10
  DISPLAY ORDER: 10
  ENTRY ACTION: I $G(^GMRD(126.95,1,"OFF")) S XQUIT=1
  TIMESTAMP: 56656,39523
  UPPERCASE MENU TEXT: CONFIGURE I/O FILES (ADP COORD)

NAME: GMRY I/O 48HRS                             MENU TEXT: Print I/O Summary (48 Hrs)
  TYPE: run routine                               CREATOR: POSTMASTER
  PACKAGE: GEN. MED. REC. - I/O
  DESCRIPTION: This option summarizes patient intake/output for the previous
day and today.
  ROUTINE: EN5^GMRYRP0                           TIMESTAMP: 55441,54683
  UPPERCASE MENU TEXT: PRINT I/O SUMMARY (48 HRS)

NAME: GMRY I/O CURRENT                           MENU TEXT: Print I/O Summary (Midnight to Present)
  TYPE: run routine                               CREATOR: POSTMASTER
  PACKAGE: GEN. MED. REC. - I/O
  DESCRIPTION: This option summarizes current patient intake/output.
  ROUTINE: EN4^GMRYRP0
  UPPERCASE MENU TEXT: PRINT I/O SUMMARY (MIDNIGHT TO

NAME: GMRY I/O SHIFT AND EVENT                   MENU TEXT: 24 Hours Itemized Shift Report
  TYPE: run routine                               CREATOR: POSTMASTER
  PACKAGE: GEN. MED. REC. - I/O
  DESCRIPTION: This option produces itemized patient intake and output
reports by shift for a period of time as defined by the user.
  ROUTINE: EN1^GMRYSE0
  UPPERCASE MENU TEXT: 24 HOURS ITEMIZED SHIFT REPORT

NAME: GMRY I/O SUM                               MENU TEXT: Print I/O Summary by Patient (by Shift & Day(s))
  TYPE: run routine                               CREATOR: POSTMASTER
  PACKAGE: GEN. MED. REC. - I/O
  DESCRIPTION: This option summarizes patient intake/output by major category
and shift for a period of time as defined by the user.
  ROUTINE: EN1^GMRYRP0                           TIMESTAMP: 55427,53365
  UPPERCASE MENU TEXT: PRINT I/O SUMMARY BY PATIENT (

NAME: GMRY INPUT FILE1                           MENU TEXT: Intake Type
  TYPE: edit                                       CREATOR: POSTMASTER
  PACKAGE: GEN. MED. REC. - I/O                   E ACTION PRESENT: YES
  X ACTION PRESENT: YES
  DESCRIPTION: This option is used by the ADP coordinator to configure the
NON-IV intake type entries for the GMRY INPUT TYPE file (#126.56). For
example, PO, TUBE FEEDING, and OTHER are input types.
  EXIT ACTION: K DLAYGO                           ENTRY ACTION: S DLAYGO=126.56
  DIC {DIC}: GMRD(126.56,                         DIC(0): AEMQL
  DIE: GMRD(126.56,                               DR {DIE}: .01;1
  UPPERCASE MENU TEXT: INTAKE TYPE

NAME: GMRY INTAKE ITEMS                           MENU TEXT: Intake Items
  TYPE: edit                                       CREATOR: POSTMASTER
  PACKAGE: GEN. MED. REC. - I/O                   E ACTION PRESENT: YES
  X ACTION PRESENT: YES
  DESCRIPTION: This option allows the ADP coordinator to enter items into the
GMRY INTAKE ITEMS file (#126.8) pointed to by the GMRY PATIENT I/O FILE file
(#126).
  EXIT ACTION: K DLAYGO                           ENTRY ACTION: S DLAYGO=126.8
  DIC {DIC}: GMRD(126.8,                         DIC(0): AEMQL
  DIE: GMRD(126.8,                               DR {DIE}: .01;1;2
  UPPERCASE MENU TEXT: INTAKE ITEMS

```

NAME: GMRY IV CARE

MENU TEXT: Start/Add/DC IV and Maintenance

TYPE: run routine

CREATOR: POSTMASTER

PACKAGE: GEN. MED. REC. - I/O

E ACTION PRESENT: YES

DESCRIPTION: This option contains seven protocols associated with intravenous therapy:

1. Start IV - Starts a new IV line or a heparin/saline lock/port.
2. Solution: Replace/DC/Convert/Finish Solution - DC's the current solution, then replaces a new solution to the selected IV line or converts the IV according to the user's choice.
3. Replace Same Solution - Replaces the same solution to a selected IV line.
4. DC IV/Lock/Port and Site - Removes the IV/lock/port from a selected IV site and documents tubing changes.
5. Care/Maintenance/Flush - Checks the site condition, and documents dressing, tubing changes and flushes.
6. Add Additional Solution(s) - Adds additional solution(s) to an IV line without discontinuing an existing one.
7. Restart DC'd IV - Restarts an IV which was discontinued due to infiltration or other reasons.
8. Adjust Infusion Rate - Adjusts infusion rate for a selected IV.
9. Flush - Flushes all IV line(s) for a selected infusion site.

ENTRY ACTION: I \$G(^GMRD(126.95,1,"OFF")) S XQUIT=1

ROUTINE: EN1^GMRYED0

TIMESTAMP: 55441,47646

UPPERCASE MENU TEXT: START/ADD/DC IV AND MAINTENANC

NAME: GMRY IV CATH

MENU TEXT: IV Catheter

TYPE: edit

CREATOR: POSTMASTER

PACKAGE: GEN. MED. REC. - I/O

E ACTION PRESENT: YES

X ACTION PRESENT: YES

DESCRIPTION: This option allows the ADP coordinator to enter types of IV catheters into the GMRY IV CATHETER file (#126.74).

EXIT ACTION: K DIDEI,DLAYGO

ENTRY ACTION: S (DIDEI,DLAYGO)=126.74

DIC {DIC}: GMRD(126.74,

DIC(0): AEMQL

DIE: GMRD(126.74,

DR {DIE}: .01;1

UPPERCASE MENU TEXT: IV CATHETER

NAME: GMRY IV FLOW

MENU TEXT: Intravenous Infusion Flow Sheet

TYPE: run routine

CREATOR: POSTMASTER

PACKAGE: GEN. MED. REC. - I/O

DESCRIPTION: This option prints intravenous flow sheets by ward, room or by patient.

ROUTINE: EN1^GMRYFLW0

TIMESTAMP: 55699,43960

UPPERCASE MENU TEXT: INTRAVENOUS INFUSION FLOW SHEE

NAME: GMRY IV SITE

MENU TEXT: IV Site

TYPE: edit

CREATOR: POSTMASTER

PACKAGE: GEN. MED. REC. - I/O

E ACTION PRESENT: YES

X ACTION PRESENT: YES

DESCRIPTION: This option allows the ADP coordinator to enter IV sites into the GMRY IV SITE file (#126.7). This information is used to track the IV insertion site and assist with documentation of the site's status and surrounding skin integrity.

EXIT ACTION: K DIDEI,DLAYGO

ENTRY ACTION: S (DIDEI,DLAYGO)=126.7

DIC {DIC}: GMRD(126.7,

DIC(0): AEMQL

DIE: GMRD(126.7,

DR {DIE}: .01

UPPERCASE MENU TEXT: IV SITE

NAME: GMRY IV SOL

MENU TEXT: IV Solution

TYPE: edit

CREATOR: POSTMASTER

PACKAGE: GEN. MED. REC. - I/O

E ACTION PRESENT: YES

X ACTION PRESENT: YES

DESCRIPTION: The ADP coordinator can enter IV solutions into the GMRY NUR

Exported Options

IV SOLUTION file (#126.9) through this option. The IV solutions include admixtures, hyperals, intralipids, piggybacks and blood/blood products.
EXIT ACTION: K DIDEL,DLAYGO ENTRY ACTION: S (DIDEL,DLAYGO)=126.9
DIC {DIC}: GMRD(126.9, DIC(0): AEMQL
DIE: GMRD(126.9, DR {DIE}: .01;1;2
UPPERCASE MENU TEXT: IV SOLUTION

NAME: GMRY NURSHIFT
MENU TEXT: Shift Starting Hour and Other Parameters
TYPE: edit CREATOR: POSTMASTER
PACKAGE: GEN. MED. REC. - I/O
DESCRIPTION: The shift starting hours stored in the GMRY NUR SHIFT/OTHER file (#126.95) are used to calculate the patient's total intake/output for night, day and evening shifts, respectively. The data type for hours can be entered "0800", "1600" and "2400".
DIC {DIC}: GMRD(126.95, DIC(0): AMEQL
DIE: GMRD(126.95, DR {DIE}: 1;2;3
TIMESTAMP: 55516,49891
UPPERCASE MENU TEXT: SHIFT STARTING HOUR AND OTHER

NAME: GMRY OUTPUT FILE1 MENU TEXT: Output Type
TYPE: edit CREATOR: POSTMASTER
PACKAGE: GEN. MED. REC. - I/O E ACTION PRESENT: YES
X ACTION PRESENT: YES
DESCRIPTION: This option is provided for the ADP coordinator to configure the entries for the GMRY OUTPUT TYPE file (#126.58). URINE, STOOL and DRAINS, for example, are major output types.
EXIT ACTION: K DLAYGO ENTRY ACTION: S DLAYGO=126.58
DIC {DIC}: GMRD(126.58, DIC(0): AMEQL
DIE: GMRD(126.58, DR {DIE}: .01;1
UPPERCASE MENU TEXT: OUTPUT TYPE

NAME: GMRY OUTPUT FILE2 MENU TEXT: Output Subtype
TYPE: edit CREATOR: POSTMASTER
PACKAGE: GEN. MED. REC. - I/O E ACTION PRESENT: YES
X ACTION PRESENT: YES
DESCRIPTION: This option allows the ADP coordinator to enter the entries for the GMRY OUTPUT SUBTYPE file (#126.6) pointed to by the GMRY PATIENT I/O FILE file (#126). VOID, FOLEY and STRAIGHT CATH, for example, are subtypes of URINE.
EXIT ACTION: K DLAYGO ENTRY ACTION: S DLAYGO=126.6
DIC {DIC}: GMRD(126.6, DIC(0): AEMQL
DIE: GMRD(126.6, DR {DIE}: .01;1
UPPERCASE MENU TEXT: OUTPUT SUBTYPE

NAME: GMRY SITE DESCRP MENU TEXT: IV Site Description
TYPE: edit CREATOR: POSTMASTER
PACKAGE: GEN. MED. REC. - I/O E ACTION PRESENT: YES
X ACTION PRESENT: YES
DESCRIPTION: This option allows the ADP coordinator to enter IV site descriptions into the GMRY IV SITE DESCRIPTION file (#126.72). This information is used for documenting site maintenance.
EXIT ACTION: K DLAYGO,DIDEL ENTRY ACTION: S (DIDEL,DLAYGO)=126.72
DIC {DIC}: GMRD(126.72, DIC(0): AEMQL
DIE: GMRD(126.72, DR {DIE}: .01;
UPPERCASE MENU TEXT: IV SITE DESCRIPTION

NAME: GMRYMGR MENU TEXT: Patient Intake/Output Menu
TYPE: menu CREATOR: POSTMASTER
PACKAGE: GEN. MED. REC. - I/O
DESCRIPTION: This is the main menu for the Intake and Output(I&O) application. It contains options for: (1) tracking patient intake and output, (2) starting and discontinuing IV lines and fluids, (3) documenting IV care, and (4) printing various intake and output reports.
ITEM: GMRY EDIT INTAKE SYNONYM: 1

DISPLAY ORDER: 1	
ITEM: GMRY EDIT OUTPUT	SYNONYM: 2
DISPLAY ORDER: 2	
ITEM: GMRY IV CARE	SYNONYM: 3
DISPLAY ORDER: 3	
ITEM: GMRY I/O SUM	SYNONYM: 4
DISPLAY ORDER: 4	
ITEM: GMRY I/O CURRENT	SYNONYM: 5
DISPLAY ORDER: 5	
ITEM: GMRY I/O 48HRS	SYNONYM: 6
DISPLAY ORDER: 6	
ITEM: GMRY FILE EDIT	SYNONYM: 9
DISPLAY ORDER: 9	
ITEM: GMRY IV FLOW	SYNONYM: 8
DISPLAY ORDER: 8	
ITEM: GMRY I/O SHIFT AND EVENT	SYNONYM: 7
DISPLAY ORDER: 7	
TIMESTAMP: 56656,39523	TIMESTAMP OF PRIMARY MENU: 56007,50166
UPPERCASE MENU TEXT: PATIENT INTAKE/OUTPUT MENU	

Chapter 5 Cross References

Included in this section is the information about the cross-references of the application.

GMRY PATIENT I/O FILE (126) FILE

PATIENT

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on .01 field of the file.

INTAKE (126.01) SUB-FILE

INTAKE DATE/TIME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field of the file. This index sorts the intake measurements by date/time for a patient.

NAME: TYP01

DESCRIPTION: TYP01 MUMPS cross-reference is created to delete an old intake measurement index ^GMR(126,DA(1),"IN","TYP",9999999-INTAKE DATE/TIME,INTAKE TYPE,DA)="".

INTAKE TYPE

NAME: TYP1

DESCRIPTION: TYP1 MUMPS cross-reference is created to sort intake measurements by inverted INTAKE DATE/TIME and INTAKE TYPE.

OUTPUT (126.02) SUB-FILE

OUTPUT DATE/TIME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field of the file. This index sorts the output measurements by date/time for a patient.

NAME: TYP01

DESCRIPTION: TYP01 MUMPS cross-reference is created to delete an old output record index ^GMR(126,DA(1),"OUT","TYP",9999999-OUTPUT DATE/TIME,OUTPUT TYPE,DA)="".

OUTPUT TYPE

NAME: TYP1

DESCRIPTION: TYP1 MUMPS cross-reference is created to sort output measurements by inverted OUTPUT DATE/TIME and OUTPUT TYPE.

Cross References

IV (126.03) SUB-FILE

IV START DATE/TIME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field of the file. This index sorts the intravenous fluids on a patient by starting date/time.

NAME: TYP01

DESCRIPTION: TYP01 MUMPS cross-reference is created to sort the intravenous fluids on a patient by the inverted IV START DATE/TIME and TYPE OF IV.

NAME: C

DESCRIPTION: C MUMPS cross-reference indexes the intravenous solutions on a patient by the inverted IV START DATE/TIME. The SET statement inserts the DUZ in the IV STARTED BY field (6).

INFUSION SITE

NAME: SITE

DESCRIPTION: SITE MUMPS cross-reference sorts the intravenous fluids on a patient by INFUSION SITE and inverted IV START DATE/TIME.

TYPE OF IV

NAME: TYP3

DESCRIPTION: TYP3 MUMPS cross-reference sorts the intravenous fluids on a patient by the inverted IV START DATE/TIME and TYPE OF IV.

IV MAINTENANCE (126.04) SUB-FILE

IV SITE

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the IV SITE field of the IV MAINTENANCE. The records are sorted by the IV's location such as LEFT HAND, RIGHT HAND and LEFT ARM, etc.

INTAKE ITEM (126.13) SUB-FILE

INTAKE ITEM

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field of the file.

NAME: VOL

DESCRIPTION: VOL MUMPS cross-reference is created to sum up the values of VOLUME field of the INTAKE ITEM multiple and insert the total in the TOTAL AMOUNT field of the INTAKE record.

IV INTAKE (126.313) SUB-FILE

IV INTAKE DATE/TIME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

NAME: C

DESCRIPTION: This MUMPS index is created to sort the intake records for an IV solution by inverted IV INTAKE DATE/TIME. The SET statement inserts DUZ in the ENTERED BY field (3).

D/T TITER ADJUSTED (126.316) SUB-FILE

D/T TITER ADJUSTED

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

NAME: C

DESCRIPTION: This MUMPS index is created to sort the infusion rate adjustment record by inverting the date/time stored in the D/T TITER ADJUSTED field..

MAINTENANCE DATE/TIME (126.41) SUB-FILE

MAINTENANCE DATE/TIME

NAME: B

DESCRIPTION: This cross-reference is created automatically on the .01 field of the MAINTENANCE DATE/TIME multiple for each IV SITE.

NAME: AC

DESCRIPTION: AC MUMPS cross-reference is created to insert the DUZ of the person who gives the nursing care in the ENTERED BY field (4) of the maintenance record.

NAME: C

DESCRIPTION: C cross-reference is created to sort the nursing care records for a specific IV's location by the inverted date/time the care given.

Cross References

GMRY INPUT TYPE (126.56) FILE

NAME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

ORDER

NAME: C

DESCRIPTION: This regular cross-reference is created to index the file by ORDER and the associated input type NAME.

GMRY OUTPUT TYPE (126.58) FILE

OUTPUT TYPE

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

ORDER

NAME: C

DESCRIPTION: This regular cross-reference is created to sort the file by ORDER and the associated OUTPUT TYPE.

GMRY OUTPUT SUBTYPE (126.6) FILE

OUTPUT SUBTYPE

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

OUTPUT TYPE

NAME: C

DESCRIPTION: This regular cross-reference is created to sort the file by OUTPUT TYPE and the associated OUTPUT SUBTYPE.

GMRY IV SITE (126.7) FILE

IV SITE

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

GMRY IV SITE DESCRIPTION (126.72) FILE

DESCRIPTION

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

GMRY IV CATHETER (126.74) FILE

IV CATHETER TYPE/SIZE

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

PORT (126.741) SUB-FILE

PORT

NAME: B

DESCRIPTION: This cross-reference is automatically created on the .01 field of the PORT multiple.

GMRY IV DC'ED REASON (126.76) FILE

NAME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

GMRY INTAKE ITEMS (126.8) FILE

NAME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

NAME: BL

DESCRIPTION: This MUMPS cross-reference is created to index the file by lower case NAME.

Cross References

INPUT TYPE (126.82) SUB-FILE

INPUT TYPE

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

NAME: C

DESCRIPTION: C MUMPS cross-reference is created to index the GMRY INTAKE ITEMS file by the INPUT TYPE field (2) and the associated intake item NAME (.01).

GMRY NUR IV SOLUTION (126.9) FILE

NAME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

TYPE

NAME: C

DESCRIPTION: This regular cross-reference is created to sort the file by TYPE field and the associated IV solution NAME.

GMRY NUR SHIFT/OTHER (126.95) FILE

NAME

NAME: B

DESCRIPTION: This regular cross-reference is automatically created on the .01 field.

Chapter 6 Archiving and Purging

It is anticipated that the implementation of this application will be minimal due to the lack of point of care (POC) entry devices at the medical centers. The archiving of data will be addressed in a future version of the software.

Chapter 7 Callable Routines

There are no callable routines in Version 4.0 of the Intake and Output software.

Chapter 8 External Relations

1. The following *VISTA* applications must reside in the system before Intake and Output, Version 4.0 can be installed:
 - a. Kernel Version 8.0 or greater,
 - b. VA FileMan Version 21 or greater,
 - c. PIMS (MAS) Version 5.3 or greater.
2. If the facility intends to utilize the patient IV orders found in the *VISTA* Pharmacy application, then Version 4.5 (or greater) of the Inpatient Medications application must reside in the system.
3. Existing integration agreements between the Intake and Output software and other *VISTA* applications are summarized below.

DBIA's where the Intake and Output package is the subscriber:

```
1380      NAME: ROOM-BED
CUSTODIAL PACKAGE: REGISTRATION           Albany
SUBSCRIBING PACKAGE: INTAKE/OUTPUT        Chicago
          USAGE: Controlled Subscri APPROVED: APPROVED
          STATUS: Active                 EXPIRES:
          DURATION: Till Otherwise Agr VERSION:
          FILE: 405.4                   ROOT: DG(405.4,
DESCRIPTION:                               TYPE: File
Nursing, Vitals/Measurements and Intake/Output have permission to access
the following elements in the Room-Bed (405.4) file.

^DG(405.4,0) to test for existence of file.
"W" cross-reference
Direct global read of the NAME (.01) field.
^DG(405.4,0)
Direct global reference of this node to check for existence of
Room-Bed (405.4) file.
^DG(405.4,D0,0)
.01      NAME                      0;1      Direct Global Read
^DG(405.4,'W',
Direct global read on the "W" cross-reference.

ROUTINE:

*****

1409      NAME: NURS LOCATION
CUSTODIAL PACKAGE: NURSING SERVICE        Chicago
SUBSCRIBING PACKAGE: INTAKE/OUTPUT        Chicago
          USAGE: Private                 APPROVED: APPROVED
          STATUS: Active                 EXPIRES:
          DURATION: Till Otherwise Agr VERSION:
          FILE: 211.4                   ROOT: NURSF(211.4,
DESCRIPTION:                               TYPE: File
Intake/Output can access the Nurs Location (211.4) file entry as described
in this DBIA.
^NURSF(211.4,D0,
.01      NAME                      0;1      Direct Global Read
1        PATIENT CARE FLAG        1;1      Direct Global Read
Direct global read of ^NURSF(211.4) is supported to check if the file
exists.
Direct global read of the "D" cross-reference of the NURS Location
(211.4) file is supported.
^NURSF(211.4,D0,3,D1,
.01      MAS WARD                  0;1      Direct Global Read
Direct global read of ^NURSF(211.4,D0,3,D1) to $Order through the
```

External Relations

multiple is supported.

ROUTINE:

```
1410      NAME: NURS POSITION CONTROL
CUSTODIAL PACKAGE: NURSING SERVICE           Chicago
SUBSCRIBING PACKAGE: INTAKE/OUTPUT           Chicago
                USAGE: Private               APPROVED: APPROVED
                STATUS: Active                EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
                FILE: 211.8                  ROOT: NURSF(211.8,
DESCRIPTION:                                TYPE: File
Intake/Output has permission to access the NURS Position Control (211.8)
file as indicated in this DBIA.
^NURSF(211.8,D0,
.02      SERVICE CATEGORY      0;2      Direct Global Read
Also direct global read access of the "D" cross-reference of file
211.8 is supported.
```

ROUTINE:

```
1411      NAME: NURS PATIENT
CUSTODIAL PACKAGE: NURSING SERVICE           Chicago
SUBSCRIBING PACKAGE: INTAKE/OUTPUT           Chicago
                USAGE: Private               APPROVED: APPROVED
                STATUS: Active                EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
                FILE: 214                    ROOT: NURSF(214,
DESCRIPTION:                                TYPE: File
Intake/Output can access the NURS Patient (214) file as described in this
DBIA.
^NURSF(214,D0,
2        NURS LOCATION          0;3      Direct Global Read
Direct global read of the "AF" and "E" cross-references of the NURS
Patient (214) file is supported.
Direct global read of the ^NURSF(214,D0,0) node is also supported.
```

ROUTINE:

```
1957      NAME: File Security Codes
CUSTODIAL PACKAGE: VA FILEMAN                San Francisco
SUBSCRIBING PACKAGE: NURSING SERVICE           Chicago
                GMRY GEN. MED. REC           Chicago
                GEN. MED. REC. - V           Chicago
                TEXT GENERATOR              Chicago
                USAGE: Private               APPROVED: APPROVED
                STATUS: Active                EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
                FILE: 1                      ROOT: DIC
DESCRIPTION:                                TYPE: File
The Gen. Med. Rec. - I/O (Intake and Output), Gen. Med. Red. - Vitals
(Vitals/Measurements), Nursing Service and Text Generator packages have
permission to set the security nodes (i.e., "DD", "RD", "DEL", "LAYGO",
and "WR") in FILE 1 for those files within the package's number range.
For example: S ^DIC(210,0,"DD")="@"
```

Package	Number Range
Intake & Output	126-126.95
Vitals/Measurements	120.5-120.57
Nursing Service	210-219.7
Text Generator	124-124.3

With the next release of each package, the installation process will allow the site to change its file security codes to match the codes as they appear in the documentation. The site can answer YES to change their file security codes to match the package documentation or NO to leave them as is.

DBIA's where the Intake and Output package is the custodian:

```

1390      NAME: GMRY PATIENT I/O FILE
CUSTODIAL PACKAGE: INTAKE/OUTPUT                      Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE                  Chicago
      USAGE: Private                                APPROVED: APPROVED
      STATUS: Active                                EXPIRES:
      DURATION: Till Otherwise Agr  VERSION:
      FILE: 126                                    ROOT: GMR(126,
      DESCRIPTION:                                TYPE: File
Nursing has permission to access the GMRY Patient I/O File (126) file
fields described in this DBIA.
^GMR(126,D0,
  Direct global read on "B" cross-reference of GMRY Patient I/O File is
  supported.
  LAYGO is allowed to this file using a ^DIC lookup.
^GMR(126,D0,'IVM',D1,
  Direct global reference on the "B" cross-reference of the IV
  Maintenance sub-file is supported.
^GMR(126,D0,'IVM',D1,1,D2,
  .01      MAINTENANCE DATE/TIM 0;1      Direct Global Read
  1        SITE DESCRIPTION      0;2      Direct Global Read
  2        TUBING CHANGED        0;3      Direct Global Read
  3        DRESSING CHANGED      0;4      Direct Global Read
  4        ENTERED BY            0;5      Direct Global Read
  5SITE DC'ED                    0;6      Direct Global Read
  Direct global reads of the "B" and "C" cross-references of the
  Maintenance sub-file are also supported.
^GMR(126,0)
  Direct global read to test for existence of the file is supported.

```

ROUTINE:

```

1391      NAME: GMRY NUR SHIFT/OTHER
CUSTODIAL PACKAGE: INTAKE/OUTPUT                      Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE                  Chicago
                  VITALS/MEASUREMENT                Chicago
      USAGE: Private                                APPROVED: APPROVED
      STATUS: Active                                EXPIRES:
      DURATION: Till Otherwise Agr  VERSION:
      FILE: 126.95                                ROOT: GMRD(126.95,
      DESCRIPTION:                                TYPE: File
Nursing and Vitals/Measurements have permission to access the GMRY NUR
Shift/Other file fields described in this DBIA.
^GMRD(126.95,D0,
  1        NIGHT                  1;1      Direct Global Read
  2        DAY                    1;2      Direct Global Read
  3        EVENING                1;3      Direct Global Read

```

ROUTINE:

```

1392      NAME: GMRY INPUT TYPE
CUSTODIAL PACKAGE: INTAKE/OUTPUT                      Chicago
SUBSCRIBING PACKAGE: VITALS/MEASUREMENT              Chicago
      USAGE: Private                                APPROVED: APPROVED
      STATUS: Active                                EXPIRES:
      DURATION: Till Otherwise Agr  VERSION:
      FILE: 126.56                                ROOT: GMRD(126.56,
      DESCRIPTION:                                TYPE: File
Vitals/Measurements has permission to access the GMRY Input Type file as
described in this DBIA.
^GMRD(126.56,D0,
  .01      NAME                    0;1      Direct Global Read
  Direct global read of the "C" cross-reference of the GMRY Input Type
  file is also supported.

```

ROUTINE:

```

1393      NAME:  GMRY OUTPUT TYPE
CUSTODIAL PACKAGE:  INTAKE/OUTPUT                                Chicago
SUBSCRIBING PACKAGE:  VITALS/MEASUREMENT                        Chicago
                USAGE:  Private                                APPROVED:  APPROVED
                STATUS:  Active                                EXPIRES:
                DURATION:  Till Otherwise Agr                    VERSION:
                FILE:  126.58                                ROOT:  GMRD(126.58,
DESCRIPTION:                                TYPE:  File
Vitals/Measurements has permission to access the GMRY Output Type (126.58)
file as described in this DBIA.
^GMRD(126.58,DO,
.01      OUTPUT TYPE                                0;1      Direct Global Read
Direct global read of the "C" cross-reference of the GMRY Output Type
file is also supported.

```

ROUTINE:

* * * * *

```

      1395      NAME:  GMRYED1
CUSTODIAL PACKAGE:  INTAKE/OUTPUT      Chicago
SUBSCRIBING PACKAGE:  NURSING SERVICE   Chicago
      USAGE:  Private      APPROVED:  APPROVED
      STATUS:  Active      EXPIRES:
      DURATION:  Till Otherwise Agr  VERSION:
      FILE:      ROOT:
      DESCRIPTION:      TYPE:  Routine
Nursing has permission to access the entry points described in this DBIA
for the GMRYED1 routine.

```

```
ROUTINE: GMRYED1  
COMPONENT: INPUT  
VARIABLES: DFN          Input          Patient IEN.  
  
           GNUROP       Input          Type of Input/Output/IV.  
  
           GMRHLOC      Input          Hospital Location file pointer.  
  
           GMROUT       Both           Switch that is set to 0 and returned if  
                                   abnormal user exit.  
           Allows user to enter/edit patient intake.  
COMPONENT: OUTPUT  
VARIABLES: DFN          Input          Patient IEN.  
  
           GNUROP       Input          Type of data Input/Output/IV.  
  
           GMRHLOC      Input          Hospital Location (44) pointer.  
  
           GMROUT       Both           Switch to determine if user abnormally  
                                   exits. Passed in with value of 0.  
           Allows user to enter/edit patient Output.
```

* * * * *

```

1396      NAME: GMRYRP0
CUSTODIAL PACKAGE: INTAKE/OUTPUT                      Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE                   Chicago
                USAGE: Private                        APPROVED: APPROVED
                STATUS: Active                        EXPIRES:
                DURATION: Till Otherwise Agr          VERSION:
                FILE:                                ROOT:
DESCRIPTION:                                           TYPE: Routine
Nursing has permission to access the following entry points in the GMRYRP0
routine.

```

```
ROUTINE:  GMRYRPO
COMPONENT: EN1
VARIABLES:  GMRNUR      Input

This variable is set to one to indicate
that this routine was called from an
external package.

This entry point prints an I/O Summary by Patient (by Shift
```

```

& Day(s)).
COMPONENT: EN4
VARIABLES: GMRNUR      Input
                This variable is set to one to indicate
                that this routine was called from an
                external package.
                This entry point prints an I/O Summary (Midnight to
                Present).
COMPONENT: EN5
VARIABLES: GMRNUR      Input
                This variable is set to one to indicate
                that this routine was called from an
                external package.
                This entry point prints an I/O Summary (48 hours).
COMPONENT: EN2
VARIABLES: GMRNUR      Input
                This variable is set to one to indicate
                that this routine was called from an
                external package.
                This entry point prints the Patient I/O Summary Report for
                the previous day.
COMPONENT: Q
VARIABLES:      This entry point cleans up variables used by GMRYRP0 calls.

*****

1397      NAME: GMRYED3
CUSTODIAL PACKAGE: INTAKE/OUTPUT      Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE      Chicago
                USAGE: Private      APPROVED: APPROVED
                STATUS: Active      EXPIRES:
                DURATION: Till Otherwise Agr      VERSION:
                FILE:      ROOT:
DESCRIPTION:      TYPE: Routine
Nursing can access the following entry points described in this DBIA for
the GMRYED3 routine.

ROUTINE: GMRYED3
COMPONENT: LIST
VARIABLES: DFN      Input
                Patient IEN.
                GNUROP      Input
                Type of Input/Output/IV.
                GMRHLOC      Input
                Hospital Location file (44) pointer.
                GMROUT      Both
                This variable indicates whether the user
                abnormally exited the input process. It
                is passed in with a value of 0.
                This entry point allows user to start/add/DC IV and
                maintenance.

*****

1415      NAME: GMRYFLW0
CUSTODIAL PACKAGE: INTAKE/OUTPUT      Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE      Chicago
                USAGE: Private      APPROVED: APPROVED
                STATUS: Active      EXPIRES:
                DURATION: Till Otherwise Agr      VERSION:
                FILE:      ROOT:
DESCRIPTION:      TYPE: Routine
Nursing has permission to access the following entry point in the GMRYFLW0
routine.

ROUTINE: GMRYFLW0
COMPONENT: EN1
VARIABLES: GMRNUR      Input
                This variable is passed in with a value
                of 1 to indicate that the report is
                requested by the Nursing service.
                This entry point allows user to print the Intravenous
                Infusion Flow Sheet for a selected time range.

*****

```

External Relations

```
1430      NAME: GMRYRP1
CUSTODIAL PACKAGE: INTAKE/OUTPUT           Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE        Chicago
                  VITALS/MEASUREMENT       Chicago
                  USAGE: Private            APPROVED: APPROVED
                  STATUS: Active            EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
                  FILE:                    ROOT:
DESCRIPTION:                                TYPE: Routine
Nursing has permission to access the NEXT entry point for the GMRYRP1
routine.  Vitals/Measurements is allowed to use the entry STARTD for the
GMRYRP1 routine.

ROUTINE: GMRYRP1
COMPONENT: NEXT
VARIABLES: GMRFIN      Input
                  Date/time the current nursing shift ends.
GLASTDT      Output
                  Date the day before the date stored in
                  GMRFIN.
GDTSTRT      Output
                  Date the nursing shift starts.
GNXTDT      Output
                  Date the day after the date stored in
                  GDTSTRT.
GMRNIT      Output
                  Time the nursing night shift starts.
GDTFIN      Output
                  Date the nursing shift ends.
                  This entry point is called to initialize variables required
                  for the SETSIFT^GMRYRP2 call.
COMPONENT: STARTD
VARIABLES: DFN      Input
                  Patient IEN.
GMRSTRT      Both
                  Input: Start date of information extract.
                  Output: Start date_night shift start
                  hour.
GMRFIN      Both
                  Input: End date of information extract.
                  Output: End date_evening shift end hour.
GMROUT      Both
                  Passed in with a value of 0.  Returned a
                  value of 1 if exited abnormally.
GRPT      Input
                  Set to 5 to indicate that the data are
                  requested the V/M Graphic Reports.
GMRNIT      Input
                  Nursing night shift start hour defined in
                  the GMRY NUR Shift/Other file (126.95).
GMRDAY      Input
                  Nursing day shift start hour defined in
                  the GMRY NUR Shift/Other file (126.95).
GMREVE      Input
                  Nursing evening shift start hour defined
                  in the GMRY NUR Shift/Other file
                  (126.95).
                  This entry is called to set up the start date/time and end
                  date/time of information extract according to the nursing
                  shift starting hours defined in the GMRY NUR Shift/Other
                  file (126.95).

*****

1432      NAME: GMRYUT0
CUSTODIAL PACKAGE: INTAKE/OUTPUT           Chicago
SUBSCRIBING PACKAGE: VITALS/MEASUREMENT       Chicago
                  USAGE: Private            APPROVED: APPROVED
                  STATUS: Active            EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
                  FILE:                    ROOT:
DESCRIPTION:                                TYPE: Routine
Vitals/Measurements can access the GMTRYUT0 routine as described in this
DBIA.
```



```

ROUTINE: GMRYUT0
COMPONENT: PT
VARIABLES: DFN          Input          Patient IEN.
           GMRAGE       Output         Age of patient.
           GMRBED       Output         Room-bed for patient.
           GMRSEX       Output         Patient sex.
           GMRVADM      Output         Patient admission date.
           GMRWARD      Output         Pointer to Ward Location (42) file
                                     denoting patient's location.
           GMRWARD(1)   Output         Free text of patient's location.
                                     This entry is used to call 1^VADPT to set up VAIN and VADM
                                     local variables.

```

```

1433      NAME: GMRYUT2
CUSTODIAL PACKAGE: INTAKE/OUTPUT          Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE      Chicago
          USAGE: Private                   APPROVED: APPROVED
          STATUS: Active                   EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
          FILE:                           ROOT:
DESCRIPTION:                           TYPE: Routine
Nursing can access the following entry point in the GMRYUT2 routine.

```

```

ROUTINE: GMRYUT2
COMPONENT: SELSITE
VARIABLES: DFN          Input          Patient IEN.
           GMRX         Output         Local global containing the intravenous
                                     infusion site information.
                                     This entry point is called to extract all current
                                     intravenous infusion sites and the sites discontinued
                                     within the last 24 hours for the selected patient.

```

```

1434      NAME: GMRYUT9
CUSTODIAL PACKAGE: INTAKE/OUTPUT          Chicago
SUBSCRIBING PACKAGE: VITALS/MEASUREMENT  Chicago
          USAGE: Private                   APPROVED: APPROVED
          STATUS: Active                   EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
          FILE:                           ROOT:
DESCRIPTION:                           TYPE: Routine
Vitals/Measurements can access the GMRYUT9 routine as described in this
DBIA.

```

```

ROUTINE: GMRYUT9
COMPONENT: PATIENT
VARIABLES: DFN          Input          Patient IEN.
           GMRNUR       Input          This is set to 1 to indicate return data
                                     from Nurs Patient file.
           SSN          Output         Patient SSN.
           GMRAGE       Output         Patient's age.
           GMRSEX       Output         Patient's sex.
           GMRBED       Output         Patient's room-bed.
           GMRVADM      Output         Patient admission date/time.
           GMRWARD      Output

```

External Relations

```

                                Pointer to Ward Location (42) file
                                denoting patient's location.
GMRWARD(1)  Output
                                Free text version of patient location.
                                This entry point extracts information from Nurs Patient
                                (214) file.

                                *****

1435      NAME: GMRYRP2
CUSTODIAL PACKAGE: INTAKE/OUTPUT           Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE        Chicago
                                VITALS/MEASUREMENT      Chicago
                                USAGE: Private           APPROVED: APPROVED
                                STATUS: Active           EXPIRES:
DURATION: Till Otherwise Agr  VERSION:
                                FILE:                   ROOT:
                                DESCRIPTION:             TYPE: Routine
Nursing and Vitals/Measurements can access the following entry points in
the GMRYRP2 routine.

ROUTINE: GMRYRP2
COMPONENT:  SAVE
VARIABLES:  DA(1)      Input      Pointer to the GMRY Patient I/O file
                                (126).
                                II      Input      Passed in with a value of "IN" or "OUT"
                                subscript of the GMRY Patient I/O file
                                (126).
                                GMRSTRT  Input      Date/time the current nursing shift
                                starts.
                                GMRFIN   Input      Date/time the current nursing shift ends.
                                TMP       Output     ^TMP($J,"GMRY") global contains intake
                                and output information for a selected
                                patient.
                                This entry call extracts the intake and output information
                                and stores the data in ^TMP($J,"GMRY") for a selected
                                patient.
COMPONENT:  SAVEIV
VARIABLES:  DA(1)      Input      Pointer to the Patient I/O file (126).
                                GMRSTRT  Input      Date/time the current nursing shift
                                starts.
                                GMRFIN   Input      Date/time the current nursing shift ends.
                                TMP       Output     ^TMP($J,"GMRY") global contains the
                                patient intravenous infusion information.
                                This entry call extracts patient intravenous infusion
                                information and stores the data in ^TMP($J,"GMRY") global.
COMPONENT:  SETSIFT
VARIABLES:  GMRINDT    Input      Date/time the I/O data was entered.
                                GDTSTRT  Input      Date the nursing shift starts.
                                GDTFIN   Input      Date the nursing shift ends.
                                GLASTDT  Input      Date the day before the current nursing
                                shift ends.
                                GSHIFT   Output     Value = "SH-1"    night shift,
                                = "SH-2"    day shift,
                                = "SH-3"    evening shift.
                                This entry is called to assign the nursing shift (night,
                                day or evening) according to the date/time the I/O data was
                                entered.
COMPONENT:  GMRYRP2
VARIABLES:  DFN        Input      Patient IEN.

```

GMRSTRT Input Start date for the information extract.
 GMRFIN Input End date for the information extract.
 This routine is called by the Vitals/Measurements to
 extract patient intake and output information entered
 within a selected date range.

1436 NAME: GMRYRP3
 CUSTODIAL PACKAGE: INTAKE/OUTPUT Chicago
 SUBSCRIBING PACKAGE: NURSING SERVICE Chicago
 VITALS/MEASUREMENT Chicago
 USAGE: Private APPROVED: APPROVED
 STATUS: Active EXPIRES:
 DURATION: Till Otherwise Agr VERSION:
 FILE: ROOT:
 DESCRIPTION: TYPE: Routine
 Nursing and Vitals/Measurements can access the following entry point in
 the routine GMRYRP3.

ROUTINE: GMRYRP3
 COMPONENT: REPORT1
 VARIABLES: GRPT Input Type of intake/output report. Set GRPT =
 10 for the Nursing End of Shift Report.
 GQ Input Set GRPT = 5 for the V/M Graphic Reports.
 GQT Input Passed in with a value of 0, required by
 the GMRYRP3 routine.
 GMROUT Both Passed in with a value of 0, required by
 the GMRYRP3 routine.
 TMP Both This variable indicates whether the user
 abnormally exited the process. It is
 passed in with a value of 0.
 GTOTLI Output ^TMP(\$J,"GMRY") contains the intake,
 GTOTLO Output output and intravenous infusion data for
 GN(1) Output a patient. If the data is requested by
 GN(2) Output the Vitals/Measurements, ^TMP(\$J,"GMR")
 GIN Output is also used to store the aggregated
 GOUT Output information.
 GTOTIN Output Intake grand total.
 GTOTOUT Output Output grand total.
 The Nursing End of Shift Report calls this entry point to
 aggregate the data obtained from the execution of
 SAVE^GMRYRP2 and ^GMRYRP2. The V/M Graphic Reports call
 this entry point to aggregate data obtained from the
 execution of STARTD^GMRYRP1, PT^GMRYUT0 and ^GMRYRP2.

1437 NAME: GMRYSE0
 CUSTODIAL PACKAGE: INTAKE/OUTPUT Chicago
 SUBSCRIBING PACKAGE: NURSING SERVICE Chicago
 USAGE: Private APPROVED: APPROVED

External Relations

```

        STATUS: Active          EXPIRES:
    DURATION: Till Otherwise Agr VERSION:
        FILE:                   ROOT:
    DESCRIPTION:                TYPE: Routine
Nursing can access the following entry point in the GMRYSE0 routine.

    ROUTINE: GMRYSE0
    COMPONENT: EN1
    VARIABLES: GMRNUR          Input
                                This variable is passed in with a value
                                of 1 to indicate that the report is
                                requested by the Nursing Service.
    This entry point allows user to print the Patient
    Intake/Output 24 Hours Itemized Shift Report for a time
    range.

*****

    1438    NAME: GMRYSE3
    CUSTODIAL PACKAGE: INTAKE/OUTPUT          Chicago
    SUBSCRIBING PACKAGE: NURSING SERVICE      Chicago
        USAGE: Private          APPROVED: APPROVED
        STATUS: Active          EXPIRES:
    DURATION: Till Otherwise Agr VERSION:
        FILE:                   ROOT:
    DESCRIPTION:                TYPE: Routine
Nursing can access the following entry point in the GMRYSE3 routine.

    ROUTINE: GMRYSE3
    COMPONENT: FITLINE
    VARIABLES: GMRLEN          Input
                                Number of characters for a line of text.
        GTXT(0)                Output
                                The first n-words of the input text in
                                the GTXT(1) that will fit in length
                                GMRLEN.
        GTXT(1)                Both
                                The rest of the text.
    This utility breaks a line of text into lines. The length
    of the new line is defined by user.

*****

    1458    NAME: GMRY IV DC'ED REASON
    CUSTODIAL PACKAGE: INTAKE/OUTPUT          Chicago
    SUBSCRIBING PACKAGE: NURSING SERVICE      Chicago
        USAGE: Private          APPROVED: APPROVED
        STATUS: Active          EXPIRES:
    DURATION: Till Otherwise Agr VERSION:
        FILE: 126.76           ROOT: GMRD(126.76,
    DESCRIPTION:                TYPE: File
Nursing has permission to access the following field in the GMRY IV DC'ed
Reason (126.76) file.
    ^GMRD(126.76,D0,0)
    .01    NAME                  0;1    Both R/W w/Fileman
                                Nursing is allowed to LAYGO
                                entries into the file using
                                FileMan.

    ROUTINE:

*****

    1459    NAME: GMRY OUTPUT SUBTYPE
    CUSTODIAL PACKAGE: INTAKE/OUTPUT          Chicago
    SUBSCRIBING PACKAGE: NURSING SERVICE      Chicago
        USAGE: Private          APPROVED: APPROVED
        STATUS: Active          EXPIRES:
    DURATION: Till Otherwise Agr VERSION:
        FILE: 126.6           ROOT: GMRD(126.6,
    DESCRIPTION:                TYPE: File
Nursing has permission to access the following fields in the GMRY Output
Subtype (126.6) file.
    ^GMRD(126.6,D0,0)
    .01    OUTPUT SUBTYPE        0;1    Both R/W w/Fileman
```

Also Nursing is allowed to
LAYGO entries into the file
using FileMan.

1 OUTPUT TYPE 0;2 Both R/W w/Fileman

ROUTINE:

1460 NAME: GMRV INTAKE ITEMS
CUSTODIAL PACKAGE: INTAKE/OUTPUT Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE Chicago
 USAGE: Private APPROVED: APPROVED
 STATUS: Active EXPIRES:
 DURATION: Till Otherwise Agr VERSION:
 FILE: 126.8 ROOT: GMRD(126.8,
 DESCRIPTION: TYPE: File
Nursing has permission to access the following fields in the GMRV Intake
Items (126.8) file.
^GMRD(126.8,D0,0)
 .01 NAME 0;1 Both R/W w/Fileman
 Also Nursing is allowed to
 LAYGO entries into the file
 using FileMan.

1 VOLUME 0;2 Both R/W w/Fileman
2 INPUT TYPE 1;0 Both R/W w/Fileman
 Also Nursing is allowed to
 LAYGO into multiple using
 FileMan.

^GMRD(126.8,D0,1,D1,0)
 .01 INPUT TYPE 0;1 Both R/W w/Fileman

ROUTINE:

1461 NAME: GMRV IV SITE
CUSTODIAL PACKAGE: INTAKE/OUTPUT Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE Chicago
 USAGE: Private APPROVED: APPROVED
 STATUS: Active EXPIRES:
 DURATION: Till Otherwise Agr VERSION:
 FILE: 126.7 ROOT: GMRD(126.7,
 DESCRIPTION: TYPE: File
Nursing has permission to access the following field in the GMRV IV Site
(126.7) file.
^GMRD(126.7,D0,0)
 .01 IV SITE 0;1 Both R/W w/Fileman
 Also Nursing is allowed to
 LAYGO entries into the file
 using FileMan.

ROUTINE:

1462 NAME: GMRV NUR IV SOLUTION
CUSTODIAL PACKAGE: INTAKE/OUTPUT Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE Chicago
 USAGE: Private APPROVED: APPROVED
 STATUS: Active EXPIRES:
 DURATION: Till Otherwise Agr VERSION:
 FILE: 126.9 ROOT: GMRD(126.9,
 DESCRIPTION: TYPE: File
Nursing has permission to access the following fields in the GMRV NUR IV
Solution (126.9) file.
^GMRD(126.9,D0,0)
 .01 NAME 0;1 Both R/W w/Fileman
 Also Nursing is allowed to
 LAYGO entries into the file
 using FileMan.

1 TYPE 0;2 Both R/W w/Fileman
2 VOLUME 0;3 Both R/W w/Fileman

ROUTINE:

External Relations

```
*****

1463      NAME: GMRY INPUT TYPE
CUSTODIAL PACKAGE: INTAKE/OUTPUT           Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE        Chicago
          USAGE: Private                    APPROVED: APPROVED
          STATUS: Active                    EXPIRES:
          DURATION: Till Otherwise Agr      VERSION:
          FILE: 126.56                     ROOT: GMRD(126.56,
          DESCRIPTION:                      TYPE: File
Nursing has permission to access the following fields in the GMRY Input
Type (126.56) file.
^GMRD(126.56,D0,0)
.01      NAME                                0;1      Both R/W w/Fileman
                                           Also Nursing is allowed to
                                           LAYGO entries into the file
                                           using FileMan.

1         ORDER                              0;2      Both R/W w/Fileman

ROUTINE:

*****

1464      NAME: GMRY IV SITE DESCRIPTION
CUSTODIAL PACKAGE: INTAKE/OUTPUT           Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE        Chicago
          USAGE: Private                    APPROVED: APPROVED
          STATUS: Active                    EXPIRES:
          DURATION: Till Otherwise Agr      VERSION:
          FILE: 126.72                     ROOT: GMRD(126.72,
          DESCRIPTION:                      TYPE: File
Nursing has permission to access the following field in the GMRY IV Site
Description (126.72) file.
^GMRD(126.72,D0,0)
.01      DESCRIPTION                        0;1      Both R/W w/Fileman
                                           Also Nursing is allowed to
                                           LAYGO entries into the file
                                           using FileMan.

ROUTINE:

*****

1465      NAME: GMRY IV CATHETER
CUSTODIAL PACKAGE: INTAKE/OUTPUT           Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE        Chicago
          USAGE: Private                    APPROVED: APPROVED
          STATUS: Active                    EXPIRES:
          DURATION: Till Otherwise Agr      VERSION:
          FILE: 126.74                     ROOT: GMRD(126.74,
          DESCRIPTION:                      TYPE: File
Nursing has permission to access the following field in the GMRY IV
Catheter (126.74) file.
^GMRD(126.74,D0,0)
.01      IV CATHETER TYPE/SIZ 0;1          Both R/W w/Fileman
                                           Also Nursing is allowed to
                                           LAYGO entries into the file
                                           using FileMan.

ROUTINE:

*****

1466      NAME: GMRY OUTPUT TYPE
CUSTODIAL PACKAGE: INTAKE/OUTPUT           Chicago
SUBSCRIBING PACKAGE: NURSING SERVICE        Chicago
          USAGE: Private                    APPROVED: APPROVED
          STATUS: Active                    EXPIRES:
          DURATION: Till Otherwise Agr      VERSION:
          FILE: 126.58                     ROOT: GMRD(126.58,
          DESCRIPTION:                      TYPE: File
Nursing has permission to access the following fields in the GMRY Output
Type (126.58) file.
^GMRD(126.58,D0,0)
```

.01	OUTPUT TYPE	0;1	Both R/W w/Fileman Also Nursing is allowed to LAYGO entries into the file using FileMan.
1	ORDER	0;2	Both R/W w/Fileman

ROUTINE:

1964 NAME: GMRYCATH
 CUSTODIAL PACKAGE: GMRY GEN. MED. REC Chicago
 SUBSCRIBING PACKAGE: NURSING SERVICE Chicago
 USAGE: Private APPROVED:
 STATUS: EXPIRES:
 DURATION: Till Otherwise Agr VERSION:
 DESCRIPTION: TYPE: Routine
 The Nursing Service package has permission to call the GMRYCATH routine in order to display or print its End of Shift report.

ROUTINE: GMRYCATH
 COMPONENT: FINDCA
 VARIABLES: GSITE

Input

This is an array containing IV infusion location (e.g., LEFT WRIST). The NURCES2 routine passes the parameter GSITE by reference. For example:

GSITE=LEFT WRIST

II Output

The variable II is a single dimension array. It is the formal parameter associated with GSITE. Each subscripted element contains the value of the IV CATHETER TYPE/SIZE field from the GMRY PATIENT I/O FILE (#126) for a patient. It returns the name of the IV catheter for a given IV infusion location and patient. For example:

GSITE("LEFT WRIST")=TRIPLE LUMEN

DFN Input

The calling routine must have DFN defined.

This entry point finds a catheter for a selected IV site.

1965 NAME: GMRYMNT
 CUSTODIAL PACKAGE: GMRY GEN. MED. REC Chicago
 SUBSCRIBING PACKAGE: NURSING SERVICE Chicago
 USAGE: Private APPROVED: APPROVED
 STATUS: Active EXPIRES:
 DURATION: Till Otherwise Agr VERSION:
 DESCRIPTION: TYPE: Routine
 The Nursing Service package has permission to call the GMRYMNT routine in order to display or print its End of Shift report.

ROUTINE: GMRYMNT
 COMPONENT: SELSITE
 VARIABLES: DFN

Input

The calling routine must have DFN defined.

GMRXY Output

Contains all current and discontinued IV sites used within the last 24 hours.

This entry point extracts all current and discontinued IV sites used within the last 24 hours.

Chapter 9 Internal Relations

There are no internal relations in the Intake and Output application. Each of the options can be independently invoked.

Chapter 10 Package-wide Variable

No package-wide variables are used in the Intake and Output application.

Chapter 11 On-line Documentation

The Intake and Output software is found in the GMRY namespace (i.e., all routines, options, and file names begin with GMRY). File numbers are in the range of 126 to 126.95 in the ^GMR and ^GMRD globals.

The list of all exported files and their data dictionaries can be produced by using the VA FileMan Data Dictionary Utility option, List File Attributes. File relationships can be diagrammed by using the VA FileMan Data Dictionary Utility option, Map Pointer Relationships.

Menu diagrams may be generated through the Menu Manager option, Menu Diagrams. If detailed documentation is required on the application's options, it can be printed through the Menu Manager option, Print Option File.

The XINDEX routine prints a cross-reference listing of all local and global variable usage as well as other information of invaluable assistance in debugging.

Throughout the application, on-line documentation is also provided at each user prompt. If you are unsure of what is being asked or how to reply during your dialogue with the computer, simply enter one or two question marks (? or ??) for help. The computer will respond with an explanation and then repeat the prompt.

Chapter 12 SAC Exemptions

There are no SAC Exemptions associated with the Intake and Output package.

Chapter 13 Software Product Security

1. Security Management.

No additional security measures are to be applied other than those implemented through Menu Manager and the package routines.

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.

2. Security Features:

a. Mail groups and alerts.

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

b. Remote systems.

The application does not transmit data to any remote system/facility database.

c. Archiving/Purging.

The application does not include capabilities for archiving and/or purging.

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 Information Security Officers (ISO's) to view.

h. Security Keys.

There are no Security Keys in this application.

i. File Security.

NUMBER	NAME	GLOBAL NAME	DD ACC	RD ACC	WR ACC	DEL ACC	LAY ACC
126	GMRY PATIENT I/O FILE	^GMR(126,	@		@	@	@
126.56	GMRY INPUT TYPE	^GMRD(126.56,	@		@	@	@
126.58	GMRY OUTPUT TYPE	^GMRD(126.58,	@		@	@	@
126.6	GMRY OUTPUT SUBTYPE	^GMRD(126.6,	@		@	@	@
126.7	GMRY IV SITE	^GMRD(126.7,	@		@	@	@
126.72	GMRY IV SITE DESCRIPTION	^GMRD(126.72,	@		@	@	@
126.74	GMRY IV CATHETER	^GMRD(126.74,	@		@	@	@
126.76	GMRY IV DC'ED REASON	^GMRD(126.76,	@		@	@	@
126.8	GMRY INTAKE ITEMS	^GMRD(126.8,	@		@	@	@
126.9	GMRY NUR IV SOLUTION	^GMRD(126.9,	@		@	@	@
126.95	GMRY NUR SHIFT/OTHER	^GMRD(126.95,	@		@	@	@

j. References.

There are no special reference materials for this package.

k. Official Policies.

There are no special official policies for this package.

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.

Administration Schedule This is a common abbreviation for a schedule. A schedule is the frequency for which an action is to take place, such as every eight hours (Q8H) or every other day (QOD).

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, (i.e., disk, CD-Rom and magnetic tape), and deleting the information from active storage in order to free-up disk space on the system.

Audit Trail/Logging Features The use of automated software procedures to determine if the security controls implemented for protection of computer systems are being circumvented and to identify the potential source of the security breach.

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.

Baud Rate The rate at which data is being transmitted or received from a computer. The baud rate is equivalent to the number of characters per second times 10.

Block The unit of storage transferred to and from disk drives, typically 512, 1024, or 2048 bytes (characters).

Boot The process of starting up the computer.

Bulletin A canned message that is automatically sent by MailMan to a user when something happens to the database.

Byte A unit of computer space usually equivalent to one character.

CIOFO Chief Information Office Field Office, formerly known as Information Resource Management Field Office, and Information Systems Center.

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.

CORE A collection of VA developed programs (specific to PIMS, Pharmacy Service, and Laboratory Service) which is run at VA Medical Centers.

CPU Central Processing Unit, the heart of a computer system.

CRT Cathode Ray Tube, similar to a TV monitor but used in computer systems for viewing data. Also called a Video Display Terminal (VDT).

Cursor A visual position indicator (e.g., blinking rectangle or an underline) on a CRT that moves along with each character as it is entered from the keyboard.

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).

Disk A magnetic storage device used to hold information.

Edit Used to change/modify data typically stored in a file.

Field A data element in a file. For example, PATIENT is a field in the GMRY Patient I/O File.

File The M construct in which data is stored for retrieval at a later time. A computer record of related information (e.g., GMRY Patient I/O File, Patient file).

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.

Focus Group Previously referred to as the Expert Panel, or SIUG (Special Interest User Group). A committee which advises programmers about the development of a particular system/package.

Global An M term used when referring to a file stored on a storage medium, usually a magnetic disk. In the Intake and Output software, for example, intake and output data is stored in one global, and patient data is stored in another global.

GMRV This signifies the namespace assigned to the Vitals/Measurements application.

GMRY This signifies the namespace assigned to the Intake and Output application.

Hardware The physical or mechanical components of a computer system such as CPU, CRT, disk drives, etc.

I&O Intake and output.

Intake/Output Type The type denotes a category from where the intake or output is derived, i.e., oral, intravenous, etc.

IRMS Information Resource Management Service.

IV Intravenously; by intravenous injection.

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.

Kilobyte More commonly known as Kbyte or "K". A measure of storage capacity equivalent to 1024 characters.

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.

Megabyte A measure of storage capacity; approximately 1 million characters. Abbreviated as Mbyte or Meg.

Memory A storage area used by the computer to hold information.

Menu A set of options or functions available to users for editing, formatting, generating reports, etc.

Menu Manager A part of the Kernel that allows each site to manage the various options or functions available to individual users.

ML Milliliters; a unit of volume used in the Intake and Output application.

Modem An electronic device which converts computer signals to enable transmission through a telephone.

Namespace A naming convention followed in the VA to identify various applications and to avoid duplication. It is used as a prefix for all routines and globals used by the application. The Intake and Output Package uses GMRY as its namespace.

Operating System The innermost layer of software that communicates with the hardware. It controls the overall operation of the computer such as assigning places in memory, processing input and output. One of its primary functions is interpreting M computer programs into language the system can understand.

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 GMRVMGR 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.

PO Per orum; refers to an item consumed orally or through the mouth.

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.

Port An outlet in the back of the computer into which terminals can be connected.

Printer A device for printing (on paper) data which is processed by a computer system.

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.

Response Time The average amount of time the user must wait between the time the user responded to a question at the terminal and the time the system responds by displaying data and/or the next question.

Restart/Recovery Procedures The actions necessary to restore a system's data files and computational capability after a system failure or penetration.

<RET> Carriage return.

Routine A set of M commands and arguments, created, stored, and retrieved as a single unit in M.

Risk Analysis An analysis of system assets and vulnerabilities to establish an expected loss from certain events based on estimated probabilities of the occurrence of such events.

Security Key A function which unlocks specific options and makes them accessible to an authorized user.

Security System A part of Kernel that controls user access to the various computer applications. When a user signs-on, the security system determines the privileges of the user, assigns security keys, tracks usage, and controls the menus or options the user may access. It operates in conjunction with MenuMan.

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. Generally, this refers to an operating system that enables user programs to run.

Subroutine A part of a program which performs a single function.

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.

Telecommunications Any transmission, emission, or reception of signs, signals, writing, images, sounds or other information by wire, radio, visual, or any electromagnetic system.

Terminal A device used to send and receive data from a computer system (i.e., keyboard and CRT, or printer with a keyboard).

UCI User Class Identifier. The major delimiter of information structure within the operating system.

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.

VDT Video Display Terminal. Also called a Cathode Ray Tube (CRT).

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.