INTAKE AND OUTPUT

USER MANUAL

Version 4.0

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Department of Veterans Affairs
Software Service
Clinical Support Product Line

Preface

This manual has been developed for clinical, IRMS (Information Resource Management Service) and CIOFO (Chief Information Office Field Office) staff for the purpose of describing the implementation and use of the Intake and Output application. The content covers: software implementation, site configurable file maintenance, on-line documentation, functional use of each option, menu access, and prototype screen displays.

The content of this manual was prepared under the auspices of the multi-disciplinary Nursing Focus Group that provided the application's developers with functional specifications.

Table of Contents

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 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 nine 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.

Section 1 Package Management

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 clinical 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 V*IST*A (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 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 group of patient'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 Start/ADD/ DC IV and Maintenance protocol.

7. Printer related issues

Reports can be printed on a dot matrix printer or a laser printer.

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.

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

Globals	Type of Data	Size
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 Maintenance of Site Files

GMRYMGR

Patient Intake/Output Menu

Description:

This is the main menu for the Intake and Output (I&O) application. It contains
options for (1) documenting patient intake and output, (2) starting and
discontinuing IV lines and fluids, (3) documenting IV care, and (4) printing various
intake and output reports.

Additional Information:

This is the primary menu for the Intake and Output application, and is assigned to
the package's application coordinator. Options 1, 2 and 4-8 may be assigned to
clinical staff. Option 3 should be assigned to registered nurses and members of the
IV team. The package application coordinator should be assigned option 9.

Menu Display:

```
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) ...
```

Menu Access:

The Patient Intake/Output Menu is the main menu.

GMRY FILE EDIT

Configure I/O Files (ADP Coordinator Only)

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).

Additional Information:

The first area of concern is to ensure that you have the appropriate entries in the
site specific files to use the software at your hospital, ambulatory care facility, or
other VHA facility. When the application is installed, all files have a few entries to
assist you with initially running the software, but you will have to enter
appropriate facility related data in the site configurable files. You may always edit
file data if that data does not apply to a specific site; deleting data is not always
permitted.

Menu Display:

```
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) ...

Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


   1       Intake Type
   2       Output Type
   3       Output Subtype
   4       Intake Items
   5       IV Site
   6       IV Solution
   7       Shift Starting Hour and Other Parameters
```

```
8       IV Site Description
9       IV Catheter
10      IV DC'ed Reason
```

Menu Access:

The Configure I/O Files (ADP Coordinator Only) option is accessed through the Patient Intake/Output Menu.

GMRY INPUT FILE1

Intake Type

Description:

This option is used by the ADP coordinator to configure the NON-IV intake type entries for the GMRY Input Type (#126.56) file. For example, PO, TUBE FEEDING, and OTHER are input types.

Additional Information:

This information is used in the following options:
    Enter/Edit Patient Intake
    Print I/O Summary by Patient (by Shift & Day(s))
    Print I/O Summary (Midnight to Present)
    Print I/O Summary (48 Hrs)
    24 Hours Itemized Shift Report

The entries of the GMRY Input Type Name prompt cannot be deleted except by IRMS staff. A user may change the entry name by editing the information.

When entering and editing the intake type, the coordinator needs to be aware that only the first 5 characters print in the header of the following reports:
    Print I/O Summary by Patient (by Shift & Day(s))
    Print I/O Summary (Midnight to Present)
    Print I/O Summary (48 Hrs)

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


    1        Intake Type
    2        Output Type
    3        Output Subtype
    4        Intake Items
    5        IV Site
    6        IV Solution
    7        Shift Starting Hour and Other Parameters
    8        IV Site Description
    9        IV Catheter
    10       IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 1  Intake Type
```

```
Select GMRY INPUT TYPE NAME: GAVAGE
  Are you adding 'GAVAGE' as a new GMRY INPUT TYPE (the 5TH)? No//  Y  (Yes)
```

Enter appropriate input type name. The following is an example of possible choices associated with this field:

```
        IRRIGATION    3
        OTHER     4
        PO     1
        TUBE FEEDING     2
```

```
NAME: GAVAGE//<RET>
ORDER: 5
```

This field is used to print the intake type headers in a specific order on the intake and output reports.

```
Select GMRY INPUT TYPE NAME: <RET>
```

Menu Access:

The Intake Type option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY OUTPUT FILE1

Output Type

Description:

This option is provided for the ADP coordinator to configure the entries for the GMRY Output Type (#126.58) file. URINE, STOOL and DRAINS, for example, are major output types.

Additional Information:

This information is used in the following options:
     Enter/Edit Patient Output
     Print I/O Summary by Patient (by Shift & Day(s))
     Print I/O Summary (Midnight to Present)
     Print I/O Summary (48 Hrs)
     24 Hours Itemized Shift Report

The entries in the GMRY Output Type file cannot be deleted except by IRMS staff.
A user may change the entry name by editing the information.

When entering and editing the output type, the coordinator needs to be aware that only the first 5 characters print in the header of the following reports:
     Print I/O Summary by Patient (by Shift & Day(s))
     Print I/O Summary (Midnight to Present)
     Print I/O Summary (48 Hrs)

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


     1         Intake Type
     2         Output Type
     3         Output Subtype
     4         Intake Items
     5         IV Site
     6         IV Solution
     7         Shift Starting Hour and Other Parameters
     8         IV Site Description
     9         IV Catheter
     10        IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 2  Output Type
```

```
Select GMRY OUTPUT TYPE: OTHER
  Are you adding 'OTHER' as a new GMRY OUTPUT TYPE (the 6TH)? No//  Y  (Yes)
```

Answer with appropriate output type. The following is an example of possible choices found in the field:

DRAINAGE   4
EMESIS   3
FECES   5
N/G   2
URINE   1

```
OUTPUT TYPE: OTHER//<RET>
ORDER: 6
```

This field is used to print the output type headers in a specific order on the intake and output reports.

```
Select GMRY OUTPUT TYPE:<RET>
```

Menu Access:

The Output Type option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY OUTPUT FILE2

Output Subtype

Description:

This option allows the ADP coordinator to enter the entries for the GMRY Output Subtype (#126.6) file pointed to by the GMRY Patient I/O File (#126). VOID, FOLEY and STRAIGHT CATH, for example, are subtypes of URINE.

Additional Information:

This information is used in the following options:
    Enter/Edit Patient Output
    24 Hours Itemized Shift Report

The entries of the GMRY Output Subtype prompt cannot be deleted except by IRMS staff. A user may change the entry name by editing the information.

Restrictions:

Only URINE and DRAINAGE output types should have associated output subtypes.

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


   1        Intake Type
   2        Output Type
   3        Output Subtype
   4        Intake Items
   5        IV Site
   6        IV Solution
   7        Shift Starting Hour and Other Parameters
   8        IV Site Description
   9        IV Catheter
   10       IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 3  Output Subtype

Select GMRY OUTPUT SUBTYPE: CHEST TUBE,LEFT
  Are you adding 'CHEST TUBE,LEFT' as a new GMRY OUTPUT SUBTYPE (the 6TH)?
No//  Y (Yes)
```

Answer with appropriate output subtype. The following is an example of possible choices found in the field:

  CHEST TUBE,RIGHT   DRAINAGE
  FOLEY   URINE
  SHEATH CATH   URINE
  STRAIGHT CATH   URINE
  VOID   URINE

```
   GMRY OUTPUT SUBTYPE OUTPUT TYPE: DRAINAGE
OUTPUT SUBTYPE: CHEST TUBE,LEFT//<RET>
OUTPUT TYPE: DRAINAGE//<RET>

Select GMRY OUTPUT SUBTYPE:<RET>
```

Menu Access:

The Output Subtype option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY INTAKE ITEMS

Intake Items

Description:

This option allows the ADP coordinator to enter items into the GMRY Intake Items (#126.8) file pointed to by the GMRY Patient I/O File (#126). The entries in the 126.8 file are used to identify specific fluid intake items associated with detailed oral fluids, tube feeding preparations, irrigation solution, etc. The information collected includes the name of the intake item (e.g., water), the volume of the fluid's container, and the input type associated with the intake item's name (e.g., po, irrigation).

Additional Information:

This information is used in the following options:
    Enter/Edit Patient Intake
    24 Hours Itemized Shift Report

The entries of the GMRY Intake Items Name prompt cannot be deleted except by IRMS staff. A user may change the entry name by editing the information.

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


     1        Intake Type
     2        Output Type
     3        Output Subtype
     4        Intake Items
     5        IV Site
     6        IV Solution
     7        Shift Starting Hour and Other Parameters
     8        IV Site Description
     9        IV Catheter
     10       IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 4  Intake Items

Select GMRY INTAKE ITEMS NAME: SODA
  Are you adding 'SODA' as a new GMRY INTAKE ITEMS (the 14TH)? No//  Y  (Yes)
```

Enter appropriate intake item.

```
NAME: SODA//<RET>
VOLUME: 360
```

Enter amount of intake item.

```
Select INPUT TYPE: PO
  Are you adding 'PO' as a new INPUT TYPE (the 1ST for this GMRY INTAKE
ITEMS)? No//  Y  (Yes)
```

Enter appropriate input type.

```
Select INPUT TYPE:<RET>
```

```
Select GMRY INTAKE ITEMS NAME:<RET>
```

Menu Access:

The Intake Items option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY IV SITE

IV Site

Description:

This option allows the ADP coordinator to enter IV sites into the GMRY IV Site (#126.7) file. The entries are names of anatomical sites such as right wrist and left hand.

Additional Information:

This information is used to track the IV insertion site and assist with documentation of the site's status and surrounding skin integrity. Deletion of file data does not affect existing patient I&O information.

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


     1          Intake Type
     2          Output Type
     3          Output Subtype
     4          Intake Items
     5          IV Site
     6          IV Solution
     7          Shift Starting Hour and Other Parameters
     8          IV Site Description
     9          IV Catheter
     10         IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 5  IV Site

Select GMRY IV SITE: WRIST,RT
  Are you adding 'WRIST,RT' as a new GMRY IV SITE (the 12TH)? No//  Y  (Yes)
```

Enter appropriate IV site.

```
IV SITE: WRIST,RT//<RET>

Select GMRY IV SITE:<RET>
```

Menu Access:

The IV Site option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY IV SOL

IV Solution

Description:

This option allows the ADP coordinator to enter IV solutions into the GMRY NUR IV Solution (#126.9) file. There are three fields associated with this option that store information on the IV solution: solution name, the type of solution (hyperal, piggyback, admixture, blood/blood products, and intralipids), and the volume of the solution.

Additional Information:

The IV solutions added to this file include admixtures, hyperals, intralipids, piggybacks and blood/blood products. This data is used only when the Pharmacy IV module interface is not available, when patient IV orders have not been entered into OE/RR and processed by pharmacy, or if an API (application programmer interface) has not been written for a specific package (e.g., Blood Bank). Deletion of file data does not affect existing patient I&O information.

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


   1        Intake Type
   2        Output Type
   3        Output Subtype
   4        Intake Items
   5        IV Site
   6        IV Solution
   7        Shift Starting Hour and Other Parameters
   8        IV Site Description
   9        IV Catheter
   10       IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 6  IV Solution

Select GMRY NUR IV SOLUTION NAME: D10W (1000)
  Are you adding 'D10W (1000)' as a new GMRY NUR IV SOLUTION (the 31ST)? No//
Y (Yes)
```

Enter the name of an appropriate IV solution.

```
GMRY NUR IV SOLUTION TYPE: A   ADMIXTURE
```

Enter appropriate IV solution type. The following is a list of choices distributed in the software:

H	HYPERAL
P	PIGGYBACK
A	ADMIXTURE
B	BLOOD/BLOOD PRODUCT
I	INTRALIPIDS

```
NAME: D10W (1000)//<RET>
TYPE: ADMIXTURE//<RET>
VOLUME: 1000
```

Enter amount of IV solution.

```
Select GMRY NUR IV SOLUTION NAME:<RET>
```

Menu Access:

The IV Solution option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY NURSHIFT

Shift Starting Hour and Other Parameters

Description:

This option allows the application coordinator to edit specific Intake and Output parameters that are stored in the GMRY NUR Shift/Other (#126.95) file. These parameters include the starting hours for the night, day, and evening shift (tour of duty) which are used to calculate a patient's total intake and output for a specific time span.

Additional Information:

In this version of Intake and Output, the application can only assign shift start times for the entire hospital. In a future version, the application's functionality will be modified to accommodate unique shift times for specific wards or units. Also, the displaying of data for units with two tours of duty, (i.e., two 12 hour shifts) within a 24 hour time frame will be explored. The data type for the shift start hours is entered in military time (e.g., 0800, 1600, and 2400).

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


     1        Intake Type
     2        Output Type
     3        Output Subtype
     4        Intake Items
     5        IV Site
     6        IV Solution
     7        Shift Starting Hour and Other Parameters
     8        IV Site Description
     9        IV Catheter
     10       IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 7  Shift
Starting Hour and Other Parameters

Select GMRY NUR SHIFT/OTHER NAME: HOSPITAL
```

The data selected at this prompt cannot be edited.

```
NIGHT: 2400
```

Enter start time of night shift. Use military time.

DAY: **0700**

Enter start time of day shift. Use military time.

EVENING: **330**??

Enter start time of evening shift. Use military time.

Note: The program did not accept this entry as valid. Only military time is accepted.

EVENING: **1530**

Select GMRY NUR SHIFT NAME/OTHER:**<RET>**

Menu Access:

The Shift Starting Hour and Other Parameters option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY SITE DESCRP

IV Site Description

Description:

This option allows the ADP coordinator to enter IV site descriptions into the GMRY IV Site Description (#126.72) file. This information describes the condition of the skin around the insertion site of the IV catheter or needle.

Additional Information:

The following descriptions are distributed with the software.

        DRAINAGE
        NO REDNESS/PAIN/SWELLING   (This description is the default.)
        NON TENDER
        RED
        SLOUGH
        SWOLLEN
        TENDER

Information is printed on the 24 Hours Itemized Shift Report, the Intravenous Infusion Flow Sheet, and the Nursing application's End of Shift Report. Deleting information from the file does not affect existing patient I&O information.

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


    1       Intake Type
    2       Output Type
    3       Output Subtype
    4       Intake Items
    5       IV Site
    6       IV Solution
    7       Shift Starting Hour and Other Parameters
    8       IV Site Description
    9       IV Catheter
    10      IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 8  IV Site
Description
```

```
Select GMRY IV SITE DESCRIPTION: WARM
  Are you adding 'WARM' as a new GMRY IV SITE DESCRIPTION (the 8TH)? No//  Y
(Yes)
```

Answer with IV site description.

```
DESCRIPTION: WARM//<RET>
```

```
Select GMRY IV SITE DESCRIPTION:<RET>
```

Menu Access:

The IV Site Description option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY IV CATH

IV Catheter

Description:

This option allows the ADP coordinator to enter different types of IV catheters, needles, etc. into the GMRY IV Catheter (#126.74) file.

Additional Information:

This file contains a list of IV instrumentation (i.e., needles, catheters, locks, butterflys, etc.) that might be used by clinicians to establish an IV infusion (continuous or intermittent) of fluids or drugs. Both the type and size of the catheter should be contained in the IV catheter name (when appropriate). Refer to the example illustrated under Screen Prints. Deleting data in this file does not affect existing patient I&O information.

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


    1        Intake Type
    2        Output Type
    3        Output Subtype
    4        Intake Items
    5        IV Site
    6        IV Solution
    7        Shift Starting Hour and Other Parameters
    8        IV Site Description
    9        IV Catheter
    10       IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 9  IV Catheter
```

Example 1: Enter the name of a single lumen catheter.

```
Select GMRY IV CATHETER IV CATHETER TYPE/SIZE: ANGIO CATH-14
  Are you adding 'ANGIO CATH-14' as a new GMRY IV CATHETER (the 21ST)? No//  Y
(Yes)
IV CATHETER TYPE/SIZE: ANGIOCATH-14//<RET>
```

Answer with IV catheter name. The following is a representative list of choices displayed by the software when a user queries the application for a list of IV catheter types/sizes:

ANGIO CATH-14   Note: In this file when you configure
ANGIO CATH-16   the entries, FileMan will order
ANGIO CATH-18   either numerically or alphabeti-
ANGIO CATH-20   cally depending on your entries.
ANGIO CATH-22   For instance if you enter
BUTTERFLY-16   catheter size first, such as 18
BUTTERFLY-18   and the user selects 18, then
NEEDLE 1 1/4 IN-14   all the 18 catheters will be
NEEDLE 1 1/4 IN-16   displayed for the user to select
NEEDLE 1 1/4 IN-18   from.

```
Select PORT: <RET>
```
A single lumen port does not need an entry at this prompt.

Example 2: Enter the name of a multi-lumen catheter and names of associated ports.

```
Select GMRY IV CATHETER IV CATHETER TYPE/SIZE: DOUBLE LUMEN
Are you adding 'DOUBLE LUMEN' as a new GMRY IV CATHETER (the 19TH)? No//  Y
(Yes)
IV CATHETER TYPE/SIZE: DOUBLE LUMEN 1// <RET>
```

The following PORT prompts allow the package coordinator to associate the name of a port with the catheter. Since this is a double lumen port, the port names of PROXIMAL and DISTAL are entered. If this was a triple lumen port, the MEDIAL port would have been added.

```
Select PORT: PROXIMAL
Are you adding 'PROXIMAL' as a new PORT (the 1ST for this GMRY IV CATHETER)?
No//  Y (Yes)
Select PORT: DISTAL
Are you adding 'DISTAL' as a new PORT (the 2ND for this GMRY IV CATHETER)?
No//  Y (Yes)
Select PORT: <RET>
```

Menu Access:

The IV Catheter option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

GMRY DC REASON

IV DC'ed Reason

Description:

This option allows the ADP coordinator to enter and edit reasons for discontinuing an IV into the GMRY IV DC'ed Reason (#126.76) file.

Additional Information:

The information in this file can be edited or deleted through this option. Editing or deleting of information will not affect existing patient I&O information.

Menu Display:

```
Select Patient Intake/Output Menu Option: 9  Configure I/O Files (ADP
Coordinator Only)


   1        Intake Type
   2        Output Type
   3        Output Subtype
   4        Intake Items
   5        IV Site
   6        IV Solution
   7        Shift Starting Hour and Other Parameters
   8        IV Site Description
   9        IV Catheter
   10       IV DC'ed Reason
```

Screen Prints:

```
Select Configure I/O Files (ADP Coordinator Only) Option: 10  IV DC'ed Reason

Select GMRY IV DC'ED REASON NAME: WRONG PATIENT
  Are you adding 'WRONG PATIENT' as a new GMRY IV DC'ED REASON (the 8TH)? No//
Y (Yes)
```

Answer with IV DC'ed reason name. The following is a list of choices:

> ACCIDENTALLY D/C'D
> CLOTTED
> COMPLETE A BOTTLE
> INFUSED   Note: INFUSED is the default.
> IV INFILTRATED
> ORDER EXPIRED/DC'D
> SITE CONDITION

```
NAME: WRONG PATIENT//<RET>
```

```
Select GMRY IV DC'ED REASON NAME:<RET>
```

Menu Access:

The IV DC'ed Reason option is accessed through the Configure I/O Files (ADP Coordinator Only) option of the Patient Intake/Output Menu.

Section 2 Package Operation

Chapter 3 Package Operation

Having completed the instructions for implementing the software as indicated in the Package Management section, you are now ready to use the options. The content contained in the following sections provides information on all software options which can be assigned to clinical staff. This information includes the name, description or purpose of the option, screen prints, menu access, and other information that supports the use of the options.

Remember that on-line help is available when questions arise. The user can type ? or ??, after any prompt to get a help message that generally tells the user what to do. In some instances, a specific list of possible responses is displayed. All field names in the Intake and Output application have descriptions associated with them. Help is also available at the menu level by typing a ??, or ???.

Chapter 4 Enter/Edit Patient Intake and Output

GMRY EDIT INTAKE

Enter/Edit Patient Intake

Description:

This option allows the user to enter or edit patient intake records (e.g., oral, IV, and nasogastric). Data is stored in the GMRY Patient I/O (#126) file. Refer to Chapter 2, Maintenance of Site Files for editing associated files.

Additional Information:

Enter/Edit Patient Intake is the primary option used to enter patient intake. You will note that two (2) columns display after the patient's hospital location or patient's name is entered:

			Detailed input from 6 to 9
1	PO	6	PO
2	IV Access	7	Tube Feeding
3	Tube Feeding	8	Irrigation
4	Irrigation	9	Other
5	Other		

The column on the left side of the screen, permits a user to document only the total intake (in milliliters) associated with a specific intake type (PO, IV, etc.). The column on the right allows users to document the names of specific liquids, fluids, solutions, etc. associated with an intake type. The documenting of specific IV fluids is accomplished through the Start/Add/DC IV and Maintenance option explained later in this chapter. If a user does not document that an IV has been started on a patient through the Start/Add/DC IV and Maintenance option, the software will not allow the user to chart an IV intake amount through this option.

The Intake and Output application does NOT automatically calculate the IV intake totals; this data must be manually entered. Although the intake amount could be calculated based on the date/time the IV solution was hung, the variables adversely affecting the flow rate and producing an erroneous IV intake, counter indicate the automatic calculation of the intravenous intake.

The Enter/Edit Patient Intake option prompts you after you have entered the intake, to enter the patient's output. This was done to simplify the I&O process and save time. The prompt's response is defaulted to YES but you can answer N (for NO) if there is no output at this time.

This software does not prevent intake and output measurements from being entered for patients on leave status, (e.g., authorized, unauthorized) or those that are deceased. When the date and time the data was collected is later than the date/time the patient died or was placed on leave, the software displays a reminder. Following this message, the user may continue entering data.

A patient's I&O information is printed on the following reports:
>   Print I/O Summary by Patient (by Shift & Day(s))
>   Print I/O Summary (Midnight to Present)
>   Print I/O Summary (48 Hrs)
>   24 Hours Itemized Shift Report

Information on a patient's detailed intake is printed on the 24 Hours Itemized Shift Report.

Restrictions:

Data can only be edited for the previous 48 hour period. Future data cannot be entered.

Menu Display:

```
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) ...
```

Screen Prints:

```
Select Patient Intake/Output Menu Option: 1  Enter/Edit Patient Intake
by (A)ll patients on a unit, (S)elected Rooms on unit, or (P)atient? P

Select PATIENT NAME: STARK,ANTHONY L.  01-19-25     589632111     NSC
VETERAN
```

Enter patient name.

> Select HOSPITAL LOCATION: If the patient is an outpatient, the hospital location prompt displays.

The following example demonstrates the use of the left column for documenting ingested items. More than one (1) entry can be entered by separating numbers by a comma (',') or a hyphen ('-') for a range of numbers.

Note: The following screen display can be edited through the Intake Type option (refer to Chapter 2).

```
                                        Detailed input from 6 to 9
    1       PO                          6       PO
    2       IV ACCESS                   7       TUBE FEEDING
    3       TUBE FEEDING                8       IRRIGATION
    4       IRRIGATION                  9       OTHER
    5       OTHER
Select from 1 to 9 (enter 1,3-5 etc.) or "^" to quit: 1
Enter intake: PO

No records in the database within the last 48 hours
```

Note: The system alerts the user when no information for this intake type has been recorded in the previous 48 hours. If entries are present the program displays data entered within the last 48 hours and a prompt which allows the user to edit, delete and add a new entry, (i.e., Select a number (i.e., 1 to edit; 1@ to delete or N to add; ^ to quit selection) 6).

```
    Please enter a new DATE/TIME: T@0902    (DEC 28,1992@09:02:00)
```

Enter appropriate date/time.

```
Enter PO dated DEC 28,1992@09:02
    Unit ml is not required.

TOTAL AMOUNT: 560
```

Enter the intake volume. Ml does not have to be entered after the volume.

```
        Total PO intake for this time: 560 mls

Do you want to enter OUTPUT? Yes// <RET>  (Yes)
```

Enter 'N' to exit if there is no output for this patient.

```
    1       URINE
    2       N/G
    3       EMESIS
    4       DRAINAGE
    5       FECES
    6       OTHER
Select from 1 to 6 (enter 1,3-5 etc.) or "^" to quit: URINE//<RET>
```

Note: The above screen display can be changed/edited through the Output Type option (refer to Chapter 2).

```
Enter output: URINE
```

Urine is the default, but the user may enter another output type from the above list.

```
        No records in the database within the last 48 hours
```

Note: The system alerts the user when no information for this output type has been documented in the previous 48 hours. If entries are present the program displays those entered within the last 48 hours.

```
Please enter a new DATE/TIME: N   (DEC 28,1996@09:05:04)
```

Enter appropriate date/time.

```
Enter URINE dated DEC 28,1996@09:05
      Unit ml is not required

1. VOIDED                          3. SUPRAPUBIC CATHETER
2. FOLEY CATHETER
```

Note: The above screen display of urine subtypes can be adjusted by editing the Output Subtype file through the Configure I/O Files (ADP Coordinator Only) option.

You may document how the output was obtained by entering a urine output subtype (i.e., voided, foley catheter, suprapubic catheter). If you do not wish to enter a subtype, enter <RET>. The user is then asked to enter an amount that is a numeric entry; you do not have to enter cc/ml. If the actual amount cannot be determined, an estimated amount using S = small, M = medium, and L = large may also be entered.

```
Select a number for the URINE SUBTYPE(optional): 2
FOLEY CATHETER
```

Enter appropriate subtype.

```
Enter numeric value for measured output in cc/ml or enter S(mall), M(edium) or
L(arge) for estimated output.

OUTPUT AMOUNT: 340
```

The following example demonstrates patient intake using specific entries (right column). This display can be changed by editing the intake type data through the Intake Type option (refer to chapter 2).

```
Select Patient Intake/Output Menu Option: 1  Enter/Edit Patient Intake
by (A)ll patients on a unit, (S)elected Rooms on unit, or (P)atient? P

Select PATIENT NAME: STARK,ANTHONY L.  01-19-25      589632111      NSC
VETERAN
                                          Detailed input from 6 to 9
   1      PO                           6      PO
   2      IV ACCESS                    7      TUBE FEEDING
   3      TUBE FEEDING                 8      IRRIGATION
   4      IRRIGATION                   9      OTHER
   5      OTHER
Select from 1 to 9 (enter 1,3-5 etc.) or "^" to quit: 6,7
Enter intake: PO
     1.   DEC 28,1996@09:02        Total: 560 mls
```

In this example, the software displays the previous oral intake (documented within the last 48 hours).

```
Select a number(i.e., 1 to edit; 1@ to delete or N to add; ^ to quit
selection): N
```

You can edit the previous entry, delete the entry or enter 'N' for a new entry.

```
Please enter a new DATE/TIME: T@1115  (DEC 28,1996@11:15)
```

Enter appropriate date/time. Time can be entered for the past 48 hours or the present, but cannot be entered in the future.

A list of items from the Intake Items file is displayed.

SOUP	120	mls
ICE CREAM	50	mls
JELLO	75	mls
MILK	240	mls
TEA	150	mls
WATER	125	mls
COFFEE	150	mls
JUICE	125	mls
SODA	360	mls

Intake items are specific to the facility. The ADP coordinator is responsible for maintaining the Intake Items file through the Configure I/O Files (ADP Coordinator Only) option.

```
Enter PO dated DEC 28,1996@11:15
     Unit ml is not required.

Select INTAKE ITEM: SOUP
```

Enter appropriate intake item.

```
  VOLUME: 120// 150
```

Enter amount ingested. The user may either accept the default by entering <RET> or enter a different amount.

```
Select INTAKE ITEM: MILK
  VOLUME: 240//<RET>
Select INTAKE ITEM:<RET>
```

The software displays a total intake volume associated with this oral intake type.

```
     Total PO intake for this time: 390 mls

Enter intake: TUBE FEEDING

     No records in the database within the last 48 hours
Please enter a new DATE/TIME: N  (DEC 28,1996@11:15:20)
```

Enter appropriate date/time.

A list of items found in the Intake Items file is displayed.

MILK	240	mls
WATER	125	mls
SOUP	180	mls
SUSTACAL	240	mls

You may have more or less items listed, depending on what the ADP coordinator entered into the Intake Items file through the Configure I/O Files (ADP Coordinator Only) option.

```
Enter TUBE FEEDING dated DEC 28,1996@11:15
     Unit ml is not required.
Select INTAKE ITEM: SOUP
```

Enter the tube feeding product.

```
  VOLUME: 180// 300
```

Enter amount ingested.

```
Select INTAKE ITEM: WATER
  VOLUME: 125// 60
Select INTAKE ITEM: <RET>

    Total TUBE FEEDING intake for this time: 360 mls

Do you want to enter OUTPUT? Yes// N  (No)
```

IV Access.

Under this option, the user is able to enter the amount of the IV solution left in the container at the end of the shift or at any time an IV intake total must be entered. The Start/Add/DC IV and Maintenance option does not automatically calculate an accurate amount of absorbed solution per shift.

```
Select Patient Intake/Output Menu Option: 1  Enter/Edit Patient Intake
by (A)ll patients on a unit, (S)elected Rooms on unit, or (P)atient? P

Select PATIENT NAME: STARK,ANTHONY L.  01-19-25     589632111     NSC
VETERAN

                                        Detailed input from 6 to 9
  1     PO                            6       PO
  2     IV ACCESS                     7       TUBE FEEDING
  3     TUBE FEEDING                  8       IRRIGATION
  4     IRRIGATION                    9       OTHER
  5     OTHER

Select from 1 to 9 (enter 1,3-5 etc.) or "^" to quit: 2
Enter intake: IV ACCESS

1. D5W 1000 mls  1000 mls (A)  LEFT HAND  Started on FEB 11,1996@10:39
```

The software displays a list of the patient's IVs that were entered through the Start/Add/DC IV and Maintenance option.

```
Enter the number of the IV you wish to enter/edit INTAKE: 1
Enter IV INTAKE for D5W 1000 mls A  LEFT HAND  1000 mls
        Started @FEB 11,1996@10:39
    Total amount absorbed: 0 mls
```

The software indicates the total IV intake previously documented through the option and associated with this IV.

```
        No intake records for this IV line within the last 48 hours
```

If no IV intake was entered, the display appears on the screen.

```
Please enter a new DATE/TIME: @1500  (FEB 11, 1996@15:00:00)

Enter ADMIXTURE intake dated FEB 11,1996@15:00
     Enter * for AMOUNT LEFT if amount of solution absorbed is unknown.
          Unit mls is not required.

AMOUNT LEFT: 600
```

This is the amount of the IV solution left at 1500 hours or 3pm.

```
Intake for this period: 400 mls   ? Yes//<RET>   (Yes)
```

This is the amount of IV fluid absorbed from the 1000 ml bag from the time it was started at 10:39am this morning..

```
Do you want to enter OUTPUT? Yes// N    (No)
```

Menu Access:

The Enter/Edit Patient Intake option is accessed through the Patient Intake/Output Menu option.

GMRY EDIT OUTPUT

Enter/Edit Patient Output

Description:

This option allows user to enter or edit patient output records only. Patient data is stored in the GMRY Patient I/O (#126) file.

Additional Information:

This option only permits entry of OUTPUT. URINE and DRAINAGE are the only output types with associated output subtypes, (e.g., foley, voided), but entering data for these subtypes is optional.

Patient output information is printed in the following options:
          Print I/O Summary by Patient (by Shift & Day(s))
          Print I/O Summary (Midnight to Present)
          Print I/O Summary (48 Hrs)
          24 Hours Itemized Shift Report

A report of a patient's detailed output is found on the 24 Hours Itemized Shift Report.

Restrictions:

Data can only be edited for the previous 48 hour period. Future data cannot be entered.

Menu Display:

```
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) ...
```

Screen Prints:

```
Select Patient Intake/Output Menu Option: 2  Enter/Edit Patient Output
by (A)ll patients on a unit, (S)elected Rooms on unit, or (P)atient? P
```

```
Select PATIENT NAME: MOUSE,MICKEY        04-25-38     123222111
```

If the patient is an outpatient and/or placed on a ward for 23 hour observation, the hospital location prompt displays.

```
Select HOSPITAL LOCATION: 1 EAST

    1       URINE
    2       N/G
    3       EMESIS
    4       DRAINAGE
    5       FECES
    6       OTHER
Select from 1 to 6 (enter 1,3-5 etc.) or "^" to quit: URINE//<RET>
Enter output: URINE
    1.   FEB 2,1996@08:00              245 mls   VOIDED
    2.   FEB 1,1996@14:24              455 mls   FOLEY CATHETER
    3.   FEB 1,1996@09:49              100 mls   SUPRAPUBIC CATHETER

Select a number(i.e., 1 to edit; 1@ to delete or N to add; ^ to quit
selection): N

Please enter a new DATE/TIME: @0845   (FEB 02, 1996@08:45:00)
```

Enter date/time of output.

```
Enter URINE dated FEB 2,1996@08:45
     Unit ml is not required

1. VOIDED                     3. SUPRAPUBIC CATHETER
2. FOLEY CATHETER
Select a number for the URINE SUBTYPE(optional): 1

Enter numeric value for measured output in cc/ml or enter S(mall), M(edium) or
L(arge) for estimated output.

OUTPUT AMOUNT: S// 240
```

DELETING ERRORS: The entry number, followed by an @ deletes the entry as shown below.

```
Select Patient Intake/Output Menu Option: 2  Enter/Edit Patient Output
by (A)ll patients on a unit, (S)elected Rooms on unit, or (P)atient? P

Select PATIENT NAME: MOUSE,MICKEY        04-25-38     123222111
```

If the patient is an outpatient, the hospital location prompt displays.

```
Select HOSPITAL LOCATION: 1 EAST

    1       URINE
    2       N/G
    3       EMESIS
    4       DRAINAGE
    5       FECES
    6       OTHER
Select from 1 to 6 (enter 1,3-5 etc.) or "^" to quit: URINE//<RET>
```

Urine is the software's default response.

```
Enter output: URINE
      1.    FEB 2,1996@08:45               240 mls   VOIDED
      2.    FEB 2,1996@08:00               245 mls   VOIDED
      3.    FEB 1,1996@14:24               455 mls   FOLEY CATHETER
      4.    FEB 1,1996@09:49               100 mls   SUPRAPUBIC CATHETER

Select a number(i.e., 1 to edit; 1@ to delete or N to add; ^ to quit
selection): 2@
```

Select the entry to be deleted.

```
Are you sure you want to delete this record? Yes// <RET>    (Yes)

URINE Entered on FEB 2,1996@08:00  has been deleted!!!
```

The user can reenter the date/time and enter the correct amount if appropriate.

Menu Access:

The Enter/Edit Patient Output option is accessed through the Patient Intake/ Output Menu option.

GMRY IV CARE

Start/Add/DC IV and Maintenance

Description:

This 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.

Information on a patient's IV line, solutions hung and absorbed, IV site care, etc., are stored in the GMRY Patient I/O (#126) file.

Additional Information:

A patient's IV intake cannot be documented through the Enter/Edit Patient Intake option (IV ACCESS) until an IV has been started through the Start IV option. This software option does not automatically calculate the amount of fluid absorbed during a specific 8 hour shift. There are multiple variables influencing the fluid's absorption rate (such as positioning, pathway, etc.), therefore, the total IV volume absorbed per shift must be manually entered through the Enter/Edit Patient Intake option (IV ACCESS). When the intake of an IV is unknown, the nurse may document this unknown amount by entering an asterisk (*).

The patient data entered through this option is reflected in the following reports:
    24 Hours Itemized Shift Report
    Intravenous Infusion Flow Sheet

Restrictions:

Data can only be edited for the previous 48 hour period. Future data cannot be entered.

Menu Display:

```
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) ...
```

Screen Prints:

The following pages contain separate examples of each option's use. There is no continuity in IV displays between individual examples.

```
Select Patient Intake/Output Menu Option:  3    Start/Add/DC IV and Maintenance

by (A)ll patients on a unit, (S)elected Rooms on unit, or (P)atient? P
Select PATIENT NAME: STARK,ANTHONY L.          11-04-85     112334443
500-3    NO     NSC VETERAN
```

When the patient is an outpatient, a Hospital Location prompt appears and the patient's clinic or ward should be entered. If the patient is an inpatient, the location prompt does not appear.

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

1a. Start IV using a single lumen catheter.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 1
*** START IV ***

There is no IV running for this patient.

Start new IV

Please enter a new DATE/TIME: N  (FEB 14, 1997@14:39:34)
Select from the following IV sites

1. HAND                              7. JUGULAR
2. WRIST                             8. ANKLE/FOOT
3. LOWER ARM                         9. LEG
4. UPPER ARM                         10. FEMORAL
5. ANTECUBITTAL                      11. UMBILICAL
6. SUBCLAVIAN                        12. PEDAL
```

```
Enter a number with a qualifier L for LEFT/R for RIGHT, default (L)eft.
(e.g., 2R for RIGHT WRIST; 2 or 2L for LEFT WRIST): 3
   LEFT LOWER ARM
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Site option.

```
Select from the following IV CATHs

1.  ANGIO CATH-14                    12. TRIPLE LUMEN CVP
2.  ANGIO CATH-16                    13. RA-PA CATH
3.  ANGIO CATH-18                    14. VENOUS INTRODUCER
4.  ANGIO CATH-20                    15. HICKMAN LOCK
5.  ANGIO CATH-22                    16. DOUBLE LUMEN PERIPHERAL
6.  BUTTERFLY-16                     17. SUBCLAVIAN
7.  BUTTERFLY-18                     18. DOUBLE LUMEN SUBCLAVIAN
8.  NEEDLE 1 1/4 IN-14               19. DOUBLE LUMEN 1
9.  NEEDLE 1 1/4 IN-16               20. TRIPLE LUMEN 1
10. NEEDLE 1 1/4 IN-18               21. ANGIOCATH-14
11. BUTTERFLY-20

Select a number between 1 and 21: 3
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Catheter option.

```
Select one of the IV types listed below
     A - admixture
     B - blood/blood product
     H - hyperal
     I - intralipid
     P - piggyback
     L - locks/ports
     Please enter a character: A  admixture

Active pharmacy IV order for the patient:

5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... 1000 100 ml/hr

Select a number between 1 and 1: <RET>
```

Enter Return to bypass the pharmacy orders and to select an entry from the Nursing Solution file.

```
Select a(n) admixture from the following Nursing Solution file listing

1.  OTHER  0 mls                     15. D5W.2%NS (500)  500 mls
2.  1/2 NS (1000)  1000 mls          16. D5W.9NS (1000)  1000 mls
3.  1/2 NS (500)  500 mls            17. D5W.9NS (250)  250 mls
4.  10% DEXTRAN 40  500 mls          18. D5W.9NS (500)  500 mls
5.  D10W (1000)  1000 mls            19. D5W1/2NS (1000)  1000 mls
6.  D10W.9NS (1000)  1000 mls        20. D5W1/2NS (250)  250 mls
7.  D10W1/2NS (1000)  1000 mls       21. D5W1/2NS (500)  500 mls
8.  D5.2NS  1000 mls                 22. KCL 20MEQ (50)  50 mls
9.  D5W (250)  250 mls               23. LACTATED RINGERS (1000)  1000 mls
10. D5W (500)  500 mls               24. NS  500 mls
```

```
11. D5W(1000)  1000 mls                 25. NS.9% (1000)  1000 mls
12. D5W.2%NS (100)  100 mls             26. NS.9% (250)  250 mls
13. D5W.2%NS (1000)  1000 mls           27. NS.9% (500)  500 mls
14. D5W.2%NS (250)  250 mls             28. SODIUM BICARBINATE 5%(500)  500
mls

Enter a number/name for your selection,
Enter additional vitamins/electrolytes using a ; to separate,
for example, 4;multivits): 13
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Solution option.

```
Amount of solution in mls in the container: 1000// <RET>
Enter a number for infusion rate (Example: 125 = 125 ml/hr):  50
D5W.2%NS (1000)  admixture   1000 mls  50 ml/hr   Is it correct ? Yes// <RET>
(Yes)
    D5W.2%NS (1000) (A)  1000 mls  (02/14/97@14:39)
Do you want to add another solution to this line? No// Y  (Yes)
Select one of the IV types listed below
    A - admixture
    B - blood/blood product
    H - hyperal
    I - intralipid
    P - piggyback
    L - locks/ports
    Please enter a character: P  piggyback
No pharmacy active IV order for this patient


Select a(n) piggyback from the following Nursing Solution file listing

1. OTHER  0 mls                         3. MANNITOL  500 mls
2. D5W (50)  50 mls                     4. NS.9% (100)  100 mls
```

If you select 1 for OTHER, you are asked to enter the name of an IV solution. For example:

```
Enter a number/name for your selection,
Enter additional vitamins/electrolytes using a ; to separate,
for example, 4;multivits): 1

Please SPECIFY the name of the solution
  (maximum 75 characters): AMPICILLIN 1GM in NS.9%
```

The user may type in the name of any solution or blood/blood product that is not longer than 75 characters.

```
AMPICILLIN 1GM in NS.9%  ? Yes// <RET>  (Yes)
Amount of solution in mls in the container: 0// 50
Enter a number for infusion rate (Example: 125 = 125 ml/hr):  100
AMPICILLIN 1GM in NS.9%  piggyback   50 mls  100 ml/hr   Is it correct ? Yes//
<RET>  (Yes)
    D5W.2%NS (1000) (A)  1000 mls  (02/14/97@14:39)
    AMPICILLIN 1GM in NS.9% (P)  50 mls  (02/14/97@14:39)
Do you want to add another solution to this line? No// <RET>  (No)
```

If you entered YES, you can enter more solutions to the same IV site.

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

1b. Start IV using a multi-lumen catheter.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 1

*** START IV ***

Current IV(s):

1. LEFT LOWER ARM - ANGIO CATH-18
     D5W.2%NS (1000)  (A) 50 ml/hr  Started on 02/14/97@14:39

2. LEFT LOWER ARM - ANGIO CATH-18
     AMPICILLIN 1GM in NS.9%  (P) 100 ml/hr  Added on 02/14/97@14:39

Start new IV

Please enter a new DATE/TIME: n  (FEB 14, 1997@14:44:35)
Select from the following IV sites

1. HAND                          7. JUGULAR
2. WRIST                         8. ANKLE/FOOT
3. LOWER ARM                     9. LEG
4. UPPER ARM                     10. FEMORAL
5. ANTECUBITTAL                  11. UMBILICAL
6. SUBCLAVIAN                    12. PEDAL

Enter a number with a qualifier L for LEFT/R for RIGHT, default (L)eft.
(e.g., 2R for RIGHT WRIST; 2 or 2L for LEFT WRIST): 6
  LEFT SUBCLAVIAN
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Site option.

```
Select from the following IV CATHs
```

```
1. ANGIO CATH-14                      12. TRIPLE LUMEN CVP
2. ANGIO CATH-16                      13. RA-PA CATH
3. ANGIO CATH-18                      14. VENOUS INTRODUCER
4. ANGIO CATH-20                      15. HICKMAN LOCK
5. ANGIO CATH-22                      16. DOUBLE LUMEN PERIPHERAL
6. BUTTERFLY-16                       17. SUBCLAVIAN
7. BUTTERFLY-18                       18. DOUBLE LUMEN SUBCLAVIAN
8. NEEDLE 1 1/4 IN-14                 19. DOUBLE LUMEN 1
9. NEEDLE 1 1/4 IN-16                 20. TRIPLE LUMEN 1
10. NEEDLE 1 1/4 IN-18                21. ANGIOCATH-14
11. BUTTERFLY-20

Select a number between 1 and 21: 20
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Catheter option.

```
1  DISTAL
2  MEDIAL
3  PROXIMAL

Select the port number used for medication infusion or ^ to quit: 1
Select one of the IV types listed below
     A – admixture
     B – blood/blood product
     H – hyperal
     I – intralipid
     P – piggyback
     L – locks/ports
     Please enter a character: a  admixture
pharmacy active IV order for the patient:

1.5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... 1000 100
ml/hr

Select a number between 1 and 1: 1
Amount of solution in mls in the container: 1000// <RET>
Enter a number for infusion rate (Example: 125 = 125 ml/hr): 100// <RET>
5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG...  admixture
1000 mls  100 ml/hr   Is it correct ? Yes// <RET>
  (Yes)
  DISTAL
    5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... (A)
    1000 mls  (02/14/97@14:44)
Do you want to add another solution to DISTAL port? No// <RET>  (No)
```

The user could have added another solution to the distal port. After the documentation specific to the distal port is completed, the user is again prompted with the list of ports. Documentation of a solution associated with another port can then be entered.

```
1  DISTAL
2  MEDIAL
3  PROXIMAL
```

```
     Select the port number used for medication infusion or ^ to quit: 3
Select one of the IV types listed below
     A - admixture
     B - blood/blood product
     H - hyperal
     I - intralipid
     P - piggyback
     L - locks/ports
     Please enter a character: h  hyperal
pharmacy active IV order for the patient:

1.DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;... 1000 100
ml/hr

Select a number between 1 and 1: 1
Amount of solution in mls in the container: 1000// <RET>
Enter a number for infusion rate (Example: 125 = 125 ml/hr): 100// <RET>
DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...  hyperal
1000 mls  100 ml/hr   Is it correct ? Yes// <RET>
  (Yes)
  DISTAL
    5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... (A)
    1000 mls  (02/14/97@14:44)
  PROXIMAL
    DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;... (H)
    1000 mls  (02/14/97@14:44)
Do you want to add another solution to PROXIMAL port? No// <RET>  (No)

1  DISTAL
2  MEDIAL
3  PROXIMAL

Select the port number used for medication infusion or ^ to quit: ^
```

Note: The users must ^ to exit, otherwise an ERROR ENTRY prompt displays.

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

1c. Hanging a unit of blood or blood products.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 1
** START IV ***
```

The IV line supporting blood transfusions can be supported by starting an IV using normal saline (NS) and adding the blood/blood product to the main line.

```
Current IV(s):
```

```
1. LEFT SUBCLAVIAN - TRIPLE LUMEN 1   DISTAL
     LOCK/PORT    Converted on 02/14/97@15:03

2. LEFT SUBCLAVIAN - TRIPLE LUMEN 1   MEDIAL
    D5W.2%NS (500)  (A) 30 ml/hr  Added on 02/14/97@14:53

3. LEFT SUBCLAVIAN - TRIPLE LUMEN 1   PROXIMAL
     DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...  (H)
     100 ml/hr  Added on 02/14/97@14:44

Start new IV

Please enter a new DATE/TIME: n  (FEB 14, 1997@15:05:23)
Select from the following IV sites

1. HAND                            7.  JUGULAR
2. WRIST                           8.  ANKLE/FOOT
3. LOWER ARM                       9.  LEG
4. UPPER ARM                       10. FEMORAL
5. ANTECUBITTAL                    11. UMBILICAL
6. SUBCLAVIAN                      12. PEDAL

Enter a number with a qualifier L for LEFT/R for RIGHT, default (L)eft.
(e.g., 2R for RIGHT WRIST; 2 or 2L for LEFT WRIST): 2r
  RIGHT WRIST
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Site option.

```
Select from the following IV CATHs

1. ANGIO CATH-14                   12. TRIPLE LUMEN CVP
2. ANGIO CATH-16                   13. RA-PA CATH
3. ANGIO CATH-18                   14. VENOUS INTRODUCER
4. ANGIO CATH-20                   15. HICKMAN LOCK
5. ANGIO CATH-22                   16. DOUBLE LUMEN PERIPHERAL
6. BUTTERFLY-16                    17. SUBCLAVIAN
7. BUTTERFLY-18                    18. DOUBLE LUMEN SUBCLAVIAN
8. NEEDLE 1 1/4 IN-14              19. DOUBLE LUMEN 1
9. NEEDLE 1 1/4 IN-16              20. TRIPLE LUMEN 1
10. NEEDLE 1 1/4 IN-18             21. ANGIOCATH-14
11. BUTTERFLY-20

Select a number between 1 and 21: 1
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Catheter option.

```
Select one of the IV types listed below
     A - admixture
     B - blood/blood product
     H - hyperal
     I - intralipid
     P - piggyback
     L - locks/ports
     Please enter a character: a  admixture
pharmacy active IV order for the patient:
```

```
5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... 1000 100 ml/hr

Select a number between 1 and 1: <RET>

Select a(n) admixture from the following Nursing Solution file listing

1. OTHER  0 mls                          15. D5W.2%NS (500)   500 mls
2. 1/2 NS (1000)   1000 mls              16. D5W.9NS (1000)   1000 mls
3. 1/2 NS (500)   500 mls                17. D5W.9NS (250)   250 mls
4. 10% DEXTRAN 40   500 mls              18. D5W.9NS (500)   500 mls
5. D10W (1000)   1000 mls                19. D5W1/2NS (1000)   1000 mls
6. D10W.9NS (1000)   1000 mls            20. D5W1/2NS (250)   250 mls
7. D10W1/2NS (1000)   1000 mls           21. D5W1/2NS (500)   500 mls
8. D5.2NS   1000 mls                     22. KCL 20MEQ (50)   50 mls
9. D5W (250)   250 mls                   23. LACTATED RINGERS (1000)   1000 mls
10. D5W (500)   500 mls                  24. NS   500 mls
11. D5W(1000)   1000 mls                 25. NS.9% (1000)   1000 mls
12. D5W.2%NS (100)   100 mls             26. NS.9% (250)   250 mls
13. D5W.2%NS (1000)   1000 mls           27. NS.9% (500)   500 mls
14. D5W.2%NS (250)   250 mls             28. SODIUM BICARBINATE 5%(500)   500
mls

Enter a number/name for your selection,
Enter additional vitamins/electrolytes using a ; to separate,
for example, 4;multivits): 24

Amount of solution in mls in the container: 500// <RET>
Enter a number for infusion rate (Example: 125 = 125 ml/hr):  30
NS   admixture   500 mls  30 ml/hr   Is it correct ? Yes// <RET>  (Yes)
    NS (A)  500 mls  (02/14/97@15:05)
Do you want to add another solution to this line? No// <RET>  (No)
```

To document the hanging of blood, use the Add Additonal Solution(s) protocol.

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush

Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 6
*** ADD ADDITIONAL SOLUTION(S) ***


1. LEFT SUBCLAVIAN - TRIPLE LUMEN 1
   DISTAL
    LOCK/PORT (02/14/97@15:03)
   MEDIAL
    D5W.2%NS (500) (A)  500 mls  (02/14/97@14:53)
   PROXIMAL
    DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;... (H)
    1000 mls  (02/14/97@14:44)
2. RIGHT WRIST - ANGIO CATH-14
    NS (A)  500 mls  (02/14/97@15:05)
```

```
Select an IV site to add additional solutions: 2
Please enter a new DATE/TIME: n  (FEB 14, 1997@15:06:56)
Select one of the IV types listed below
     A - admixture
     B - blood/blood product
     H - hyperal
     I - intralipid
     P - piggyback
     L - locks/ports
     Please enter a character: b  blood/blood product
No pharmacy active IV order for this patient


Select a(n) blood/blood product from the following Nursing Solution file
listing


1. OTHER   0 mls                        4. PACKED RBC   350 mls
2. CRYOPRECIPITATE   150 mls            5. PLATLETS   100 mls
3. FRESH FROZEN PLASMA   100 mls        6. WHOLE BLOOD   450 mls
```

Note: Only solutions designated as blood/blood products will display. If you are required to document the blood control #, select 1 (for Other) and enter the type of blood/product with the control #.

```
Enter a number/name for your selection,
Enter additional vitamins/electrolytes using a ; to separate,
for example, 4;multivits): 4
Amount of solution in mls in the container: 350// <RET>
Enter a number for infusion rate (Example: 125 = 125 ml/hr):  100
PACKED RBC  blood/blood product   350 mls  100 ml/hr   Is it correct ? Yes//
<RET>
  (Yes)
    NS (A)  500 mls  (02/14/97@15:05)
    PACKED RBC (B)  350 mls  (02/14/97@15:06)
Do you want to add another solution to this line? No// <RET>  (No)
```

If you entered YES, you can enter more solutions to the same IV site.

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

2a. Discontinuing/converting an IV solution using Solution: Replace/DC/Convert/Finish Solution.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 2
*** SOLUTION: REPLACE/DC/CONVERT/FINISH SOLUTION ***
```

All running IV's are listed.

```
1. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    MEDIAL
   D5W.2%NS (500)  (A) 30 ml/hr  Added on 02/14/97@14:53

2. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    DISTAL
   5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG...  (A)
   100 ml/hr  Started on 02/14/97@14:44

3. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    PROXIMAL
   DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...  (H)
   100 ml/hr  Added on 02/14/97@14:44


Select a number to be discontinued: 2

Discontinued 5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG...
1000 mls (A) LEFT SUBCLAVIAN    started on FEB 14,1997@14:44


Select one of the following reasons for DCing or ^ to exit

            1. ACCIDENTLY DC'ED
            2. CLOTTED
            3. DATA ENTRY ERROR
            4. INFILTRATED
            5. INFUSED
            6. ORDER CHANGED
            7. ORDER EXPIRED/DC'ED
            8. REMOVED BY PATIENT
            9. RESTART, OUTDATED
            10. SITE CONDITION
            11. TRIPPED
            12. WRONG PATIENT

Select a number between 1 and 12: INFUSED// 6
ORDER CHANGED
DATE/TIME DC'ED: NOW// <RET>  (FEB 14, 1997@15:03:01)

Enter solution left in the container on FEB 14,1997@15:03
     Enter * for AMOUNT LEFT if amount of solution absorbed is unknown.
         Unit mls is not required.

AMOUNT LEFT: 250
```

Enter the amount left in the IV bag/bottle.

```
Intake for this period: 750 mls   ? Yes// <RET>  (Yes)
```

The user validates the amount of the IV fluid absorbed.

```
Do you wish to
     Convert to lock/port
     Hang a new solution
Please enter the FIRST character for your selection or press return to
continue: c
Convert to lock/port
Did you flush ? No// y  (Yes)
```

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

2b. Finishing a solution and discontinuing the IV using Solution: Replace/DC/ Convert/Finish Solution.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 2
*** SOLUTION: REPLACE/DC/CONVERT/FINISH SOLUTION ***

1. LEFT ANTECUBITTAL - ANGIO CATH-18
   D5W.2%NS (1000)  (A) 50 ml/hr  Started on 02/14/97@15:15

2. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    PROXIMAL
   DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...  (H)
   100 ml/hr  Added on 02/14/97@15:13

3. RIGHT WRIST - ANGIO CATH-14
   NS  (A) 30 ml/hr  Started on 02/14/97@15:05

4. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    DISTAL
    LOCK/PORT   Converted on 02/14/97@15:03

5. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    MEDIAL
   D5W.2%NS (500)  (A) 30 ml/hr  Added on 02/14/97@14:53


Select a number to be discontinued: 3

Discontinued NS  500 mls (A) RIGHT WRIST   started on FEB 14,1997@15:05


Select one of the following reasons for DCing or ^ to exit

            1. ACCIDENTLY DC'ED
            2. CLOTTED
            3. DATA ENTRY ERROR
            4. INFILTRATED
            5. INFUSED
            6. ORDER CHANGED
            7. ORDER EXPIRED/DC'ED
            8. REMOVED BY PATIENT
            9. RESTART, OUTDATED
            10. SITE CONDITION
            11. TRIPPED
            12. WRONG PATIENT

Select a number between 1 and 12: INFUSED// 6
ORDER CHANGED
DATE/TIME DC'ED: NOW// <RET>  (FEB 14, 1997@15:17:55)
```

```
Enter solution left in the container on FEB 14,1997@15:17
      Enter * for AMOUNT LEFT if amount of solution absorbed is unknown.
          Unit mls is not required.

AMOUNT LEFT: 300
```

Enter the amount left in the IV bag/bottle.

```
Intake for this period: 200 mls   ? Yes// <RET>  (Yes)
```

The user validates the amount of the IV fluid absorbed.

```
Do you wish to
      Convert to lock/port
      Hang a new solution
```

At the next prompt, the user may enter <RET> to document removal of the IV line/catheter.

```
Please enter the FIRST character for your selection or press return to
continue: <RET>

The IV site has no more solutions hanging. Do you want to DC IV SITE? Yes//
<RET>
  (Yes)
1. NO REDNESS/PAIN/SWELLING
2. NON TENDER
3. TENDER
4. RED
5. SWOLLEN
6. DRAINAGE
7. SLOUGH
8. FRANK PUS
Select from 1 to 8 (enter 1,3-5 etc.) to describe the infusion site: 1
      NO REDNESS/PAIN/SWELLING


1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

3. Replace same solution.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 3
*** REPLACE SAME SOLUTION ***

1. RIGHT WRIST - ANGIO CATH-14
    NS  (A) 30 ml/hr  Started on 02/14/97@15:05

2. LEFT SUBCLAVIAN - TRIPLE LUMEN 1   DISTAL
    LOCK/PORT   Converted on 02/14/97@15:03
```

```
3. LEFT SUBCLAVIAN - TRIPLE LUMEN 1   MEDIAL
    D5W.2%NS (500)  (A) 30 ml/hr  Added on 02/14/97@14:53

4. LEFT SUBCLAVIAN - TRIPLE LUMEN 1   PROXIMAL
    DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...  (H)
    100 ml/hr  Added on 02/14/97@14:44


Select a number to be discontinued: 4

Discontinued DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...
1000 mls (H) LEFT SUBCLAVIAN    started on FEB 14,1997@14:44


Select one of the following reasons for DCing or ^ to exit

             1. ACCIDENTLY DC'ED
             2. CLOTTED
             3. DATA ENTRY ERROR
             4. INFILTRATED
             5. INFUSED
             6. ORDER CHANGED
             7. ORDER EXPIRED/DC'ED
             8. REMOVED BY PATIENT
             9. RESTART, OUTDATED
             10. SITE CONDITION
             11. TRIPPED
             12. WRONG PATIENT

Select a number between 1 and 12: INFUSED// 5
INFUSED
DATE/TIME DC'ED: NOW// <RET>  (FEB 14, 1997@15:13:23)

Enter solution left in the container on FEB 14,1997@15:13
     Enter * for AMOUNT LEFT if amount of solution absorbed is unknown.
          Unit mls is not required.

AMOUNT LEFT: 0// <RET>
```

Enter the amount left in the IV bag/bottle.

```
Intake for this period: 1000 mls   ? Yes// <RET>  (Yes)
```

The user validates the amount of the IV fluid absorbed.

```
Adding DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...  (H)
1000 mls

Infusion rate(ml/hr) 100 // <RET>
New infusion rate is 100
VOLUME: 1000// <RET>


1.  Start IV
2.  Solution: Replace/DC/Convert/Finish Solution
3.  Replace Same Solution
4.  DC IV/Lock/Port and Site
```

```
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

4. DC IV/lock/port and site.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 4
*** DC IV/LOCK/PORT AND SITE ***

1. LEFT LOWER ARM - ANGIO CATH-18
   D5W.2%NS (1000) (A)  1000 mls  (02/14/97@14:39)
   AMPICILLIN 1GM in NS.9% (P)  50 mls  (02/14/97@14:39)
2. LEFT SUBCLAVIAN - TRIPLE LUMEN 1
   DISTAL
   5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... (A)
   1000 mls  (02/14/97@14:44)
   MEDIAL
   D5W.2%NS (500) (A)  500 mls  (02/14/97@14:53)
   PROXIMAL
   DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;... (H)
   1000 mls  (02/14/97@14:44)
```

Note: The IV solutions and locks/ports are associated with the IV site. The locks/ports are treated just like solutions. The following protocols: (infiltrated, infused, and order changed) display IV lines by IV site. The user is asked to enter the number of the IV site to be discontinued and all solutions/locks/ports associated with this IV site sill be DC'ed after the user provides additional closing information (i.e., fluid left/absorbed).

```
Select an IV site to discontinue: 1

LEFT LOWER ARM
   D5W.2%NS (1000) (A)  1000 mls  (02/14/97@14:39)
   AMPICILLIN 1GM in NS.9% (P)  50 mls  (02/14/97@14:39)
Please enter DATE/TIME: NOW//  (FEB 14, 1997@14:59:45)

Select one of the following reasons for DCing or ^ to exit

        1. ACCIDENTLY DC'ED
        2. CLOTTED
        3. DATA ENTRY ERROR
        4. INFILTRATED
        5. INFUSED
        6. ORDER CHANGED
        7. ORDER EXPIRED/DC'ED
        8. REMOVED BY PATIENT
        9. RESTART, OUTDATED
        10. SITE CONDITION
        11. TRIPPED
        12. WRONG PATIENT

Select a number between 1 and 12: INFUSED// 6
ORDER CHANGED
```

```
Discontinued D5W.2%NS (1000)  1000 mls (A) LEFT LOWER ARM   started on FEB
14,1997@14:39


Enter solution left in the container on FEB 14,1997@14:59
     Enter * for AMOUNT LEFT if amount of solution absorbed is unknown.
          Unit mls is not required.

AMOUNT LEFT: 900
```

Enter the amount left in the IV admixture bag/bottle.

```
Intake for this period: 100 mls   ? Yes// <RET>  (Yes)
```

The user validates the amount of the IV fluid absorbed.

Now the user will document the amount of piggyback solution remaining.

```
Discontinued AMPICILLIN 1GM in NS.9%  50 mls (P) LEFT LOWER ARM   started on
FEB 14,1997@14:39


Enter solution left in the container on FEB 14,1997@14:59
     Enter * for AMOUNT LEFT if amount of solution absorbed is unknown.
          Unit mls is not required.

AMOUNT LEFT: 0// <RET>
```

Enter the amount left in the IV bag/bottle.

```
Intake for this period: 50 mls   ? Yes// <RET>  (Yes)
```

The user validates the amount of the IV fluid absorbed.

```
1. NO REDNESS/PAIN/SWELLING
2. NON TENDER
3. TENDER
4. RED
5. SWOLLEN
6. DRAINAGE
7. SLOUGH
8. FRANK PUS
Select from 1 to 8 (enter 1,3-5 etc.) to describe the infusion site: 1
     NO REDNESS/PAIN/SWELLING
Do you want to restart the DC'd IV ? Yes// n  (No)


1.  Start IV
2.  Solution: Replace/DC/Convert/Finish Solution
3.  Replace Same Solution
4.  DC IV/Lock/Port and Site
5.  Care/Maintenance/Flush
6.  Add Additional Solution(s)
7.  Restart DC'd IV
8.  Adjust Infusion Rate
9.  Flush
```

5. Documenting IV site care, tubing change and flushing of lines.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 5

*** CARE/MAINTENANCE/FLUSH ***

1. LEFT LOWER ARM - ANGIO CATH-18
     D5W.2%NS (1000) (A)  1000 mls  (02/14/97@14:39)
     AMPICILLIN 1GM in NS.9% (P)  50 mls  (02/14/97@14:39)
```

Note: This protocol displays solutions/locks/ports discontinued within 24 hours.

```
Select IV site for care/maintenance/flush: 1
Please enter date/time: NOW//  (FEB 14, 1997@14:43:57)
1. NO REDNESS/PAIN/SWELLING
2. NON TENDER
3. TENDER
4. RED
5. SWOLLEN
6. DRAINAGE
7. SLOUGH
8. FRANK PUS
Select from 1 to 8 (enter 1,3-5 etc.) to describe the infusion site: 1
     NO REDNESS/PAIN/SWELLING
DRESSING CHANGED: <RET>

LEFT LOWER ARM - ANGIO CATH-18

   1.  D5W.2%NS (1000) (A)  1000 mls  (02/14/97@14:39)
   2.  AMPICILLIN 1GM in NS.9% (P)  50 mls  (02/14/97@14:39)
Enter the number(s) of the line associated with the TUBING CHANGE: <RET>
```

The user will notice that all of the patient's IV sites were displayed and when the IV's were DC'ed. If a previous IV site indicated a problem, this protocol can be used to document the condition of the site. The prompts are the same, but the user must enter <RET> at the TUBING CHANGE prompt.

```
1.  Start IV
2.  Solution: Replace/DC/Convert/Finish Solution
3.  Replace Same Solution
4.  DC IV/Lock/Port and Site
5.  Care/Maintenance/Flush
6.  Add Additional Solution(s)
7.  Restart DC'd IV
8.  Adjust Infusion Rate
9.  Flush
```

6. Add additional solutions.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 6
```

This example shows an admixture add to the medial port of a multi-lumen catheter.

```
*** ADD ADDITIONAL SOLUTION(S) ***
```

```
1. LEFT LOWER ARM - ANGIO CATH-18
   D5W.2%NS (1000) (A)  1000 mls  (02/14/97@14:39)
   AMPICILLIN 1GM in NS.9% (P)  50 mls  (02/14/97@14:39)
2. LEFT SUBCLAVIAN - TRIPLE LUMEN 1
   DISTAL
   5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... (A)
   1000 mls  (02/14/97@14:44)
   PROXIMAL
   DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;... (H)
   1000 mls  (02/14/97@14:44)

Select an IV site to add additional solutions: 2
Please enter a new DATE/TIME: n  (FEB 14, 1997@14:53:19)

1  DISTAL
2  MEDIAL
3  PROXIMAL

   Select the port number used for medication infusion or ^ to quit: 2
Select one of the IV types listed below
     A - admixture
     B - blood/blood product
     H - hyperal
     I - intralipid
     P - piggyback
     L - locks/ports
     Please enter a character: a  admixture
pharmacy active IV order for the patient:

1.5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... 1000 100
ml/hr

Select a number between 1 and 1: <RET>
```

Since the solution was an ordered item, the user will select from the GMRY NUR IV Solution (#126.9) file.

```
Select a(n) admixture from the following Nursing Solution file listing

1. OTHER  0 mls                          15. D5W.2%NS (500)  500 mls
2. 1/2 NS (1000)  1000 mls               16. D5W.9NS (1000)  1000 mls
3. 1/2 NS (500)  500 mls                 17. D5W.9NS (250)  250 mls
4. 10% DEXTRAN 40  500 mls               18. D5W.9NS (500)  500 mls
5. D10W (1000)  1000 mls                 19. D5W1/2NS (1000)  1000 mls
6. D10W.9NS (1000)  1000 mls             20. D5W1/2NS (250)  250 mls
7. D10W1/2NS (1000)  1000 mls            21. D5W1/2NS (500)  500 mls
8. D5.2NS  1000 mls                      22. KCL 20MEQ (50)  50 mls
9. D5W (250)  250 mls                    23. LACTATED RINGERS (1000)  1000 mls
10. D5W (500)  500 mls                   24. NS  500 mls
11. D5W(1000)  1000 mls                  25. NS.9% (1000)  1000 mls
12. D5W.2%NS (100)  100 mls              26. NS.9% (250)  250 mls
13. D5W.2%NS (1000)  1000 mls            27. NS.9% (500)  500 mls
14. D5W.2%NS (250)  250 mls              28. SODIUM BICARBINATE 5%(500)  500
mls

Enter a number/name for your selection,
Enter additional vitamins/electrolytes using a ; to separate,
for example, 4;multivits): 15
```

```
Amount of solution in mls in the container: 500// <RET>
Enter a number for infusion rate (Example: 125 = 125 ml/hr):  30
D5W.2%NS (500)  admixture   500 mls  30 ml/hr   Is it correct ? Yes// <RET>
(Yes)
  DISTAL
    5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... (A)
    1000 mls  (02/14/97@14:44)
  MEDIAL
    D5W.2%NS (500) (A)  500 mls  (02/14/97@14:53)
  PROXIMAL
    DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;... (H)
    1000 mls  (02/14/97@14:44)
Do you want to add another solution to MEDIAL port? No// <RET>  (No)

1  DISTAL
2  MEDIAL
3  PROXIMAL

   Select the port number used for medication infusion or ^ to quit: ^
```

Since the user wishes to exit, an ^ is entered.

```
1.  Start IV
2.  Solution: Replace/DC/Convert/Finish Solution
3.  Replace Same Solution
4.  DC IV/Lock/Port and Site
5.  Care/Maintenance/Flush
6.  Add Additional Solution(s)
7.  Restart DC'd IV
8.  Adjust Infusion Rate
9.  Flush
```

7. Restart DC'd IV.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 7
*** RESTART DC'd IV ***

Select one of the following IV(s) to restart

1. 5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... (A) 1000 ml
100 ml/hr
    started on FEB 14,1997@14:44
    DC'd on FEB 14,1997@15:03    250 ml left
    DC reason: ORDER CHANGED
2. D5W.2%NS (1000) (A) 1000 ml 50 ml/hr
    started on FEB 14,1997@14:39
    DC'd on FEB 14,1997@14:59    900 ml left
    DC reason: ORDER CHANGED
```

Note: An IV can't be restarted for one or more of the following reasons:
   1. The specific item has been running over 24 hrs.
   2. The solution has been discontinued for over 8 hrs.
   3. The remaining solution is under 5 mls.
   4. The reason for discontinuation is 'INFUSED'.

Please enter your choice: **2**

After the IV solution is selected, the user must validate the information displayed.

```
Amount of solution in mls in the container: 900// <RET>
Enter a number for infusion rate (Example: 125 = 125 ml/hr): 50// <RET>
D5W.2%NS (1000)  admixture   900 mls  50 ml/hr   Is it correct ? Yes// <RET>
(Yes)
```

The software then prompts for IV site and catheter information to complete the restart cycle.

```
Please enter a new DATE/TIME: n  (FEB 14, 1997@15:15:47)
Select from the following IV sites

1. HAND                               7. JUGULAR
2. WRIST                              8. ANKLE/FOOT
3. LOWER ARM                         9. LEG
4. UPPER ARM                         10. FEMORAL
5. ANTECUBITTAL                      11. UMBILICAL
6. SUBCLAVIAN                        12. PEDAL

Enter a number with a qualifier L for LEFT/R for RIGHT, default (L)eft.
(e.g., 2R for RIGHT WRIST; 2 or 2L for LEFT WRIST): 5
   LEFT ANTECUBITTAL
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Site option.

```
Select from the following IV CATHs

1. ANGIO CATH-14                     12. TRIPLE LUMEN CVP
2. ANGIO CATH-16                     13. RA-PA CATH
3. ANGIO CATH-18                     14. VENOUS INTRODUCER
4. ANGIO CATH-20                     15. HICKMAN LOCK
5. ANGIO CATH-22                     16. DOUBLE LUMEN PERIPHERAL
6. BUTTERFLY-16                      17. SUBCLAVIAN
7. BUTTERFLY-18                      18. DOUBLE LUMEN SUBCLAVIAN
8. NEEDLE 1 1/4 IN-14                19. DOUBLE LUMEN 1
9. NEEDLE 1 1/4 IN-16                20. TRIPLE LUMEN 1
10. NEEDLE 1 1/4 IN-18               21. ANGIOCATH-14
11. BUTTERFLY-20

Select a number between 1 and 21: 3
```

The ADP coordinator can add entries to the display list through the Configure I/O Files option, specifically the IV Catheter option.

```
Select one of the following IV(s) to restart

1. 5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG... (A) 1000 ml
100 ml/hr
    started on FEB 14,1997@14:44
    DC'd on FEB 14,1997@15:03    250 ml left
    DC reason: ORDER CHANGED

Please enter your choice: <RET>
```

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

8. Adjust infusion rate.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 8
*** ADJUST INFUSION RATE ***
```

This protocol lists each IV solution seperately.

```
1. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    MEDIAL
    D5W.2%NS (500)  (A) 30 ml/hr  Added on 02/14/97@14:53

2. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    DISTAL
    5% DEXTROSE;HEPARIN 1,000 U/ML .05 UNITS;AMPHOTERICIN-B 50MG...  (A)
    100 ml/hr  Started on 02/14/97@14:44

3. LEFT SUBCLAVIAN - TRIPLE LUMEN 1    PROXIMAL
    DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;...  (H)
    100 ml/hr  Added on 02/14/97@14:44

4. LEFT LOWER ARM - ANGIO CATH-18
    D5W.2%NS (1000)  (A) 50 ml/hr  Started on 02/14/97@14:39

5. LEFT LOWER ARM - ANGIO CATH-18
    AMPICILLIN 1GM in NS.9%  (P) 100 ml/hr  Added on 02/14/97@14:39


Select the number of solution & rate to be adjusted: 5

    AMPICILLIN 1GM in NS.9%  50 mls (P) LEFT LOWER ARM  started on FEB
14,1997@14:39

Please enter Date/Time: NOW// <RET> (FEB 14, 1997@14:58:12)
Infusion rate(ml/hr) 100// 60
COMMENT: <RET>
```

The nurse may enter in this comment field any additional documentation, 1-50 characters in length, supporting the rate change.

```
1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush
```

9. Flushing the IV line, lock or port.

```
Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: 9
*** FLUSH ***

1. LEFT SUBCLAVIAN - TRIPLE LUMEN 1
   DISTAL
    LOCK/PORT (02/14/97@15:03)
   MEDIAL
    D5W.2%NS (500) (A)  500 mls  (02/14/97@14:53)
   PROXIMAL
    DEXTROSE 5%;AMINOSYN 7%;SODIUM CHLORIDE (2.5 MEQ/ML) 40 MEQ;... (H)
    1000 mls  (02/14/97@14:44)
2. RIGHT WRIST - ANGIO CATH-14
    NS (A)  500 mls  (02/14/97@15:05)
    PACKED RBC (B)  350 mls  (02/14/97@15:06)

Select IV site to flush: 2

Please enter DATE/TIME: NOW// <RET> (FEB 14, 1997@15:10:18)



1.   Start IV
2.   Solution: Replace/DC/Convert/Finish Solution
3.   Replace Same Solution
4.   DC IV/Lock/Port and Site
5.   Care/Maintenance/Flush
6.   Add Additional Solution(s)
7.   Restart DC'd IV
8.   Adjust Infusion Rate
9.   Flush

Select from 1 to 9 (enter 1,3-5 etc.) or <RET> to exit: ^
```

Menu Access:

The Start/Add/DC IV and Maintenance option is accessed through the Patient Intake/Output Menu option.

Chapter 5 Intake and Output Reports

GMRY I/O SUM

Print I/O Summary by Patient (by Shift & Day(s))

Description:

This option summarizes patient intake/output by major category and shift for a period of time as defined by the user. Patient data is stored in the GMRY Patient I/O (#126) file.

Additional Information:

Patient information displayed in the report has been entered through the following options:
    Enter/Edit Patient Intake
    Enter/Edit Patient Output
    Start/Add/DC IV and Maintenance

The aggregation of I&O data by shift is determined from the shift start time information stored in the GMRY NUR Shift/Other (#126.95) file.

Menu Display:

```
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) ...
```

Screen Prints:

```
Select Patient Intake/Output Menu Option: 4  Print I/O Summary by Patient (by
Shift & Day(s))
Enter start DATE for report: T-3//  12/11(DEC 11, 1996)
```

Enter appropriate start date.

```
Go to DATE: NOW//  <RET>(DEC 12, 1996@12:09)
```

Enter appropriate end date.

Select PATIENT NAME: **PARKER,P**ETER P.   08-04-18 931848807   SC VETERAN

Enter patient name.

DEVICE: Enter appropriate response

```
PATIENT INTAKE/OUTPUT SUMMARY
DEC 11, 1996 - DEC 12, 1996@12:09                        PAGE: 1
INPUT                                    |OUTPUT
IV   |BLOOD|PARNT|     |     |     |     |     |     |     |     |     |     |
FLUID|PRDCT|NUTRI|PO   |TUBE |IRRIG|OTHER|URINE|N/G  |EMESI|DRAIN|FECES|OTHER|
--------------------------------------------------------------------------
12/11/96                                 |
N:
  400|    0|  100|  250|    0|    0|    0| 500|    0|    0|    0|    0|    0|
D:
  500|    0|  100|  300|    0|    0|    0| 400|    0|    0|    0|    0|    0|
E:
  400|    0|  100|  200|    0|    0|    0| 400|    0|    0|    0|    0|    0|
TOTAL:
 1300|    0|  300|  750|    0|    0|    0|1300|    0|    0|    0|    0|    0|

              TOTAL INTAKE MEASURED: 2350
              TOTAL OUTPUT MEASURED: 1300
--------------------------------------------------------------------------
12/12/96                                 |
N:
  550|    0|   30|  420|    0|    0|    0| 600|    0|    0|    0|    0|    0|
D:
  500|    0|   80|  300|    0|   30|    0| 250|    0|   50|    0|    0|    0|
E:
  525|    0|    0|  200|    0|    0|    0| 450|    0|    0|    0|    0|    0|
TOTAL:
 1575|    0|  110| 1020|    0|   30|    0|1300|    0|   50|    0|    0|    0|

              TOTAL INTAKE MEASURED: 2735
              TOTAL OUTPUT MEASURED: 1350
--------------------------------------------------------------------------

PARKER,PETER P.  931-84-8807   AUG 4,1918(73 YRS)   MALE
UNIT:  SICU                    RM/BED: 560-2
DIVISION: HINES, IL
```

Note: In the above report, only the first 5 characters of the intake and output types print in the header.

Menu Access:

The Print I/O Summary by Patient (by Shift & Day(s)) option is accessed through the Patient Intake/Output Menu.

GMRY I/O CURRENT

Print I/O Summary (Midnight to Present)

Description:

This option summarizes the current day's intake and output information for all patients on a ward, in a selected room on a ward, and individual patients. Patient data is stored in GMRY Patient I/O (#126) file.

Additional Information:

The aggregation of I&O data by shift is determined from the shift start time information stored in the GMRY NUR Shift/Other (#126.95) file.

The information displayed in the report has been entered through the following options:
    Enter/Edit Patient Intake
    Enter/Edit Patient Output

Menu Display:

```
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) ...
```

Screen Prints:

```
Select Patient Intake/Output Menu Option: 5  Print I/O Summary (Midnight to
Present)
By (A)ll patients on a ward, (S)elected Rooms on ward, or (P)atient? S

Select WARD LOCATION NAME: SICU
```

Enter appropriate ward location.

```
Ward SICU has the following rooms:
```

```
NUMBER     ROOM

1.         301
2.         302
3.         550
4.         560
5.         570

Select the NUMBER(S) of the rooms: 4
```

Enter the number(s) associated with the rooms you want, separated by commas or hyphens if there is more than one room (e.g., 1-3,5 would be entries 1,2,3 and 5).

DEVICE: **Enter appropriate response**

```
PATIENT INTAKE/OUTPUT SUMMARY (CURRENT)
DEC 12, 1991                    WARD: SICU                    PAGE: 1
INPUT                                   |OUTPUT
IV    |BLOOD |PARNT |     |     |     |     |     |     |     |     |     |     |
FLUID |PRDCT |NUTRI |PO   |TUBE |IRRIG|OTHER|URINE|N/G  |EMESI|DRAIN|FECES|OTHER|
----------------------------------------------------------------------------

RM/BED : 560-1      KCCK,GEORGE R        593-48-2726

N:                                      |
    0|     0|     0|     0|     0|     0|     0|     0|     0|     0|     0|     0|     0|
D:
    0|     0|     0|     0|     0|     0|     0|   200|     0|     0|    20|     0|     0|
E:
    0|     0|     0|     0|     0|     0|     0|   650|     0|     0|     0|     0|     0|
TOTAL:
    0|     0|     0|     0|     0|     0|     0|   850|     0|     0|    20|     0|     0|

              TOTAL INTAKE MEASURED: 0
              TOTAL OUTPUT MEASURED: 870
----------------------------------------------------------------------------

RM/BED : 560-2      PARKER,PETER P.      931-84-8807

N:                                      |
  450|     0|     0|     0|     0|     0|     0|   500|     0|     0|     0|     0|     0|
D:
  300|     0|     0|   300|     0|    30|     0|   250|     0|    50|     0|     0|     0|
E:
  400|     0|     0|     0|     0|     0|     0|   350|     0|     0|     0|     0|     0|
TOTAL:
 1150|     0|     0|   300|     0|    30|     0|  1100|     0|    50|     0|     0|     0|

              TOTAL INTAKE MEASURED: 1480
              TOTAL OUTPUT MEASURED: 1150
----------------------------------------------------------------------------

PARKER,PETER P.  931-84-8807    AUG 4,1918(73 YRS)    MALE
UNIT:  SICU                      RM/BED: 560-2
DIVISION: HINES, IL
```

Menu Access:

The Print I/O Summary (Midnight to Present) option is accessed through the Patient Intake/Output Menu.

GMRY I/O 48HRS

Print I/O Summary (48 Hrs)

Description:

This option summarizes patient intake/output for the previous and current day. Patient data is stored in the GMRY Patient I/O (#126) file.

Additional Information:

The aggregation of I&O data by shift is determined from the shift start time information stored in the GMRY NUR Shift/Other (#126.95) file. Patient I&O may be printed for all patients on a ward, for patients in selected rooms, and for individual patients.

The information displayed in the report has been entered through the following options:
> Enter/Edit Patient Intake
> Enter/Edit Patient Output

Menu Display:

```
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) ...
```

Screen Prints:

```
Select Patient Intake/Output Menu Option: 6  Print I/O Summary (48 Hrs)
By (A)ll patients on a ward, (S)elected Rooms on ward, or (P)atient? P
Select PATIENT NAME:  PARKER,PETER P.   08-04-18   931848807     SC VETERAN
```

Enter patient name.

DEVICE: Enter appropriate response

```
PATIENT INTAKE/OUTPUT SUMMARY (48 HRS)
DEC 11, 1991 - DEC 12, 1991     WARD: SICU                PAGE: 1
INPUT                                       |OUTPUT
IV     |BLOOD|PARNT|     |      |     |     |URINE|N/G   |EMESI|DRAIN|FECES|OTHER|
FLUID  |PRDCT|NUTRI|PO   |TUBE  |IRRIG|OTHER|
--------------------------------------------------------------------------------

RM/BED : 560-2     PARKER,PETER P.     931-84-8807
12/11/91                                    |
N:
  400|    0|  100|  250|     0|    0|    0| 500|    0|    0|    0|    0|    0|
D:
  500|    0|  100|  300|     0|    0|    0| 400|    0|    0|    0|    0|    0|
E:
  400|    0|  100|  200|     0|    0|    0| 400|    0|    0|    0|    0|    0|
TOTAL:
 1300|    0|  300|  750|     0|    0|    0|1300|    0|    0|    0|    0|    0|

             TOTAL INTAKE MEASURED: 2350
             TOTAL OUTPUT MEASURED: 1300
--------------------------------------------------------------------------------
12/12/91                                    |
N:
  550|    0|   30|  420|     0|    0|    0| 600|    0|    0|    0|    0|    0|
D:
  500|    0|   80|  300|     0|   30|    0| 250|    0|   50|    0|    0|    0|
E:
  525|    0|    0|  200|     0|    0|    0| 450|    0|    0|    0|    0|    0|
TOTAL:
 1575|    0|  110| 1020|     0|   30|    0|1300|    0|   50|    0|    0|    0|

             TOTAL INTAKE MEASURED: 2735
             TOTAL OUTPUT MEASURED: 1350
--------------------------------------------------------------------------------

PARKER,PETER P.  931-84-8807    AUG 4,1918(73 YRS)   MALE
UNIT:  SICU                      RM/BED: 560-2
DIVISION: HINES, IL
```

Menu Access:

The Print I/O Summary (48 Hrs) option is accessed through the Patient Intake/ Output Menu.

GMRY I/O SHIFT AND EVENT

24 Hours Itemized Shift Report

Description:

This option produces itemized patient intake and output reports by shift for a period of time as defined by the user. Patient data is stored in the GMRY Patient I/O (#126) file.

Additional Information:

The aggregation of I&O data by shift is determined from the shift start time information stored in the GMRY NUR Shift/Other (#126.95) file. Patient I&O may be printed for all patients on a ward, for patients in selected rooms, and for individual patients.

The information displayed in the report has been entered through the following options:
    Enter/Edit Patient Intake
    Enter/Edit Patient Output
    Start/Add/DC IV and Maintenance

Menu Display:

```
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) ...
```

Screen Prints:

```
Select Patient Intake/Output Menu Option: 7  24 Hours Itemized Shift Report
Enter start DATE for this report: T-3// <RET> (FEB 23, 1997)
```

Enter appropriate start date.

```
Go to DATE: NOW// <RET> (FEB 26, 1997@10:25:25)
```

Enter appropriate end date.

```
By (A)ll patients on a ward, (S)elected Rooms on ward, or (P)atient? P
Select PATIENT NAME:     ANDERSON,AL        08-08-88      333333331      102A-1
```

Enter patient name.

DEVICE: Enter appropriate response

```
          PATIENT INTAKE/OUTPUT REPORT BY SHIFT AND EVENT TYPE        PAGE: 1
          ---------------------------------------------------
              FEB 23, 1997 - FEB 26, 1997
02/25/97
  DAY:
    ITEMIZED IV INTAKE
    08:00
                 SALINE LOCK started  Site: LEFT LEG   IV cath:
                 HICKMAN LOCK                                       YH/OTH
                     Discontinued on 03/17/94 @ 08:01              YH/OTH

                 HEPARIN LOCK added  Site: LEFT LEG                 YH/OTH
                     Discontinued on 03/17/94 @ 12:33              YH/OTH

                 LEFT LEG: NO REDNESS/PAIN/SWELLING, dressing
                 changed
                   HICKMAN LOCK tubing changed                     YH/OTH
    12:33
                 HEPARIN LOCK added  Site: LEFT LEG Rate: 2 ml/hr   YH/OTH
                     Discontinued on 03/17/94 @ 12:34              YH/OTH
    12:34
                 SALINE LOCK added  Site: LEFT LEG                  YH/OTH
                     Discontinued on 03/17/94 @ 12:35              YH/OTH

                 HEPARIN LOCK added  Site: LEFT LEG                 YH/OTH
                     Discontinued on 03/17/94 @ 12:36              YH/OTH
    12:36
                 HEPARIN LOCK added  Site: LEFT LEG Rate: 2 ml/hr   YH/OTH

  *** DAY shift total:
      Intake:
      Output:
--------------------
Summary for: 02/25/97
  Intake:
  Output:
  Total intake measured: 0 mls
  Total output measured: 0 mls
```

Menu Access:

The 24 Hours Itemized Shift Report option is accessed through the Patient Intake/Output Menu.

GMRY IV FLOW

Intravenous Infusion Flow Sheet

Description:

This option prints intravenous flow sheets by ward, room or by individual patient. Data is stored in the GMRY Patient I/O (#126) file.

Additional Information:

The information displayed in the report has been entered through the following option:
    Start/Add/DC IV and Maintenance

Menu Display:

```
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) ...
```

Screen Prints:

```
Select Patient Intake/Output Menu Option: 8  Intravenous Infusion Flow Sheet
Enter start DATE for this report: T-3//2/1  (FEB 01, 1993)
```

Enter appropriate start date.

```
Go to DATE: NOW// 2/18  (FEB 18, 1993)
```

Enter appropriate end date.

```
by (A)ll patients on a ward, (S)elected Rooms on ward, or (P)atient? P
Select PATIENT NAME: Bell,Fred
```

Enter patient name.

```
** THIS REPORT NEEDS 132 COLUMNS - PORT/LAND **
```

DEVICE: Enter appropriate response

Intake and Output Reports

```
                                    RATE AMT. AMT.                              TUBE DRSG
DATE    |TIME |SOLUTIONS/BLOOD       |ML'S|LEFT|ABSRB|SITE           |CATHETER          |CHNG|CHNG|D/C'D|REASON D/C    |SITE CONDITION
----------------------------------------------------------------------------------------------------------------------------------------
02/04/93|09:59|NS.9% (100)           |50  |100 |0    |LEFT FEMORAL   |                  |yes |yes |     |              |
        |     |(THOMAS,A)            |    |    |     |               |                  |    |    |     |              |
        |11:45|(THOMAS,A)            |    |100 |0    |               |                  |    |    |yes  |INFILTRATED   |
        |     |                      |    |    |     |               |                  |    |    |     |              |
        |10:02|                      |    |    |     |               |                  |no  |yes |     |              |NO REDNESS/PA
        |11:45|HEPARIN LOCK          |    |    |     |LEFT FEMORAL   |                  |    |    |     |ORDER EXPIRED |
        |     |(THOMAS,A)            |    |    |     |               |                  |    |    |     |              |
        |     |                      |    |    |     |               |                  |    |    |     |              |
        |11:47|                      |    |    |     |               |                  |no  |no  |yes  |site d/c'd    |NO REDNESS/PA
02/05/93|09:55|(HSU,Y)               |    |900 |100  |               |                  |    |    |     |              |
        |11:50|(HSU,Y)               |    |700 |300  |               |                  |    |    |     |              |
        |12:53|(HSU,Y)               |    |500 |500  |               |                  |    |    |yes  |ORDER         |
        |     |                      |    |    |     |               |                  |    |    |     |EXPIRED/DC'ED |
        |12:53|HEPARIN LOCK          |    |    |     |LEFT WRIST     |                  |    |    |     |ORDER CHANGED |
        |     |(HSU,Y)               |    |    |     |               |                  |    |    |     |              |
        |     |                      |    |    |     |               |                  |    |    |     |              |
        |13:21|MANNITOL              |100 |500 |0    |LEFT WRIST     |                  |    |    |     |              |
        |     |(HSU,Y)               |    |    |     |               |                  |    |    |     |              |
        |13:30|(HSU,Y)               |    |*   |*    |               |                  |    |    |yes  |ACCIDENTLY    |
        |     |                      |    |    |     |               |                  |    |    |     |DC'ED         |
        |13:24|10% FAT EMULSION(250  |150 |250 |0    |LEFT WRIST     |                  |yes |yes |     |              |
        |     |(HSU,Y)               |    |    |     |               |                  |    |    |     |              |
        |13:26|(HSU,Y)               |    |0   |250  |               |                  |    |    |yes  |INFUSED       |
        |     |                      |    |    |     |               |                  |    |    |     |              |
        |13:26|10% FAT EMULSION(250  |150 |250 |0    |LEFT WRIST     |                  |    |    |     |              |
        |     |(HSU,Y)               |    |    |     |               |                  |    |    |     |              |
02/08/93|10:28|(HSU,Y)               |    |50  |200  |               |                  |    |    |     |              |
        |     |                      |    |    |     |               |                  |    |    |     |              |
02/05/93|12:48|D5W1/2NS (1000)       |120 |1000|0    |RIGHT HAND     |NEEDLE 1 1/4 IN-  |yes |yes |     |              |
        |     |(HSU,Y)               |    |    |     |               |                  |    |    |     |              |
        |13:31|(HSU,Y)               |    |0   |1000 |               |                  |no  |no  |yes  |INFUSED       |TENDER
        |12:48|KCL 20MEQ             |    |10  |0    |RIGHT HAND     |                  |    |    |     |              |
        |     |(HSU,Y)               |    |    |     |               |                  |    |    |     |              |
        |13:31|(HSU,Y)               |    |0   |10   |               |                  |    |    |yes  |INFUSED       |
        |     |                      |    |    |     |               |                  |    |    |     |              |
02/01/93|10:34|D5W(1000)             |125 |1000|0    |RIGHT LOWER ARM|                  |yes |yes |     |              |
        |     |(THOMAS,A)            |    |    |     |               |                  |    |    |     |              |
        |10:37|(THOMAS,A)            |    |990 |10   |               |                  |    |    |yes  |DATA ENTRY    |
        |     |                      |    |    |     |               |                  |    |    |     |ERROR         |
        |10:37|HEPARIN LOCK          |    |    |     |RIGHT LOWER ARM|                  |    |    |     |              |
        |     |(THOMAS,A)            |    |    |     |               |                  |    |    |     |              |
        |10:39|                      |    |    |     |               |                  |no  |no  |yes  |site d/c'd    |NO REDNESS/PA
02/17/93|11:50|D5W(1000)             |125 |1000|0    |RIGHT LOWER ARM|ANGIO CATH-18     |yes |yes |     |              |
        |     |(THOMAS,A)            |    |    |     |               |                  |    |    |     |              |
        |14:36|(THOMAS,A)            |    |0   |1000 |               |                  |    |    |yes  |INFUSED       |
        |     |                      |    |    |     |               |                  |    |    |     |              |
        |14:36|HEPARIN LOCK          |    |    |     |RIGHT LOWER ARM|                  |    |    |     |              |
        |     |(THOMAS,A)            |    |    |     |               |                  |    |    |     |              |
        |     |                      |    |    |     |               |                  |    |    |     |              |
        |14:41|NS.9% (100)           |125 |100 |0    |RIGHT LOWER ARM|                  |yes |yes |     |              |
        |     |(THOMAS,A)            |    |    |     |               |                  |    |    |     |              |
02/05/93|13:27|(HSU,Y)               |    |    |     |LEFT LOWER ARM |                  |yes |no  |     |              |NO REDNESS/PA
        |     |                      |    |    |     |               |                  |    |    |     |              |
```

```
BELL,FRED        232-77-8976     JAN 23,1954(43 YRS)                  MEDICAL RECORD
UNIT:                            RM/BED:                              FLOW SHEET-VERTICAL
DIVISION:                                                             IV FLOW SHEET
```

Menu Access:

The Intravenous Infusion Flow Sheet option is accessed through the Patient Intake/Output Menu.

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 V*ISTA* 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.

CPRS   Computerized Patient Record System.

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 V*ISTA* 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 V*ISTA* (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).

TIU   Text Integration Utility.

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.

V*ISTA*   Veterans Health Information Systems and Technology Architecture.

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