Department of Veterans Affairs Decentralized Hospital Computer Program

## INPATIENT PHARMACY AUTOMATIC REPLENISHMENT/ WARD STOCK MODULE TECHNICAL MANUAL

## Version 2.3 January 1994

Information Systems Center Birmingham, Alabama

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Automatic Replenishment/Ward Stock V. 2.3 Technical Manual Preface

## Preface

This technical manual is designed to provide the VAMC's Site Manager and IRM/ADP staff with the information necessary to install, maintain, and troubleshoot Version 2.3 of the Automatic Replenishment/Ward Stock module of the DHCP Inpatient Pharmacy software.

Preface

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Automatic Replenishment (AR)/Ward Stock (WS) is a method of drug distribution and inventory management within a hospital. Drug products can be automatically inventoried and delivered (AR) to an area of use (AOU) or requested on demand (WS). An area of use is the place where commonly stocked items are stored. The area is potentially composed of wards, clinics, and specialties.

Introduction

This manual is divided into sections addressing such items as routines, files, security, options, etc. to provide a method of quick reference for the Site Manager and IRM/ADP staff. For more detailed information about the package functionality, refer to the Inpatient Pharmacy Automatic Replenishment/Ward Stock Module V. 2.3 User Manual. Additionally, there is a section in the User Manual called Working with the System which presents information which will be useful to persons who have not previously used DHCP software.

The following notations are used in this manual:

Description	Notation	
Return or Enter key example	<ret> if in text, <ret> if in</ret></ret>	screen
User response on computer screen example screen). After a user	Underlined and bold (they will not appear this way on	the
	response on a screen example, <ret> is implied.</ret>	
Editor's note	Inside square brackets: []	
Explanation interrupting computer screen example	Inside square brackets: [ ], and bold.	

#### **About Change Pages**

Future modifications to the software may require changes to the documentation. Change pages will reflect the new version number and date in the footer. Vertical lines in the margin may also be used to further highlight changes on a page.

The Automatic Replenishment process usually consists of the following functions: 1) select the AOUs and types of items within each AOU to be inventoried, 2) visit each AOU and take inventory, 3) determine the quantity to be dispensed for each item, and 4) dispense the item. The Automatic Replenishment package is designed to allow each VAMC to adapt the system to its own needs.

#### /Legal Requirements

This package does not impose any additional legal requirements on the user, nor does it relieve the user of any legal requirements.

Orientation

There are 93 AR/WS routines that take up approximately 222K of disk space. Additionally, there are 48 Init routines (including the PSGWPOST and PSGWPRE\* routines) that take up approximately 168K of disk space.

The following is a list of the site parameters that are used in defining the Automatic Replenishment/Ward Stock module for your site.

#### MERGE INVENTORY SHEET AND PICK LIST:

If "1" is entered, the Automatic Replenishment inventory sheet and pick list are merged. A separate pick list does not have to be printed. The inventory sheet contains the quantity dispensed column. The on hand values do not have to be input. The user only enters the actual quantity dispensed. If "0" is entered, the inventory sheet and pick list are not merged. The user prints the inventory sheet, enters on hand amounts, prints the pick list, and dispenses the items.

How should the "MERGE INV. SHEET AND PICK LIST" prompt be answered? This prompt will be answered "YES" if a site does not physically inventory all items in each AOU when Automatic Replenishment occurs. "YES" will be used by sites that stock the AOU with the needed supplies, noting quantity dispensed on an inventory sheet. This prompt will be answered "NO" if a site conducts a manual inventory prior to the stocking process.

#### PRINT RETURN COLUMNS?:

If "1" is entered, the return quantity column and the return reason column will appear on the inventory sheet in the Automatic Replenishment package. If "0" is entered, the return columns do not appear on the inventory sheet.

How should the "PRINT RETURN COLUMNS?" prompt be answered? If you wish to have a column to record return quantity and return reason on the inventory sheet, enter "YES" to this prompt. If you answer "NO", then these columns will not be printed.

AR/WS V. 2.3 will enable sites that are multi-divisional to separate their AMIS Statistics by assigning an INPATIENT SITE to each active AOU in the PHARMACY AOU STOCK file (#58.1). Only inpatient sites that have been designated "Selectable for AR/WS" may be assigned to AOUs.

The following routines are used by the Automatic Replenishment/Ward Stock module.

## **Routine List and**

Routine <u>Names</u>	Routine <u>Descriptions</u>
PSGWADE	Enter AMIS Data for All Drugs in All AOUs
PSGWADE1	Enter AMIS Data for All Drugs in All AOUs - CONTINUED
PSGWADP	Print Data for AMIS Stats
PSGWADP1	Print Data for AMIS Stats - CONTINUED
PSGWAIO	AOU Inventory Outline for Selected Date Range
PSGWAOU	Identify How Řeturns Are to be Credited & if Inventories for the AOU
	are to be Counted in AMIS
PSGWAOUI	Enter/Edit AOU Inactivation Dates
PSGWAP	Purge Old AMIS Data
PSGWAR	Print AMIS Report
PSGWAR1	Print AMIS Report
PSGWARP	Print AMIS Report - CONTINUED
PSGWATR	Item Activity Inquiry
PSGWATR1	Print Item Activity Inquiry (80 column)
PSGWBGIN	AR/WS Item Inactivation
PSGWBO	Enter/Edit Actual Dispensed/Backorder Values
PSGWBO1	Enter/Edit Actual Dispensed/Backorder Values - CONTINUED
PSGWBOA	Print Backorder Report by AOU or Item (ALL Current Backorders)
PSGWBOE	Backorder Input Routine to replace 'PSGW BACKORDER INPUT'
	Template
PSGWBOI	Print Backorder Report by Specific Item (Single or Multiple)
PSGWBOIP	Print Backorder Report by Specific Item (Single or Multiple) -
	CONTINUED
PSGWBOS	Print Backorder Report by AOU
PSGWCAD	Calculate and Store AMIS Data
PSGWCAD1	Send 'Update AMIS Stats' MailMan message for missing Inpatient
	Site assignment
PSGWCAD2	Send 'Update AMIS Stats' MailMan message for invalid Inpatient
	Site assignment
PSGWCAD3	Check for non-pharmacy items in AOUs before updating AMIS Stats
PSGWCCE	INPUT AOU LOCATION field
PSGWCCP	Print Crash Cart Location List
PSGWCHG	AR/WS Mass Ward Conversion
PSGWCL	Clear AMIS Exceptions
PSGWCLP	Clear AMIS Exceptions Print
PSGWCPA	Cost Per AOU for Selected Date Range
PSGWCPA1	Print Cost Per AOU Report for Selected Date Range - CONTINUED
PSGWDEL	Delete Inventory Sheets
PSGWDR	Returns Breakdown Report for Selected Date Range
PSGWDUP	Report for Duplicate Entries in ITEM subfile
PSGWDUP	Report for Duplicate Entries in ITEM subfile - CONTINUED
PSGWEDI	Enter/Edit of AOU Inventory Values
PSGWEDI1	Enter/Edit of AOU Inventory Values - CONTINUED
PSGWEDIS	Input AOU 'INPATIENT SITE' field
PSGWEE PSGWEXP	Enter/Edit all types of data
	Enter/Edit Drug Expiration Dates Drug Expiration Date Report by Selected Date Range/AOU
PSGWEXR PSGWEXR1	Print Drug Expiration Date Report by Selected Date Range/AOU
PSGWEARI PSGWEXR2	
I JUVILARA	Print Drug Expiration Date Report by Selected Date Range/AOUfor AOUs with Locations
	AUUS WIUI LOCAUOIIS

PSGWFIL	Fill Backorder
PSGWFLBO	Enter/Edit Backorders
PSGWHC	High Cost for Selected Date Range (Single AOU or Cumulative)
PSGWHC0	High Cost for Selected Date Range (Single AOU or Cumulative) -
1 Sowiieo	CONTINUED
DCCULIC1	
PSGWHC1	Print High Cost Report for Selected Date Range - CONTINUED
PSGWHV	High Volume for Selected Date Range (Single AOU or Cumulative)
PSGWHV0	High Volume for Selected Date Range (Single AOU or Cumulative) -
	CONTINUED
PSGWHV1	Print High Volume Report for Selected Date Range - CONTINUED
PSGWKINV	Purge ^PSI(58.19,"AINV") Global of Inventory Over 100 days Old
PSGWL	Build AOU Inventory List
PSGWLSI	List Active Stock Items for AOU(s)
PSGWLSI1	Print Stock Items in Order by Type/Location
PSGWLSI2	Print Stock Items in Alphabetical Order
PSGWNTEG	Package checksum checker
PSGWNTE0	Package checksum checker
PSGWNU	Print Drugs (Items) with NO Usage for Selected Date Range
PSGWNU1	Print Drugs (Items) with NO Usage for Selected Date Range -
	CONTINUED
PSGWOD2	Enter an On-Demand Request (for Pharmacy Use) - CONTINUED
PSGWODP	Print an On-Demand Report by Date/AOU
PSGWODPR	Print an On-Demand Report by Date/AOU - CONTINUED
PSGWODRN	Enter an On-Demand Request - for Nursing Staff
PSGWOLD	Purge Old Inventory Data (Auto Replenish, On-Demands, Returns &
	Backorder Data)
PSGWOLD1	Purge Old Inventory Data - CONTINUED (Delete Drugs Inactivated
	in AOU & Delete AOUs with No Drugs or Pointers to 58.2)
PSGWOND	Delete an On-Demand Request
PSGWONDM	Enter an On-Demand Request - for Pharmacy Use
PSGWPAW	Print AMIS Data Worksheet for All Drugs in All AOUs
PSGWPAW1	Print AMIS Data Worksheet for All Drugs in All AOUs -
	CONTINUED
PSGWPERC	Print Percentage Stock On Hand
PSGWPERE	Edit person doing inventory
PSGWPI	Print AOU Inventory Sheet
PSGWPI1	Print AOU Inventory Sheet - CONTINUED
PSGWPI2	Print AOU Inventory Sheet - CONTINUED
PSGWPIG	Print AOU Inventory Group List
PSGWPIS	Print AOU Inventory Sheet for a single AOU
PSGWPL	Print AOU Inventory Pick List
PSGWPL0	Print AOU Inventory Pick List - CONTINUED
PSGWPL1	Print AOU Inventory Pick List - CONTINUED
PSGWPOST	Post Init Conversion Routine
PSGWPRE1	Pre-init for AR/WS V3.0
PSGWPSI	Print Data for AR/WS Stock Items
PSGWPSI1	Print Data for AR/WS Stock Items - CONTINUED
PSGWST1	Post-Init Conversion Routine - CONTINUED
PSGWRA	Recalculate AMIS Data
PSGWRAC	Print AOU Status for AMIS - Inpatient Site, Returns, and AMIS
I SOWIAC	
DOCUUDI	Count
PSGWRI	Return Items for AOU
PSGWSC	Cost Report for Single Item for Selected Date Range
PSGWSC1	Print Cost Report for Single Item for Selected Date Range -
	CONTINUED
PSGWSET	Set Inpatient Site
PSGWSIG	Build Sort Key for AOUs in Inventory Group
PSGWSTD	Standard Cost Report
PSGWSTKI	Stock Item Enter/Edit
PSGWTOT PSGWTOT1	Usage Report for an Item
PSGWTOT1	Print Usage Report for All Drugs for a single AOU or ALL AOUs

PSGWTOT2 PSGWTR PSGWTR1 PSGWUAS PSGWUTL PSGWUTL1 PSGWVW PSGWWRD PSGWXREF Print Usage Report for Single Drug for One or ALL AOUs Transfer Stock Entries from One AOU to Another Transfer Stock Entries from One AOU to Another - CONTINUED Update AMIS Stats File Utility routine for VA FileMan functions Utility routine for HELP functions Lookup Item and List Wards/AOUs Which Stock It Add/Delete Ward (for Item) assignments Background job to re-index the AMIS cross-reference for inventories, on-demands, and returns

This package requires 10 files. Information about all files including these can be obtained by using the VA FileMan to generate a list of file attributes.

<u>File Numbers</u>	<u>File Names</u>
50	DRUG
58.1	PHARMACY AOU STOCK
58.16	AOU INVENTORY TYPE
58.17	AOU ITEM LOCATION
58.19	PHARMACY AOU INVENTORY
58.2	AOU INVENTORY GROUP
58.3	PHARMACY BACKORDER
58.5	AR/WS STATS
59.4	INPATIENT SITE
59.7	PHARMACY SYSTEM

The following are files exported and used by the Automatic Replenishment/Ward Stock module.

#### 50

#### DRUG FILE

This file holds the information related to each drug that can be used to fill a prescription.

#### 58.1PHARMACY AOU STOCK FILE

This file defines the items, their location, and quantity for each Area of Use (AOU) in the hospital. Additionally, information for each inventory, by item, is stored for an audit trail of usage.

#### 58.16 AOU INVENTORY TYPE FILE

Defines the inventory types which are used to group related items in or across areas of use. This file is defined by the user to allow for maximum flexibility in adapting to the system of inventory in each hospital.

#### 58.17 AOU ITEM LOCATION FILE

Expansions of the codes used to indicate storage location of item in the area of use.

#### 58.19 PHARMACY AOU INVENTORY FILE

This file contains information that pertains to each individual inventory such as date/time of inventory, responsible employee, ID number, and inventory group.

**Note:** There is a cross-reference called AINV that is not VA FileMan compatible and has the Standards and Conventions Committee (SACC) exemption which allows its use. If you create any local cross-references for this file *do not* use the name AINV as this will overwrite the existing cross-reference.

#### 58.2 AOU INVENTORY GROUP FILE

Entries in this file define standard inventories by defining the areas of use and type of inventory items inventoried. This saves the user from having to re-define the inventory boundaries every time a particular inventory is scheduled. Instead, the user can name inventory groups and the computer then knows what will be inventoried by accessing this file.

This file is designed to be used by both the Automatic Replenishment/Ward Stock module and the Controlled Substance module. Areas of use intended for AR/WS are defined in Field #1 (AREA OF USE). Areas of use intended for CS are defined in Field #3 (NARCOTIC AREA OF USE).

#### 58.3 PHARMACY BACKORDER FILE

This file contains information that pertains to backorders, such as the date/time of backorder, the AOU for which the item is backordered, and the quantity backordered.

#### 58.5 AR/WS STATS FILE

This file contains the data necessary to generate the AMIS statistics for AR/WS. This data is accumulated automatically by a queued nightly job.

**Note:** There are two cross-references that exist under this file that are created in the PHARMACY AOU STOCK file (#58.1). The cross-reference names are AMIS and AMISERR, if you create any local cross-references for this file (#58.5) *do not* use these names as it will overwrite the existing cross-references.

#### 59.4 INPATIENT SITE

This file contains the site parameters for the various inpatient packages, giving the various VAMCs the ability to tailor the packages to their needs. The following fields are used by the AR/WS package:

#### 59.7 PHARMACY SYSTEM

This file contains data that pertains to the entire Pharmacy System of a medical center, and not to any one site or division. The number ranges for the nodes and field numbers are as follows:

 0 9.99
 RESERVED

 10 19.99
 National Drug File

 20 29.99
 Inpatient

 30 39.99
 IVs

 40 49.99
 Outpatient

 50 59.99
 AR/WS

 60 69.99
 Unit Dose

THERE SHOULD BE ONLY ONE ENTRY IN THIS FILE.

**Note:** Because of the nature of this file and the fact that *all* the Pharmacy packages use this file, it is *very important* to stress that sites *do not* edit fields or make local field additions to the PHARMACY SYSTEM file.

File List

For package security information for this module refer to the Inpatient Pharmacy Automatic Replenishment/Ward Stock Module Package Security Guide.

All pharmacy personnel may be assigned the *PSGWMGR* option as the primary menu option.

If Pharmacy wishes to give the Auto Replenishment/Ward Stock Nurses' Menu to Nursing, then nursing personnel may be assigned the *PSGW RN* menu option. Read "On-Demand Requests" in the AR/WS User Manual before assigning this menu, as some coordination between services is required.

Some stations design their own menus for individual users. If this is the case, then the top level AR/WS menu must contain the following enter and exit code in the OPTION file:

EXIT ACTION	: K PSGWSITE
ACTION	: I '\$D(PSGWSITE) D ^PSGWSET

This enter and exit code must be present because the PSGWSITE variable is set as users enter the package. If the Kernel's ^OPTION NAME feature is used to jump directly into lower levels of the AR/WS package, then the *must be* answered in order to define the PSGWSITE variable. All

options are independently invocable, however, if the instructions above are not followed, users will be repeatly asked to select an Inpatient Site if there are two or more sites that are flagged for AR/WS use.

After the users are assigned the primary menu option, it is necessary to give the appropriate security keys to each user as required. There are four keys associated with AR/WS:

PSGWMGR This key must be given to the Inpatient Pharmacy Package Coordinator and other users who are allowed to edit AR/WS files and run the AMIS report. This key locks the *Supervisor's Menu* options [PSGW WARD STOCK MAINT].

PSGW PURGE	This key should be given <i>only</i> to the Inpatient Pharmacy Package Coordinator or his/her designee. This lock controls the deletion of data from the AR/WS files and should be assigned with discretion. This key locks the <i>Obsolete Data Purge</i> options [PSGW PURGE].
PSGW PARAM	This key should be given <i>only</i> to the Inpatient Pharmacy Package Coordinator. This lock controls when the collection of AMIS data begins. This key locks the <i>Site Parameters</i> option [PSGW SITE] on the <i>Supervisor's Menu</i> .
PSGW TRAN	This key should be given <i>only</i> to the Inpatient Pharmacy Package Coordinator or his/her designee. The key controls access to the T <i>ransfer AOU Stock Entries</i> option [PSGW TRANSFER ENTRIES]. Using the transfer option, users may copy the stock entries from one Area of Use into other AOUs.

All of the Automatic Replenishment/Ward Stock package options have been designed to stand alone. Each option requires the use of the package-wide variable PSGWSITE that is set as users enter the package. Even though *all* options are independently invokable, users will be repeatly asked to select an Inpatient Site (if there are two or more sites that are flagged as selectable for AR/WS use) if top level AR/WS menus do not contain the following enter and exit code in the OPTION file:

EXIT ACTION: K PSGWSITE ACTION: I '\$D(PSGWSITE) D ^PSGWSET

#### **PSGW ADD/DEL WARD**

#### Add/Delete Ward (for Item)

This option will allow a user to add or delete a Ward (for Item) assignment for all stock items in one or more active AOUs.

Type: run routine

Routine: PSGWWRD

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#### **PSGW AMIS**

**AR/WS AMIS Report** 

MENU Main option for clearing exceptions, printing, and recalculating the AMIS report.

Type: menu

Menu Items:

Incomplete AMIS Data Print AMIS Report (132 column) Recalculate AMIS

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#### **PSGW AOU INACTIVATION**

This option will allow a user to inactivate an AOU. An Inactive Date may be in the future.

Type: run routine

Routine: PSGWAOUI

#### **PSGW AOU INV GROUP EDIT**

This option supports entering and editing inventory groups. These groups define a cluster of AOUs and for each AOU, an inventory type which may be multiple. This lets pharmacy define a list of standard AOUs and inventory types that can be selected easily when doing inventory.

Type: run routine

Routine: GROUP^PSGWEE

**Inactivate AOU** 

**AOU Inventory Group - Enter Edit** 

## **PSGW AOU INV GROUP PRINT**

This option prints a list of the currently defined AOU inventory groups with their associated wards and inventory types.

Routine: PSGWPIG

Type: run routine

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#### **PSGW AOU INV GROUP SORT**

This option allows the user to change the order in which the AOUs within an inventory group will sort. AOUs should sort in the order that they will be visited.

Type: run routine

Routine: PSGWSIG

#### **PSGW AOU INVENTORY INPUT**

This option supports the entry of the inventory results as recorded on the AOU inventory sheet. Items within an AOU are prompted in the order that they appear on the AOU inventory sheet.

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Type: run routine

Routine: PSGWEDI

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#### PSGW AOU RET/AMIS CT PRINT

This option shows the method of distribution credited for RETURNS for each AOU, and if the AOU is to be counted in AMIS stats.

Type: run routine

**Routine: PSGWRAC** 

#### **PSGE AOU RETURNS & AMIS COUNT**

For AMIS purposes, the system must know how to credit returns. This option allows the user to identify the usual method of drug distribution to be credited for each AOU. All returns from the AOU will be credited to this method. For AMIS purposes, the system must know if the inventories for each AOU are to be counted in the AR/WS STATS file. Most AOUs will count on AMIS, however, an AOU used for internal inventory purposes within the pharmacy should not.

Type: run routine

Routine: PSGAOU

**Inventory Group List (80 column)** 

**Sort AOUs in Group** 

**Input AOU Inventory** 

**Identify AOU Returns & AMIS** Count

Show AOU Status for AMIS (80 column)

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#### **PSGW AREA OF USE EDIT**

This option allows the user to initially define the Areas of Use and the wards and services within the area.

Type: run routine

Routine: AOU^PSGWEE \_\_\_\_\_

#### **PSGW BACKORDER**

Menu giving access to the backorder options.

Type: menu

Menu Items:

Enter Backorders Fill Requests for Backorder Items AOU Backorder Report (80 column) Current (ALL) Backorder Report (80 column) Single Item Report (80 column) Multiple Items Report (80 column)

**PSGW BACKORDER (ALL) PRINT** 

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This option will print a list of ALL current backorders sorted by AOU or by ITEM.

Type: run routine

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#### **PSGW BACKORDER AOU PRINT**

Prints all items backordered for selected Areas Of Use.

Type: run routine

**Routine: PSGWBOS** 

**PSGW BACKORDER EDIT** 

Allows the user to fill a backordered request by entering the date filled field. The user must know the item, Area of Use, and the date of backorder.

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Type: run routine

Routine: PSGWFIL

#### **Create an Area of Use**

**Backorder Requests** 

**Routine: PSGWBOA** 

**Fill Requests for Backorder Items** 

**Current (ALL) Backorder Report** 

(80 column)

**AOU Backorder Report (80 column)** 

#### **PSGW BACKORDER IN**

Used to create backorders for items stocked in an AOU. User must enter item, AOU, backorder date, and current backorder (amount to back order).

Type: run routine

Routine: PSGWBOE

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#### **PSGW BACKORDER ITEM PRINT**

Prints a list of all backorders for a specific item.

Type: run routine

Routine: SINGLE^PSGWBOI

PSGW BACKORDER ITEMS PRINT

Multiple Items Report (80 column)

**Single Item Report (80 column)** 

The user may select several items. The report will then print the backorder information for each of the items selected.

Type: run routine

Routine: MULTI^PSGWBOS

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#### **PSGW CLEAR AMIS EXCEPTIONS**

**Incomplete AMIS Data** 

This option loops through the AEX - exceptions cross-reference in the AR/WS STATS file (#58.5). Drugs in this cross-reference had data missing from the DRUG file at the time the quantity was dispensed, and thus could not be added to the cumulative AMIS statistics. For the selected date range, the drug will be shown, and the user will be asked to supply the missing data. At that time, the routine will update the AMIS statistics, and delete the AEX cross-reference.

Type: run routine

Routine: PSGWCL

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#### **Enter Backorders**

Type: run routine

Type: run routine

**PSGW COST PER AOU** 

#### **PSGW CRASH CART LOCATION PRINT**

**PSGW CRASH CART LOCATION EDIT** 

service. The report may be gueued to print at a later time.

This option will print an 80 column report listing all AOUs that are flagged as Crash Carts with their locations.

For a user selected date range, this report will show all active drugs for one AOU, several AOUs, or ALL AOUs, with total quantity dispensed and cost. (It will print only Bottom Totals if desired.) The report gives a total of all quantities dispensed and all drug costs for that AOU. Also, if wards/locations and services have been defined for the AOU, a breakdown report will print. It shows the defined wards/locations, percentage of total, and cost per ward/location. If services are defined, it shows the defined services, percentage of ward/location, and cost per

Routine: PSGCPA

This option will allow users to edit the LOCATION field for AOUs that are flagged as Crash Carts.

Type: run routine

Routine: PSGWCCP

Routine: PSGWCCE

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#### **PSGW CRASH CART MENU**

This menu contains the crash cart options for production.

Type: menu

Menu Items:

Enter/Edit Crash Cart Locations Print Crash Cart Locations

### Cost Report Per AOU (80 column)

**Enter/Edit Crash Cart Locations** 

**Print Crash Cart Locations** 

**Crash Cart Menu** 

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This option will allow a user to delete an Inventory Sheet that has no entries in the PHARMACY AOU STOCK file (#58.1), or in the PHARMACY BACKORDER file (#58.3).

Type: run routine

Routine: PSGWDEL

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#### **PSGW DUPLICATE REPORT**

This 132 column report will display one or all drugs with duplicate entries in the ITEM subfile (#58.11) of the PHARMACY AOU STOCK file (#58.1). For each drug the report will show all inventory, return, and on-demand data.

Type: run routine

Routine: PSGWDUP

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#### **PSGW EDIT AOU STOCK**

Provides access to enter or edit items stocked in an Area of Use. This is how the list of items an AOU stocks is created or changed.

Type: run routine

Routine: PSGWSTKI

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#### PSGW EDIT INVENTORY USER

This option will allow editing of the field PERSON DOING INVENTORY in the PHARMACY AOU INVENTORY file (#58.19) for a selected Date/Time for Inventory.

Type: run routine

Routine: PSGWPERE

#### **PSGW ENTER AMIS DATA/ALL DRUGS**

This routine will display for the user, all drugs in all AOUs, allowing the entry of data needed for AMIS calculations. The drugs will be displayed alphabetically by type. For each drug, the user will be asked for AMIS category and AMIS conversion number.

Type: run routine

**Routine: PSGWADE** 

#### **Enter AMIS Data for All Drugs/All AOUs**

**Edit' Person Doing Inventory'** 

**Delete Inventory Date/Time** 

**Duplicate Entry Report (132 column)** 

**Stock Items - Enter/Edit** 

#### PSGW ENTER/EDIT AMIS DATA

This option allows the entry of AMIS category and conversion number for those drugs used in the Automatic Replenishment/Ward Stock package. The user must select the drug for which data is to be entered. This option is most likely to be used to edit data entered in the *Enter AMIS Data for All Drugs/All AOUs* option.

Type: edit file

File: PSDRUG(

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#### **PSGW EXP REPORT**

This option will print an Expiration Date Report for a single, several, or all AOUs. For multiple AOUs it can be sorted by Date/Drug/AOU or by Date/AOU/Drug.

Type: run routine

Routine: PSGWEXR

**PSGW EXPIRATION ENTER/EDIT** 

This option will allow the entry of expiration dates for items in an AOU.

Type: run routine

Routine: PSGWEXP

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#### **PSGW HIGH COST**

This option allows the user to see drugs/items dispensed in AR/WS in alphabetical or cost order. The user selects a date range, and a cut off amount for the report. The report may be calculated for a single AOU, or cumulatively for all AOUs. Report may be queued to print at a later time.

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Type: run routine

Routine: PSGWHC

#### **PSGW HIGH VOLUME**

For a selected date range, the user may print a report showing drug usage in decreasing order for either a selected AOU or for all AOUs combined.

Type: run routine

Routine: PSGWHV

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Expiration Date Report (80 column)

**AMIS Data Enter/Edit (Single Drug)** 

High Cost Report (80 column)

**High Volume Report (80 column)** 

**Expiration Date Enter/Edit** 

#### PSGW INACTIVATE AOU STOCK ITEM Inactivate AOU Stock Item

Use this option to inactivate an item that is currently on an AOU's stock list. Items should not be deleted, but simply made inactive.

Type: run routine

Routine: PSGWBGIN

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#### PSGW INPUT AOU INP SITE

**Identify AOU INPATIENT SITE** 

**Enter/Edit Inventory Types** 

**Enter/Edit Quantity Dispensed** 

This option will loop through the PHARMACY AOU STOCK file (#58.1) and locate all active AOUs that do not have the INPATIENT SITE field defined.

Type: run routine

Routine: PSGWEDIS

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#### **PSGW INV TYPE**

Print Inventory Types (80 column)

Print the file of INVENTORY TYPES used to classify Area of Use items.

Type: print file

File: PSI(58.16,

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#### **PSGW INV TYPE EDIT**

Edit the file INVENTORY TYPES used to classify Area of Use items.

Type: run routine

Routine: INVENT^PSGWEE

#### **PSGW INVENTORY DISPENSE**

Allows the user to enter the actual quantity dispensed from the inventory pick list or from the inventory sheet depending on how the site parameters are set up. If the MERGE INV. SHEET AND PICK LIST site parameter is set to NO, the quantity dispensed figure is then used to automatically compute the amount on backorder.

Type: run routine

Routine: PSGWBO

#### **PSGW INVENTORY PICK LIST**

Prints the Inventory Pick list for the inventory specified by the user.

Type: run routine

**PSGW INVENTORY SHEET** 

This option prints the AOU inventory reporting sheet. This contains a listing, by AOU, of all the items for specific inventory types.

Routine: PSGWPL

Type: run routine

Routine: PSGWL

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#### **PSGW INVENTORY SINGLE**

This option will print an inventory sheet for a single AOU that is included in the inventory date/time. This option is meant primarily to be used as a means of avoiding a reprint of a lengthy inventory sheet when there has been a problem such as a printer jam.

Type: run routine

Routine: EN^PSGWPIS

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#### **PSGW ITEM INQUIRY**

This option will display all activity (inventories, on-demands, and returns) for a specified item in a specified AOU for a specified date range. This option is primarily meant to be used as a tool to identify bad data input.

Type: run routine

Routine: PSGWATR

**PSGW ITEM LOC EDIT** 

**Item Location Codes - Enter/Edit** 

**Item Activity Inquiry (80 column)** 

This option supports editing of codes used to define the location of items in Areas of Use or in the pharmacy.

Type: run routine

Routine: ITEMLOC^PSGWEE

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Pick List (132 column)

**Inventory Sheet Print (132 column)** 

**Single AOU Inventory Print (132 column)** 

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# Produces report of codes used to define the location of items in Areas of Use or in the pharmacy. Type: print file File: PSI (58.17,

#### **PSGW LOOKUP ITEM**

**PSGW ITEM LOC PRINT** 

This option prints a list of all the wards and their associated AOUs that stock a particular item. The user must specify the item to be looked up.

Type: run routine

Routine: PSGWVW

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#### **PSGW MGT REPORTS**

**Management Reports** 

List Location Codes (80 column)

Ward/AOU List for an Item (80 column)

This menu gives access to various management reports, including the AMIS report.

Type: menu

Menu Items:

AR/WS AMIS Report Cost Report Per AOU (80 column) Single Item Cost Report (80 column) High Cost Report (80 column) High Volume Report (80 column) Duplicate Entry Report (132 column)

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#### **PSGW ON-DEMAND**

Menu giving access to the On-Demand options.

Type: menu

Menu Items:

Enter/Edit On-Demand Request (80 column) Delete an On-Demand Request Print an On-Demand Report by Date/AOU **On-Demand Requests** 

#### **PSGW ON-DEMAND DELETE**

Allows the user to delete the On-Demand request. The user must enter the Area of Use, item name, and the inventory date (date of request).

Type: run routine

Routine: PSGWOND

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#### **PSGW ON-DEMAND EDIT**

Enter/Edit On-Demand Request (80 column)

Allows the user to edit an On-Demand request and change the inactive date fields and the quantity requested.

Type: run routine

Routine: PSGWONDM

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#### **PSGW ON-DEMAND NURSING EDIT**

#### Enter/Edit Nurses' On-Demand Request

This option is used to enter an On-Demand request by the Nursing Staff. An On-Demand request is the nonscheduled distribution of an item to an AOU. If there is a backorder on the requested item, the backorder total is displayed, but the user is not allowed to enter quantity to be dispensed. If the item requested is currently not stocked in that AOU, the user is *not* allowed to add it with this option. Requests for non-standard items must be made through the pharmacy by phone or form. After entering the request, the user may print a report of the request.

Type: run routine

Routine: PSGWODRN

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#### PSGW ON-DEMAND PRINT

Print an On-Demand Report by Date/AOU (80 column)

Prints an On-Demand report which lists the on-demand requests within a user selected date range. The user can also select the Areas of Use to be checked. Standard stock items which have been requested on-demand are flagged.

Type: run routine

Routine: PSGWODP

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#### **Delete an On-Demand Request**

#### **PSGW PREPARE AMIS DATA**

Main option for preparing data base with AR/WS AMIS data.

Type: menu

Menu Items:

Print AMIS Worksheet (80 column) Enter AMIS Data for All Drugs/All AOUs Data for AMIS Stats - Print (132 column) AMIS Data Enter/Edit (Single Drug) Identify AOU Returns & AMIS Count Identify AOU INPATIENT SITE Show AOU Status for AMIS 980 column)

#### **PSGW PRINT AMIS REPORT**

This option prints the AMIS report. Right margin should be at 132. The report may be queued to print at a later time.

Type: run routine

**Routine: PSGWAR** 

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#### **PSGW PRINT AMIS WORKSHEET**

This option prints a worksheet to be used in classifying AR/WS drugs for AMIS. The print order is by type, and within type the drug listing is alphabetical.

Type: run routine

Routine: PSGWPAW

#### PSGW PRINT AOU STOCK

This option prints all items currently available for inventory, by AOU. You may print the report for one AOU, several AOUs, or enter ^ALL to print the report for all Areas of Use. The report may be printed (1) in order by AOU/TYPE/LOCATION, or (2) in alphabetical order by item.

Type: run routine

Routine: PSGWLSI

#### **Prepare AMIS Data**

**Print AMIS Worksheet (80 column)** 

List Stock Items (132 column)

**Print AMIS Report (132 column)** 

**Print (132 column)** This report will show the current data stored in the DRUG File which will affect AR/WS AMIS statistics.

Type: run routine

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#### **PSGW PRINT SETUP LISTS**

This option contains all reports or lists associated with setting up the files for AR/WS.

Type: menu

Menu Items:

Print Inventory Types (80 column) List Location Codes (80 column) Show AOU/Ward/Service (132 column) Print AR/WS Stock Item Data (132 column) List Stock Items (132 column) Inventory Group List (80 column)

-----

#### **PSGW PURGE**

This option is the main menu driver for purging AR/WS files.

Type: menu

Menu Items:

AMIS Data Purge Purge Dispensing Data

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#### **PSGW PURGE AMIS**

This option allows the user to delete data from the AR/WS STATS file (#58.5). Data should be kept in this file for at least one quarter. The routine will not allow users to delete data that is less than 100 days old. The option is automatically queued.

Type: run routine

Routine: PSGWAP

Automatic Replenishment/Ward Stock V. 2.3

Technical Manual

**Print Set Up Lists** 

## **Obsolete Data Purge**

#### AMIS Data Purge

Routine: PSGWADP

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#### **PSGW PURGE FILES**

#### Purge Dispensing Data

This option allows the user to delete data from Files 58.1, 58.3, and 58.19. Data should be kept in these files for at least one quarter. The routine will not allow users to delete data that is less than 100 days old. Since the option is CPU intensive, it should be queued to run during the off hours.

Type: run routine

Routine: PSGWOLD

#### **PSGW PURGE INVENTORY**

#### Purge Old Inventories from PSI(58.19,AINV)

**Re-index AMIS Cross-Reference** 

**Recalculate AMIS** 

This option is not on a menu, as it is a background job scheduled to run each night. This option purges the ^PSI(58.19,"AINV") global. Inventory information that is over 100 days old is removed. The program is automatically queued and is transparent to the users of the system.

Type: run routine

Routine: PSGWKINV

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#### **PSGW RE-INDEX AMIS**

This option will queue a background job that will re-index the AMIS cross-reference for inventories, on-demands, and returns. This cross-reference is important because this is where the nightly job to update the AR/WS STATS file (#58.5) gets the data for the update. If this cross-reference is somehow destroyed, it is very important to rebuild it. Though it is possible to accomplish this through VA FileMan, this option is a much quicker and easier

**Note:** This option is CPU intensive and should be queued only in the off hours. Also, it should *only* be run if there is strong evidence the AMIS cross-reference has been destroyed or corrupted.

alternative. This option is not tied to any menu, but may be hooked into a menu at the site's discretion.

Type: run routine

Routine: PSGWXREF

#### **PSGW RECALCULATE AMIS**

# This option should be used *only* after the AMIS report has been run, results have been found to be in error, and data in the DRUG file has been changed to reflect the correct information. The purpose of this option is to correct the AMIS when data entry errors have caused the results to be inaccurate.

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Type: run routine

Routine: PSGWRA

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**Auto Replenishment Reports** 

### PSGW REPORTS

Menu giving access to various report options for Automatic Replenishment data.

Type: menu

Menu Items:

List Stock Items (132 column) Expiration Date Report (80 column) Inventory Outline (80 column) Ward/AOU List for an Item (80 column) Item Activity Inquiry (80 column) Percentage Stock On Hand (132 column) Returns Analysis Report (80 column) Usage Report for an Item (80 column) Zero Usage Report (80 column)

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#### **PSGW RETURN ITEMS**

Used to record items returned from an AOU.

Type: run routine

Routine: PSGWRIS

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#### **PSGW RETURNS BREAKDOWN**

For a user selected date range, this report shows the break down of returns information. The report may be printed for one AOU, several AOUs, or for all AOUs. Return date, return quantity, and return reason are shown for each drug.

Type: run routine

Routine: PSGWDR

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#### PSGW RN

This is the main menu driver for Automatic Replenishment/Ward Stock options for nurses.

Type: menu

Menu Items:

Enter/Edit Nurses' on-Demand Request (80 column) List Stock Items (132 column) Ward/AOU List for an Item (80 column)

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### **Return Items for AOU**

### Returns Analysis Report (80 column)

**Auto Replenishment/Ward Stock Nurses' Menu** 

#### **PSGW SETUP**

# Options that support management of files typically created and edited during initial set up of Automatic Replenishment/Ward Stock.

Type: menu

Menu Items:

Enter/Edit Inventory Types Item Location Codes - Enter/Edit Create the Area of Use Stock Items - Enter/Edit Expiration Date - Enter/Edit Ward (For Item) Conversion Add/Delete Ward (for Item) Transfer AOU Stock Entries Inactivate AOU Inactivate AOU Stock item AOU Inventory Group - Enter/Edit Print Set Up Lists Edit 'Person Doing Inventory' Sort AOUs in Group Site Parameters

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#### **PSGW SHOW AREA OF USE**

#### Show AOU/Ward/Service (132 column)

This option allows the user to see the AOUs/wards/services created in the Create the Area of Use option.

Type: print file

File: PSI (58.1,

#### **PSGW SINGLE ITEM COST**

Single Item Cost Report (80 column)

For a selected date range, this option gives total cost for a single item from one AOU, several AOUs, or ALL AOUs.

Type: run routine

Routine: PSGWSC

Set Up AR/WS (Build Files)

#### **PSGW SITE**

#### **Site Parameters**

Allows user to set site parameters for Automatic Replenishment package. A site parameter called AR/WS AMIS FLAG controls when the collection of AMIS data begins. Read all available documentation before setting this parameter!

Type: run routine

Routine: SITE^PSGWEE

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PSGW STANDARD COST REPORT

Standard Cost Report (132 column)

This report prints the cost for items in one AOU, several AOUs, all AOUs, or an Inventory Group. This cost represents the dollar amount needed to bring each item from zero to its maximum stock level.

Type: run routine

Routine: PSGWSTD

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#### PSGW STOCK ITEM DATA

Print AR/WS Stock Item Data (132 column)

This option will print a listing of *all* items defined in the PHARMACY AOU STOCK file (#58.1) in alphabetical order. The report will show all AOUs that stock the item, stock levels, all Wards (for Item), all Types, and location.

Type: run routine

Routine: PSGWPSI

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#### **PSGW STOCK PERCENTAGE**

Percentage Stock On Hand (132 column)

Report which extracts inventory data by percentage of stock on hand for a given inventory date range. Percentage and date range can be specified.

Type: print file

File: PSI(58.1,

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#### **PSGW TRANSFER ENTRIES**

**Transfer AOU Stock Entries** 

This option will copy the active stock entries from a selected Area of Use into one or more selected Areas. As many as 10 Areas may be chosen for transfer at one time. You may transfer either the drug name only, or the drug name, stock level,

and location code. The copy process will not copy inactive drugs or duplicate entries. The actual transfer takes place in a background job which is automatically queued. When the transfer is complete, you will be notified by a MailMan message.

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Type: run routine

Routine: PSGWTR

#### **PSGW UPDATE AMIS STATS**

This option is not on a menu, as it is a background job scheduled to run each night. The purpose of the option is to loop through the temporary inventory global and move the data into the AMIS subfile. The rescheduling frequency for this option is one day.

Type: run routine

Routine: PSGWUAS

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#### **PSGW USAGE REPORT**

Usage Report for an Item (80 column)

**Update AMIS Stats File** 

This option prints a usage report for (1) a specific item in an AOU, (2) a specific item for all AOUs, (3) all items for an AOU, or (4) all items for all AOUs. The user must specify AOU, item name and the start and stop dates for the report. The report prints AOU, item, the date of inventory, total quantity dispensed, quantity dispensed by auto-replenishment, quantity dispensed by on-demand requests, and quantity returned.

Type: run routine

Routine: PSGWTOT

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#### **PSGW WARD CONVERSION**

Ward (For Item) Conversion

This option will enable a user to change the Ward (for Item) designation from the old ward to a new ward for all items in all AOUs or in a single AOU. This can be used, for example, when a ward is closed down for construction. A background job can be queued for a later time to do the conversion and a MailMan message will be sent to the person who queued the job when it has run to completion.

Type: run routine

Routine: PSGWCHG

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#### **PSGW WARD INV PRINT**

#### **Inventory Outline (80 column)**

This option lists the principal information for a date range of inventories.

Type: run routine

Routine: PSGWAIO

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#### **PSGW WARD STOCK**

#### **Production Menu**

This menu provides access to the options that are used routinely in the normal Automatic Replenishment/Ward Stock operations.

Type: menu

Menu Items:

Inventory Sheet Print (132 column) Single AOU Inventory Print (132 column) Delete Inventory Date/Time Input AOU Inventory Pick List (132 column) Enter/Edit Quantity Dispensed On-Demand Requests Backorder Requests Return Items for AOU Crash Cart Menu Auto Replenishment Reports

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#### **PSGW WARD STOCK MAINT**

#### Supervisor's Menu

This option supports activities to build and maintain the files needed to operate Automatic Replenishment/Ward Stock. It also contains the necessary options to prepare the files to collect AMIS reporting information, run the AMIS report, and purge the system of obsolete data. Additionally, cost management reports are located on this menu.

Type: menu

Menu Items:

Set Up AR/WS (Build Files) Prepare AMIS Data Management Reports Obsolete Data Purge

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#### **PSGW ZERO USAGE**

#### Zero Usage Report (80 column)

For a user selected time frame, this report prints all items with no usage. The report may be printed for one AOU, several AOUs, or for ALL AOUs.

Type: run routine

Routine: PSGWNU

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#### **PSGWMGR**

#### Automatic Replenishment

Access to all options associated with Automatic Replenishment and Ward Stock.

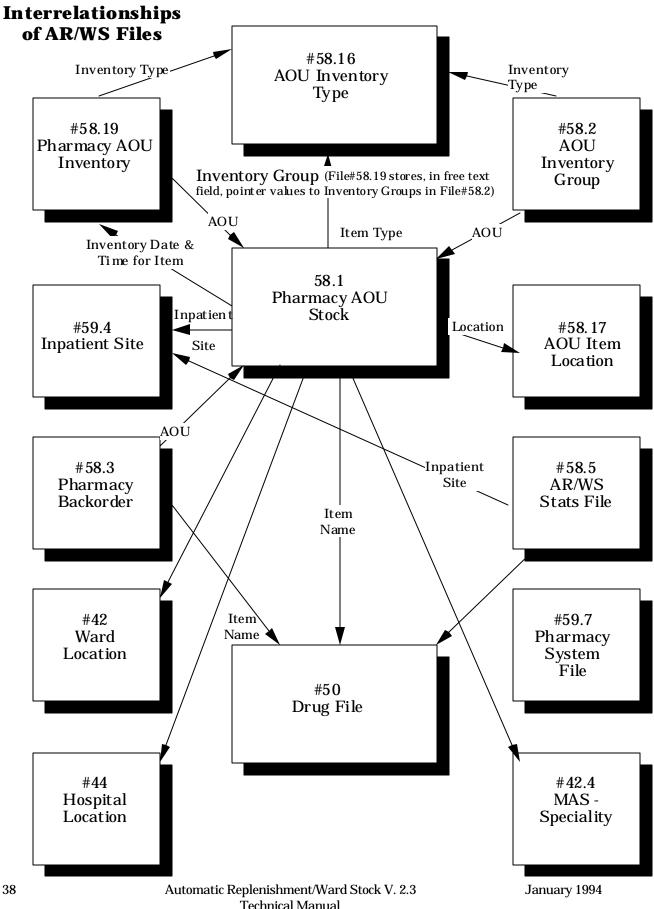
Type: menu

Menu Items:

Production Menu Supervisor's Menu

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The diagram on the next page points out the interrelationships of Automatic Replenishment/Ward Stock files. The AOU INVENTORY TYPE file entries must be defined first. These names are pointed to by two other files. AOU Item Location address codes should be established next. Five fields in the PHARMACY AOU STOCK file are pointers to the other files: ITEM points to the generic drug name from the DRUG file. TYPE is linked to the Type name from the AOU INVENTORY TYPE file, INPATIENT SITE points to the INPATIENT SITE file, WARD/LOCATION (FOR PERCENTAGE) points to the HOSPITAL LOCATION file, and LOCATION points to the address code from the AOU ITEM LOCATION file. The AOU field in the PHARMACY AOU STOCK file is pointed to by the AREA OF USE field from the AOU INVENTORY GROUP file. The AOU INVENTORY GROUP file, defined last, establishes inventory boundaries under an easy to remember group name.



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#### [PSGW WARD STOCK MAINT] \*\*Locked with PSGWMGR

#### Set Up AR/WS (Build Files) [PSGW SETUP]

-	Enter/Edit Inventory Types [PSGW INV TYPE EDIT]	
	Item Location Codes - Enter/Edit [PSGW ITEM LOC EDIT]	
	Create the Area of Use [PSGW AREA OF USE EDIT]	
	Stock Items - Enter/Edit [PSGW EDIT AOU STOCK]	
	Expiration Date - Enter/Edit [PSGW EXPIRATION ENTER/EDIT]	
	Ward (For Item) Conversion [PSGW WARD CONVERSION]	
	Add/Delete Ward (for Item) [PSGW ADD/DEL WARD]	
	Transfer AOU Stock Entries [PSGW TRANSFER ENTRIES]	**Locked with PSGW
	TRAN	
	Inactivate AOU [PSGW AOU INACTIVATION]	
	Inactivate AOU Stock Item [PSGW INACTIVATE AOU STOCK	ITEM]
	AOU Inventory Group - Enter/Edit [PSGW AOU INV GROUP	EDIT]
	Print Set Up Lists [PSGW PRINT SETUP LISTS]	
	Print Inventory Types (80 column) [PSGW INV TYPE]	
	List Location Codes (80 column) [PSGW ITEM LOC	PRINT]
	Show AOU/Ward/Service (132 column) [PSGW SHOW	AREA OF USE]
	Print AR/WS Stock Item Data (132 column) [PSGW	STOCK ITEM DATA]
	List Stock Items (132 column) [PSGW PRINT AOU	STOCK]
	Inventory Group List (80 column) [PSGW AOU INV	GROUP PRINT]
	Edit 'Person Doing Inventory' [PSGW EDIT INVENTORY USER]	
	Sort AOUs in Group [PSGW AOU INV GROUP SORT]	
	Site Parameters [PSGW SITE] **Locked with PSGW PARAM	

 
 Prepare AMIS Data
 [PSGW PREPARE AMIS DATA]

 Print AMIS Worksheet (80 column)
 [PSGW PRINT AMIS
 WORKSHEET]

 Enter AMIS Data for All Drugs/All AOUs
 [PSGW ENTER AMIS
 DATA/A
 DATA/ALL DRUGS] Data for AMIS Stats - Print (132 column) [PSGW PRINT DATA FOR AMIS STATS] AMIS Data Enter/Edit (Single Drug) [PSGW ENTER/EDIT AMIS DATA]

Identify AOU Returns & AMIS Count [PSGW AOU RETURNS &<br/>Identify AOU INPATIENT SITE [PSGW INPUT AOU INP SITE]AMIS COUNT]Show AOU Status for AMIS (80 column) [PSGW AOU RET/AMISCT PRINT]

#### Management Reports [PSGW MGT REPORTS]

AR/WS AMIS Report [PSGW AMIS] Incomplete AMIS Data [PSGW CLEAR AMIS EXCEPTIONS] Print AMIS Report (132 column) [PSGW PRINT AMIS REPORT] Recalculate AMIS [PSGW RECALCULATE AMIS] Cost Report Per AOU (80 column) [PSGW COST PER AOU] Single Item Cost Report (80 column) [PSGW SINGLE ITEM COST] High Cost Report (80 column) [PSGW HIGH COST] High Volume Report (80 column) [PSGW HIGH VOLUME] Duplicate Entry Report (132 column) [PSGW DUPLICATE REPORT] Standard Cost Report (132 column) [PSGW STANDARD COST]

#### **Obsolete Data Purge** [PSGW PURGE] \*\* Locked with PSGW PURGE

AMIS Data Purge [PSGW PURGE AMIS] Purge Dispensing Data [PSGW PURGE FILES]

Note: The following three options are background jobs and should be scheduled through TaskMan.

#### [PSGW PURGE INVENTORY]

#### [PSGW RE-INDEX AMIS]

[PSGW UPDATE AMIS STATS]

#### [PSGW WARD STOCK]

Inventory Sheet Print (132 column) [PSGW INVENTORY SHEET]

Single AOU Inventory Print (132 column) [PSGW INVENTORY SINGLE]

**Delete Inventory Date/Time [PSGW DELETE INVENTORY]** 

Input AOU Inventory [PSGW AOU INVENTORY INPUT]

Pick List (132 column) [PSGW INVENTORY PICK LIST]

#### Enter/Edit Quantity Dispensed [PSGW INVENTORY DISPENSE]

#### **On-Demand Requests** [PSGW ON-DEMAND]

Enter/Edit On-Demand Request (80 column) [PSGW ON- DEMAND EDIT] Delete an On-Demand Request [PSGW ON-DEMAND DELETE] Print an On-Demand Report by Date/AOU (80 column) [PSGW ON-DEMAND PRINT]

#### **Backorder Requests** [PSGW BACKORDER]

Enter Backorders [PSGW BACKORDER IN]Fill Requests for Backorder Items [PSGW BACKORDER EDIT]AOU Backorder Report (80 column) [PSGW BACKORDER AOUPRINT]Current (ALL) Backorder Report (80 column) [PSGW BACKORDER ITEMSingle Item Report (80 column) [PSGW BACKORDER ITEMPRINT]Multiple Items Report (80 column) [PSGW BACKORDER ITEMSPRINT]

#### **Return Items for AOU [PSGW RETURN ITEMS]**

#### Crash Cart Menu [PSGW CRASH CART MENU]

Enter/Edit Crash Cart Locations [PSGW CRASH CART LOCATION EDIT] Print Crash Cart Locations [PSGW CRASH CART LOCATION PRINT]

#### Auto Replenishment Reports [PSGW REPORTS]

List Stock Items (132 column) [PSGW PRINT AOU STOCK] Expiration Date Report (80 column) [PSGW EXP REPORT] Inventory Outline (80 column) [PSGW WARD INV PRINT] Ward/AOU List for an Item (80 column) [PSGW LOOKUP ITEM] Item Activity Inquiry (80 column) [PSGW ITEM INQUIRY] Percentage Stock On Hand (132 column) [PSGW STOCK PERCENTAGE] Returns Analysis Report (80 column) [PSGW RETURNS BREAKDOWN] Usage Report for an Item (80 column) [PSGW USAGE REPORT] Zero Usage Report (80 column) [PSGW ZERO USAGE]

#### Auto Replenishment/Ward Stock Nurses' Menu [PSGW RN]

Enter/Edit Nurses' On-Demand Request (80 column) [PSGW ON-List Stock Items (132 column) [PSGW PRINT AOU STOCK] Ward/AOU List for an Item (80 column) [PSGW LOOKUP ITEM]

# **Archiving and Purging**

At present, the Automatic Replenishment/Ward Stock module does not provide for the archiving of its data.

There are currently two options on the AR/WS Supervisor's Menu allowing files to be purged. They are *AMIS Data Purge* and *Purge Dispensing Data*.

The amount of old data to be retained is a site specific decision. It is highly recommended that you keep data for at least one quarter. Use caution when choosing dates for deletion so as not to destroy needed data. These options delete the data from your files, and it is **not recoverable**.

#### AMIS Data Purge [PSGW PURGE AMIS]

The purpose of this option is to purge old data from File 58.5 - AR/WS STATS file. Data should be kept in the file for at least one quarter to be able to produce the quarterly AMIS report. Use caution when choosing dates for deletion so as not to destroy needed data. The routine will not allow data newer than "T-100 days" to be deleted. The routine is automatically queued to run in the background.

#### Purge Dispensing Data [PSGW PURGE FILES]

The purpose of this option is to purge old data from Files 58.1 (PHARMACY AOU STOCK), File 58.3 (PHARMACY BACKORDER), and File 58.19 (PHARMACY AOU INVENTORY). Data should be kept in the files for at least one quarter or as far back as your site might choose to know usage, cost, etc. Use caution when choosing dates for deletion so as not to destroy needed data. The routine will not allow data newer than "T-100 days" to be deleted. The routine is queued to run in the background at a time that you select. Since the routine is CPU intensive, it should be queued to run in the off hours. It is highly recommended that you delete no more than two months data at a time.

The routine looks at inventory numbers that fall in the delete date range you selected. It loops through all automatic replenishment inventories, on-demand requests, and returns. Any inventories with outstanding backorders will not be deleted until the backorder is marked filled. (It may be beneficial to print the AOU Backorder Report to see if there are any old backorders that have been forgotten before running the *Purge Dispensing Data* option.) Inventory data that falls within the selected date range will be deleted in this loop. If there are drugs in an AOU which are inactivated and the inactivation date is before the "end date for

deletion", and the drugs have no inventory activity, these will be deleted from the AOU. Finally, any AOU which is not in an AOU Inventory Group and which contains no drugs (because they were inactivated and thus deleted in the above loop), will be deleted from File 58.1.

**Note:** As long as an AOU is in an AOU Inventory Group, it will not be deleted. This relates to those AOUs which have no standard stock because they are used for on-demand requests only.

There is additionally, a background job which should be scheduled through TaskMan to run each night at a convenient time. The routine should run nightly, therefore the rescheduling frequency is "1D". The purpose of the option is to purge the ^PSI(58.19,"AINV") global. This global location is the storage place for inventory sheets which have been printed. The data should remain in the global for a 100 day period. After that time, it is unlikely that the data will be needed. Therefore the data is purged from the system through this background job.

Using the TaskMan Manager's *Schedule/unschedule Task Manager tasks* option, select the *PSGW PURGE INVENTORY* option. At the "QUEUED TO RUN AT WHAT TIME:" prompt, enter "T@" followed by the time you choose for the job to begin. The time should be one that does not conflict with system backup. At the "RESCHEDULING FREQUENCY:" prompt, enter "1D". The "DEVICE" prompt should remain blank since this is a background job.

#### Example: How to Schedule a TaskMan Task

Select Systems Manager Menu Option: TASKMan Manager

Select TaskMan Manager Option: SCHedule/unschedule Task Manager tasks

Select OPTION to schedule or re-schedule: **PSGW PURGE INVENTORY** 

QUEUED TO RUN AT WHAT TIME: T@2200

DEVICE FOR QUEUED JOB OUTPUT: <RET>

RESCHEDULING FREQUENCY: 1D

QUEUED TO RUN ON VOLUME SET: [At this prompt, select the Volume Set name that the option should run on.]

Select OPTION to schedule or re-schedule: <RET>

None of the Automatic Replenishment/Ward Stock routines have been designed to be called outside of the package. A package-wide variable, PSGWSITE, is set as users enter the package.

When possible, the following routines are recommended for routine mapping. Any routines not listed below may be mapped if you so desire.

If you choose to delete the Init routines (PSGWI\*), you may also delete routines PSGWPOST, PSGWPST1, and PSGWPRE\* as they are used only by the initialization process.

**Callable Routines** 

The Automatic Replenishment/Ward Stock module relies on, at least, the following external packages to run effectively:

<u>Package</u>	Minimum Version Needed
Kernel	7.0
VA FileMan	19.0
MailMan	7.0
MAS	5.2
Outpatient Pharmacy	5.6
AR/WS	2.04*

AR/WS references the HOSPITAL LOCATION file (#44), so that AOUs may be assigned to specific Hospital Locations for statistical purposes.

AR/WS also has a tie to the Unit Dose package, so that Unit Dose will know which items in your DRUG file are Ward Stock items for each ward.

An integration agreement has been granted between Automatic Replenishment/Ward Stock and Drug Accountability. The ^PSGWUAS routine contains a call to ^PSARWS. ^PSARWS will traverse the ^PSI(58.5, "AMIS") cross-reference to update the AR/WS dispensing in Drug Accountability.

#### SAC Exemption ^PSI(58.19,"AINV", Global Exception Granted to Standards

A MUMPS cross-reference - ^PSI(58.19,"AINV", - contains the sort order for the inventory sheets used in the Automatic Replenishment/Ward Stock package. The sort order must be captured because later routines use the sort order for various input processes. If the files have been updated, re-creation of the sort order will result in a discrepancy between the printed page and what the user views on the screen.

AR/WS creates an inventory sheet which is sorted by: Area of Use, 1st location, 2nd location, 3rd location, inventory type, and drug name. The global layout is: ^PSI(58.19,"AINV",INV#,AOU,LOC1,LOC2,LOC3,TYPE,DRUG).

INV# is the internal number from File 58.19 of the inventory being done.
AOU is the internal number from File 58.1 of the AOU being inventoried.
LOC1 is the 1st piece (delimiter is a comma) of the item location from File 58.1.
LOC2 is the 2nd piece (delimiter is a comma) of the item location from File 58.1.
LOC3 is the 3rd piece (delimiter is a comma) of the item location from file 58.1.
TYPE is the internal number from file 58.16 of the inventory type for the item.
DRUG is the actual drug name from file 50 for the item.

The cross-reference is hard coded in the inventory sheet routine -  $^{PSGWPI1}$ . The cross-reference is killed periodically by a background job (PSGWKINV), because the inventory sheet has a limited life span of 100 days. This global must be translated.

The ^PSI global is currently journaled which means the inventory sheet is also journaled. ^PSI must be journaled because all AR/WS files live in ^PSI. ^PSI(58.19,"AINV", does not have to be journaled because it could be recreated and once created it has a 100 day life cycle. There are currently no globals in AR/WS that are not journaled.

If destroyed through some mishap, the cross-reference is easily recreated by running the inventory sheet(s) again. This can be accomplished by the user or Site Manager. Not all inventory sheets would need to be re-created; just those outstanding. There are no restrictions on when this can be re-created.

In AR/WS version 1.0, this data was stored in a non-Fileman global ^PSG("PSGW"). The global was changed for version 1.1 to its current format (a cross-reference) based on discussion and recommendations at a peer review of another Inpatient Pharmacy package.

Since this cross-reference can not be recreated by use of Fileman in this version reindexing and is created and killed through routines, its Fileman compatibility was questioned. Thus, the request for an exception to the standard was made. The request was passed by the SAC Committee on March 24,1988.

All of the Automatic Replenishment/Ward Stock package options have been designed to stand alone. Each option requires the use of the package-wide variable PSGWSITE that is set as users enter the package. Even though all options are able to be independently invoked, users will be repeatly asked to select an Inpatient Site (if there are two or more sites that are flagged for AR/WS use) if top level AR/WS menus do not contain the following enter and exit code in the OPTION file:

EXIT ACTION: K PSGWSITEACTION: I '\$D(PSGWSITE) D ^PSGWSET

**Internal Relations** 

Automatic Replenishment/Ward Stock contains only one package-wide variable PSGWSITE. This variable must be defined and is required for the package to run. PSGWSITE is set in the routine ^PSGWSET as package users enter the module.

Some stations design their own menus for individual users. If this is the case, then the top level AR/WS menu must contain the following enter and exit code in the OPTION file:

EXIT ACTION	: K PSGWSITE
ACTION	: I '\$D(PSGWSITE) D ^PSGWSET

This enter and exit code must be present because the PSGWSITE variable is set as users enter the package. If the Kernel's ^OPTION NAME feature is used to jump directly into lower levels of the AR/WS package, then the

**must** be answered in order to define the PSGWSITE variable. All options are independently invokable, however, if the instuctions above are not followed, users will be repeatly asked to select an Inpatient Site if there are two or more sites that are flagged as selectable for AR/WS use.

Package-Wide Variables

Throughout the entire Inpatient Automatic Replenishment/Ward Stock module, you may obtain on-line help. You may enter a question mark (?) at any prompt to assist you in your choice of actions.

The Data Dictionaries (DDs) are considered part of the on-line documentation for this software application. Use VA FileMan option *LIST FILE ATTRIBUTES* to print the DDs. The following are the files for which you should print DDs:

#50	DRUG
#58.1	PHARMACY AOU STOCK
#58.16	AOU INVENTORY TYPE
#58.17	AOU ITEM LOCATION
#58.19	PHARMACY AOU INVENTORY
#58.2	AOU INVENTORY GROUP
#58.3	PHARMACY BACKORDER
#58.5	AR/WS STATS FILE
#59.4	INPATIENT SITE
#59.7	PHARMACY SYSTEM

The namespace for the Automatic Replenishment/Ward Stock module is PSGW.

Stations may delete all templates for the AR/WS files except those listed below (and except for any local templates created):

#### FILE #58.1 PHARMACY AOU STOCK

Input Templates

PSGW AREA OF USE EDIT PSGW INACTIVATE ITEM

Print Templates

PSGW PERCENTAGE PSGW SHOW AREA OF USE

Sort Templates

PSGW PERCENTAGE PSGW SHOW AREA OF USE

#### FILE #58.16 AOU INVENTORY TYPE

Print Template

PSGW INV TYPE

Sort Template

PSGW INV TYPE

#### FILE #58.17 AOU ITEM LOCATION

Print Template

PSGW ITEM LOC

Sort Template

PSGW ITEM LOC

#### FILE #58.2 AOU INVENTORY GROUP

Input Template

PSGW WARD INVENTORY

### **AR/WS Template in Shared Files**

Input Templates

PSGW ENTER/EDIT AMIS DATA

<u>File</u> DRUG file (#50) **On-Line Documentation** 

AMIS Category	The AMIS category will classify AR/WS drugs for AMIS purposes. The four AMIS categories are "0", "1", "2", and "3". "0" means the drug is classified as field 03 or 04. This includes tablets, capsules, multi-dose vials, etc. It does not include multiple- dose externals, liquids, or antacids. "1" means the drug is classified as field 06 or 07. This includes multiple-dose externals, liquids, antacids, otics, opthalmics, and inhalations. "2" means the drug is classified as field 17. This includes solutions and administration sets. "3" means the drug is classified as field 22. This includes blood and blood products.
AMIS Conversion Number	The AMIS conversion number reflects the number of doses/units contained in a single quantity dispensed. For example, for a 20cc vial, the quantity dispensed is 1, and the AMIS conversion number is 20.
AOU - Area of Use	An Area of Use is a place where commonly stocked items are stored for use by wards or treatment areas. An AOU may serve one or more wards or clinics, or, as in the case of "cardiac cath lab", no ward.
AOU Inventory Group	An AOU Inventory Group is defined by pharmacy to represent the Areas which are inventoried together as a "batch" or "cluster". This is a way to "group" commonly inventoried AOUs under an easy to remember inventory group name. For each AOU in the inventory group, you may specify which inventory types will be included for this specific inventory group. By defining the inventory groups initially, you do not have to re-define the inventory boundaries every time a particular inventory is scheduled.

Automatic Replenishment/Ward Stock	A method of drug distribution and inventory management within a hospital. Drug products can be automatically inventoried and delivered to an Area of Use (AOU) or requested on demand.
Backorder Amount	A backorder occurs when the actual amount dispensed is less than the "to be dispensed" amount (i.e., pharmacy did not have sufficient stock to fill the total number requested). The difference between these two amounts is the total that should be on backorder. Backorder amount is figured by the computer if both the inventory sheet and pick list are printed. If the MERGE INV. SHEET AND PICK LIST site parameter is set to "YES", then the backorder amount must be entered using the <i>Enter Backorders</i> option.
Backorder File	Backorder requests are created automatically by the computer when the inventory sheet and pick list are not merged. File 58.3 contains item name, AOU, date of backorder, quantity backordered, and date filled.
Inpatient Site	The INPATIENT SITE field for each AOU defined in the PHARMACY AOU STOCK file (#58.1) contains the name of the Inpatient Site (from the INPATIENT SITE file, see the next definition below) that will receive credit for all AMIS transactions that occur in the AOU. It is <i>very important</i> that this field be defined!! If it is not, all transactions for the AOU will be ignored and will directly affect the accuracy of the AMIS Stats Report.
Inpatient Site File (#59.4)	The INPATIENT SITE file contains site parameters which allow a station to "customize" the software. AR/WS parameters affect (1) whether or not a separate inventory sheet and pick list are printed, (2) whether or not columns are printed on the inventory sheet for returns, (3) when the collection of AMIS data begins, and (4) whether the site name is used for Automatic Replenishment or Unit Dose.
Inventory Sheet	The printed form used to take inventory. Includes item location within AOU, item name, stock level required, a column to record the amount on-hand, and a column to record returns. (Return column prints only if the PRINT RETURN COLUMNS site parameter is set to "YES").
Inventory Type	Name or names linked to items found in the AOU allowing you to inventory BY THIS TYPE. For example, isopropyl alcohol could be classified as an External. An item may have more than one inventory type. This will allow the item to be selected for inventory by either type.
Item Address Code (Location Code)	A code that represents the location of an item in the AOU. For example, if isopropyl alcohol is stored in an AOU on the second set of shelves, third shelf from the top, its item address code could be expressed as S,2,3. The address code can consist of up to three levels separated by a comma. Each level should further define the exact location. The code is associated with an expansion for clarity.
Item Address Code	Text used to clarify the meaning of an item

Expansion	address code. For example, on the inventory sheet and pick list, the code S would be expanded and printed as shelf. (These codes and expansions are locally created terms.)
Minimum Quantity to Dispense	The least amount of an item to be dispensed. If defined for an item it will be used by a site as a guideline for dispensing items that are best dispensed in bulk quantities.
On Demand Request	Non-scheduled distribution of an item to an AOU.
PSGW PARAM	The PSGW PARAM key should be given <i>only</i> to the Inpatient Pharmacy Package Coordinator. This lock controls when the collection of AMIS data begins.
PSGW PURGE	The PSGW PURGE key should be given <i>only</i> to the Inpatient Pharmacy Package Coordinator or his/her designee. This lock controls the deletion of data from the AR/WS files and should be assigned with discretion.
PSGW TRAN	The PSGW TRAN key should be given <i>only</i> to the Inpatient Pharmacy Package Coordinator or his/her designee. The key controls access to the <i>Transfer AOU Stock Entries</i> option. Using the transfer option, users may "copy" the stock entries from one Area of Use into other Areas.
PSGW RN	Primary menu option for the Automatic Replenishment/Ward Stock Nurses' Menu. This menu allows nursing to enter on demand requests, list stock items, and locate AOUs which stock a specified item.
PSGWMGR	The name of the key that must be assigned to Inpatient Pharmacy Package Coordinators using the AR/WS package. This key allows access to the <i>Supervisor's Menu</i> options. Also, the name of the primary menu option to be assigned to all pharmacy personnel using the AR/WS package.
Pick List	Used to dispense the inventory. This is a two part report. The first part prints in the same format as the inventory sheet. It shows: item location, item name, stock level, on- hand amount, total backorders, the amount to be dispensed, and a column to enter the amount dispensed if it is less than the number in the "to be dispensed" column. The second part of the pick list is used by the pharmacy to pick the items. It contains item name, quantity to be dispensed, and a column to record actual quantity dispensed.
Quick Code	An abbreviated form of the drug generic name (from 1 to 10 characters). Lookup is done on print name, QUICK CODE, or synonym. Quick codes are displayed on the Inventory Sheet.
Reorder Level	If defined for an item, this is the stock level an item should reach before it can be replenished.
Service	Service is located under Ward (For Percentage) in the Pharmacy AOU Stock File. It is the name of the service which composes the ward. For example, cardiology and neurology are services.

Service Percentage	The percentage of ward use by a particular service. For example, 40 beds used by Cardiology out of 100 would be 40%.
Stock Item	An item (from the drug file) stored in the AOU.
Stock Level	The quantity of an item stocked in a specific AOU.
Ward (for item)	The name of the ward or wards that will use this particular item. It is important to accurately answer this prompt because this is the link between the AR/WS package and the Unit Dose package. The Unit Dose package looks at this field to know if the drug is a Ward Stock item.
Ward/Location (for percentage)	The name of the MAS location that is served partially or totally by an Area of Use. This field will generally be used for reporting purposes. If the AOU is <i>not</i> composed of any wards, enter "^" at the "Ward/Location (for percentage)" prompt.

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