Pharmacy Interface Automation (PIA) Startup and Troubleshooting Guide



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1 Introduction

The Pharmacy Interface Automation project created an automated interface between the Pharmacy Automated Dispensing Equipment (PADE) used in the inpatient and outpatient care settings and Veterans Health Information Systems and Technology Architecture (VistA). The purpose of this Setup and Troubleshooting Guide is to walk through the setup of the Pharmacy Interface Automation (PIA) functionality included in patches PSJ*5*317 and PSS*1*193.



CAUTION: It is highly suggested that you read the supporting documentation *BEFORE* beginning with setup.

Supporting documents are listed below:

- User Manual
- Technical Manual
- Installation Guide (this is for VistA installation)

We *recommend* the following approach to begin setting up and using the Pharmacy Interface Automation functionality. This will vary greatly from site to site and depend on the vendor at the site. Click the links for details:

- Phase 1: ACL Request/Connectivity Setup Checklist (2-3 weeks)
 - Outbound (Health Connect → PADE)
 - Inbound (PADE → Health Connect)
- Phase 2: Outbound to PADE Setup



NOTE: The outbound setup can be started while waiting for ACL approval and connectivity.

• Phase 3: Inbound to VistA Setup



NOTE: Wait until Health Connect connectivity is established to begin setup.

• Phase 4: Implementation

2 Phase 1: ACL Request/Connectivity Setup Checklist

Phase 1 Roles:

The following roles are involved with Phase 1: ACL Request/Connectivity Setup Checklist:

- Region COTS team
- Biomed group
- VIE National Admins REDACTED
- Region LAN group
- Region IT support
- REDACTED
- Vendor Engineer
- Pharmacy



NOTE: It may take up to two to three weeks to setup your ACL.

2.1 ACL Connectivity Setup

The following are the steps to get an ACL connection established:

- 1. Ensure the latest patches are installed in VistA (PSJ*5*317 and PSS*1*193).
- 2. System owners (e.g., Biomed or Pharmacy depending on the site setup) need to initiate changes to the VLAN ACL for the PADE system(s) via a CA Ticket that lists all changes needed to be done to the ACL:
 - a. Work with VistA Interface Engine (VIE) national admin group (VIE National Admins REDACTED to get the exact information that needs to go into the ticket:
 - i. Open CA ticket for their support.
 - ii. Email: REDACTED
 - iii. Get confirmation that the ACLs are open.
- 3. Conduct connectivity testing (testing of communication of information)—suggest getting a call with all parties (usually about one hour):
 - a. Confirm Health Connect can establish a connection to the VistA Health Level Seven (HL7) multi-listener (Inbound).
 - b. Test Health Connect to vendor (Outbound).
 - c. Test vendor to Health Connect (Inbound).
 - d. Test communication to/from VistA and Health Connect.
 - e. Suggest sending a few test patients or drug information to PADE and having information from PADE come back into VistA to make sure the communication is going through properly.



REF: For more details on Inbound Setup, see Section 4, "Phase 3 Inbound to VistA Setup."

3 Phase 2: Outbound to PADE Setup

In Phase 2, the setup will be configured in VistA to send the information to the appropriate PADE. Phase 2 can happen simultaneously with Phase 1. The main purpose of the outbound setup is to map the send areas to the location of the cabinets in the wards, clinics, and/or operating rooms.

Phase 2 Roles:

The following roles are involved with Phase 2: Outbound to PADE Setup:

- Pharmacy Staff (Automated Data Processing Application Coordinator [ADPAC])
- Vendor Engineer or Implementation Support
- REDACTED
- VIE National Admins REDACTED
- Region Information Technology (IT) support (if needed)

Table 1: Phase 2: Outbound to PADE Setup

Phase 2:	Step (click link for more details.)	POC	
	 Confirm Vendor point of contact (POCs) and adjust contract if needed. 	Pharmacy Staff / Biomed	
	Determine that you have the appropriate security keys and menus.	Pharmacy	
	3. PSJ PADE Logical Link Setup.		
	4. (SA) PADE Send Area Setup.		
	5. (SS) PADE System Setup.		
	6. (SO) PADE Send Patient Orders.		
	7. Nightly Job.		

3.1 Security Keys

<u>Table 2</u> lists the security keys needed for Outbound and Inbound PADE setup and functionality.

Table 2: Security Keys for Outbound and Inbound PADE Setup

Security Key	Description
PSJ PADE MGR	This security key is given to Pharmacy users who will need full access to the PSJ PADE MAIN MENU, including the PADE System setup.
PSJ PADE ADV	This security key is given to Pharmacy users in addition to the PSJ PADE MGR security key to prevent the user from PADE System setup like IP address/port, and to allow setting up division specific lower level parameters (i.e., wards and clinics) of the PADE system.
PSS PADE INIT	This security key enables users to transmit the entire drug file (or UD and IV marked drugs) to Pharmacy Automated Dispensing Equipment (PADE) System(s) within the Send Drug File Entries to External Interface VistA option. This action is typically a onetime event to send a copy of the formulary to a new PADE vendor.

3.2 Logical Link

To set up your logical links, complete the following steps:

1. From the HL7 Main Menu, select the Interface Developer Options menu.

Figure 1: HL7 Main Menu—Selecting Interface Developer Options Menu

```
Select OPTION NAME: HL7 MAIN MENU <Enter> HL MAIN MENU HL7 Main Menu

Event monitoring menu ...
Systems Link Monitor
Filer and Link Management Options ...
Message Management Options ...
Interface Developer Options ...
Site Parameter Edit
HLO HL7 (Optimized) MAIN MENU ...

You have PENDING ALERTS
Enter "VA to jump to VIEW ALERTS option

Select HL7 Main Menu <TEST ACCOUNT> Option: Interface Developer Options
```

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2. From the Interface Developer Options menu, select the EL—Link Edit option.

Figure 2: Interface Developer Options Menu—Selecting Link Edit Option

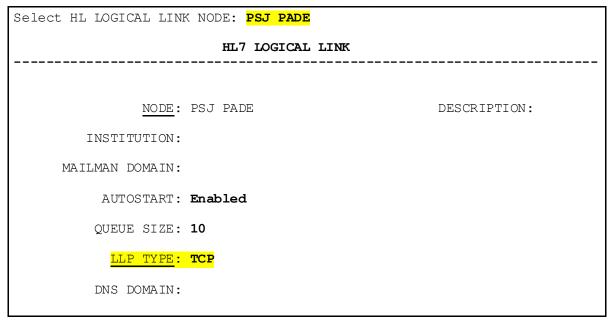
```
EA Application Edit
EP Protocol Edit
EL Link Edit
VI Validate Interfaces
Reports ...

Select Interface Developer Options <TEST ACCOUNT> Option: EL <Enter> Link
Edit
```

3. From the **EL—Link Edit** option, at the "HL LOGICAL LINK NODE:" prompt, enter **PSJ PADE**.

The system puts you into ScreenMan mode. Tab down to the "LLP TYPE" field and press **Enter**>. The "TCP LOWER LEVEL PARAMETERS" screen is displayed (<u>Figure</u> 4).

Figure 3: Link Edit option—Selecting Logical Link Node



- 4. From the "TCP LOWER LEVEL PARAMETERS" screen for the **PSJ PADE** node:
 - a. Tab to the "TCP/IP ADDRESS:" field and update the entry with the Health Connect **IP** address.
 - b. Tab to the "TCP/IP PORT:" field and update the entry with the Health Connect **port**.

Figure 4: HL Logical Link (ScreenMan)—Updating IP Address and Port

```
HL7 LOGICAL LINK
PSJ PADE
 TCP/IP SERVICE TYPE: CLIENT (SENDER)
     TCP/IP ADDRESS: update with the Health Connect IP address
       TCP/IP PORT: update with the Health Connect port
       TCP/IP PORT (OPTIMIZED):
                          RE-TRANSMISION ATTEMPTS: 5
  ACK TIMEOUT:
                     EXCEED RE-TRANSMIT ACTION:
 READ TIMEOUT:
   BLOCK SIZE:
                                      SAY HELO:
                           TCP/IP OPENFAIL TIMEOUT:
.STARTUP NODE:
                                    PERSISTENT:
  RETENTION:
                              UNI-DIRECTIONAL WAIT:
```

3.3 PSJ PADE MAIN MENU Options

Table 3 lists the options (functions) that you can access from the PSJ PADE MAIN MENU:

Table 3: PSJ PADE MAIN MENU Options (Functions)

Synonym	Option Text [Name]	Description	
SA	PADE Send Area Setup	This option is used to setup the Pharmacy Automated Dispensing Equipment (PADE) send area, which will help map locations to the cabinets on the vendor systems.	
SS	PADE System Setup	This option is used to setup the PADE system (e.g., Pyxis, OmniCell, AccuDose, etc.) that supports single/multiple cabinets, located in Inpatient Wards and Outpatient Clinics to stock items (drug/non-drug) for dispensing.	
IN	PADE Inventory Setup	dispensing. This menu contains options used to set up PADE Inbound information. PADE vendor system parameters can be set, including the activation of the display of vendor drug item balances in the Inpatient Order Entry and the entry of mail groups to which inbound HL7 error messages are sent. Individual PADE dispensing device (cabinet) parameters can also be defined, including: Initializing the device. Activating/Inactivating the device. Linking the device to a hospital division and ward or clinic location.	
RP	PADE Reports	This menu contains options to run PADE Inbound inventory reports.	

Synonym	Option Text [Name]	Description
		The PADE Transaction Report contains information on individual HL7 transactions received from the PADE vendor, and is run for a specific date range. The PADE On Hand Report contains current inventory information for each drug item stocked in each PADE dispensing device (cabinet).
SC	PADE Send Surgery Cases	This option can be used to send surgery cases manually to a PADE for that date or future date.
so	PADE Send Patient Orders	This option is used to send UD/IV orders to PADE.

3.4 Accessing the PADE Main Menu

The PADE Main Menu [PSJ PADE MAIN MENU] is located on the **Unit Dose Medications** menu [PSJU MGR]. The PADE Main Menu is locked with the PSJ PADE MGR security key.

Figure 5: Accessing the PADE Main Menu—Sample User Entries and System Responses

```
Select OPTION NAME: PSJU MGR Unit Dose Medications
(Inpatient Medications - Version 5.0 09/17/98)
          Align Labels (Unit Dose)
          Discontinue All of a Patient's Orders
          Edit Clinic Med Orders Start Date/Time
   ЕCO
   EUP
          Edit Inpatient User Parameters
   IOE
        Inpatient Order Entry
   IPF
        Inpatient Profile
         Check Drug Interaction
          INQuiries Menu ...
          Label Print/Reprint
         Non-Verified/Pending Orders
          Order Entry
          PADE Main Menu ...
          PAtient Profile (Unit Dose)
          Reports Menu ...
          Supervisor's Menu ...
You have PENDING ALERTS
Enter "VA to jump to VIEW ALERTS option
Select Unit Dose Medications <TEST ACCOUNT> Option: PADE Main Menu
   SA
          PADE Send Area Setup
   SS
          PADE System Setup
   ΙN
          PADE Inventory Setup ...
   RP
          PADE Reports ...
   SC
          PADE Send Surgery Cases
   SO
          PADE Send Patient Orders
```

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3.4.1 PADE Send Area Setup

Coordinate with your vendor to get a list of send areas on the vendor side, so when the message is sent the vendor will know to which cabinet to route the message.

Figure 6: PADE Send Area Setup Option—Sample User Entries and System Responses

```
PADE Send Area Setup
   SA
   SS
          PADE System Setup
          PADE Inventory Setup ...
   IN
          PADE Reports ...
   RΡ
   SC
          PADE Send Surgery Cases
          PADE Send Patient Orders
   SO
Select PADE Main Menu <TEST ACCOUNT> Option: SA <Enter> PADE Send Area
Setup
Select PADE SEND AREA: ??
   Choose from:
  EMERGENCY ROOM 1
  EMERGENCY ROOM 2
  MIKE'S CLINIC GROUP SA
  NICU FLOOR 7
  OP CLINIC
  SURGERY FLOOR 2
You may enter a new PADE SEND AREA, if you wish. These are the pre-
defined locations on the PADE vendor system where the messages will be
sent to.
Select PADE SEND AREA:
```

3.4.2 PADE System Setup

PADE SYSTEM SETUP is the name of the Pharmacy Automated Dispensing Equipment (PADE) system (e.g., Pyxis, OmniCell, AccuDose etc.) that supports single/multiple cabinets, located in Inpatient Wards and Outpatient Clinics to stock items (drug/non-drug) for dispensing.

<u>Figure 7</u> shows you how to enter a new PADE SYSTEM SETUP:

Figure 7: PADE System Setup Option—Sample User Entries and System Responses

```
SA
          PADE Send Area Setup
   SS
          PADE System Setup
          PADE Inventory Setup ...
   ΙN
   RP
          PADE Reports ...
          PADE Send Surgery Cases
   SC
   SO
          PADE Send Patient Orders
Select PADE Main Menu <TEST ACCOUNT> Option: SS <Enter> PADE System Setup
Select PADE SYSTEM SETUP: ??
  Choose from:
  ASEYNT
  OMNICELL
   PYXIS
Select PADE SYSTEM SETUP: PYXIS
PADE SYSTEM: PYXIS// <Enter>
DNS NAME/IP ADDRESS: 10.168.11.186// ??
        This is the DNS name or the IP address of the PADE System.
DNS NAME/IP ADDRESS: 10.168.11.186// <Enter>
PORT: 4800// ??
        This is the port number associated with the PADE System.
PORT: 4800// <Enter>
SEND DRUG FILE MESSAGES: NONE//
```

3.4.2.1 Send Drug File Messages

The SEND DRUG FILE MESSAGES prompt of the PADE SYSTEM SETUP option [PSJ PADE SETUP] will determine if the user will be prompted to send HL7 drug formulary messages to PADE when using the DRUG ENTER/EDIT option [PSS DRUG ENTER/EDIT]. When set to N (for New DRUGS), the user will be prompted to send a message to PADE only when the DRUG ENTER/EDIT option is used to create NEW entries.

If the parameter is set to U (for UPDATES) then the user is only prompted to send messages when updating/changing current entries with the DRUG ENTER/EDIT OPTION. If this parameter is set to B (for BOTH), then the user is prompted during both of these scenarios. If the parameter is set to X (or left NULL/blank), then the user is never prompted to send NEW or UPDATES to PADE when using the DRUG ENTER/EDIT option.

This parameter does *not* impact the functioning of the Send Drug File Entries to External Interface option [PSS MASTER FILE ALL], which can always be used to send the formulary update messages for one or all appropriate drugs to PADE.

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Figure 8: Send Drug File Messages Prompt—Sample User Entries and System Responses

3.4.2.2 Inactive Date

<u>Figure 9</u> is an example of the PADE inactivation date. This is the date on or after which the division will no longer communicate with the PADE system. If the year is omitted, the computer uses *current year*. Two-digit year assumes no more than **20** years in the future, or **80** years in the past.

Figure 9: Inactive Date—Examples of Valid Dates

```
INACTIVE DATE: ?
    Examples of Valid Dates:
        JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057
        T   (for TODAY), T+1 (for TOMORROW), T+2, T+7, etc.
        T-1 (for YESTERDAY), T-3W (for 3 WEEKS AGO), etc.
```



IMPORTANT: Until your site is ready to use PADE, it is *recommended* that you set the inactivation date to "T-1" to prevent generation of HL7 messages. Once your site is ready to use PADE, this inactivation date should be deleted.

3.4.2.3 Send Checkin/Surg HL7 for INPT

This is vendor-dependent and should only be set to **NO** when it is known that these messages could cause the inpatient to be removed from their Internet Protocol (IP) location on the vendor device.

Figure 10: Send Checkin/Surg HL7 for INPT Prompt—Sample User Entries and System Responses

```
SEND CHECKIN/SURG HL7 FOR INPT: YES// ?
Choose from:
Y YES
N NO
```

3.4.2.4 Days To Pull Ahead for BG Job

Check-in for a clinic generates HL7 messages to PADE in real time. For clinics that do *not* have check-in, there is a nightly background (BG) job that can be scheduled to run on a daily basis that will generate HL7 messages to PADE. If there is a need for you to send clinic appointments for future days as well then populating this field helps to pull those appointments in your nightly BG job. The system allows a maximum of 30 days, but keep this to a minimum as it may impact your network traffic.

3.4.2.5 Select Division

DIVISION is the MEDICAL CENTER DIVISION associated with the WARDS and CLINICS that are to be defined for this PADE system. You will only be able to define WARDS and Clinics that are associated with this DIVISION.

Users with the PSJ PADE ADV key can only edit existing divisions in the Multiple and *cannot* add new ones.

Figure 11: Select Division Prompt—Sample User Entries and System Responses

```
Select DIVISION: XXXXX// ??
Choose from:
   1
                 TROY
   2
                 XXXXX 500
                                539
   9
                CINCINNATI
   10
                                500PA
                ALB-PRRTP
   11
                XXXXX OPC
                               500A4
   12
                ISC 3 13000
Select DIVISION: XXXXX// <Enter>
  DIVISION: XXXXX// <a href="mailto:kinder-">Enter></a>
```

3.4.2.6 Send Clinic IV Package Orders

At the "SEND CLINIC IV PACKAGE ORDERS?: YES//" prompt, enter YES if all IV package orders associated with clinics of this division will send messages to PADE.

Figure 12: Send Clinic IV Package Orders Prompt—Sample User Entries and System Responses

3.4.2.7 Send Surgery Messages

At the "SEND SURGERY MESSAGES?: YES//" prompt, enter **YES** to send ADT messages for surgical cases scheduled in operating rooms defined within this division. This feature may *not* be needed if surgical cases for this division have associated clinic appointments into which patients are being checked into.

Figure 13: Send Surgery Messages Prompt—Sample User Entries and System Responses

3.4.2.8 Send Pharmacy Order Messages

At the "SEND ORDER MESSAGES?: YES//" prompt, enter **YES** to allow pharmacy order messages from the inpatient medication package (including clinic orders) to be sent for wards and clinics defined in the PADE parameters for this division.

Figure 14: Send Pharmacy Order Messages Prompt—Sample User Entries and System Responses

3.4.2.9 Re-send Order Messages At Check-In

If the RE-SEND ORDERS AT CHECK-IN parameter is set to YES at the CLINIC, PADE CLINIC GROUP, VISTA CLINIC GROUP, or PADE WILDCARD CLINIC NAME level (or if set to null and the parameter is set to YES at the DIVISION level, or if set to null at all other levels and set to YES at the SYSTEM level), a clinic appointment check-in that triggers a check-in message to be sent will also trigger messages for all active clinic orders associated with the same patient and send area.

If a clinic is defined at more than one level, the hierarchy for determining if order messages should be resent for the clinic at check-in is as follows:

- 1) CLINIC Re-sending a patient's active clinic orders at check-in for the send area associated with the clinic will honor the RE-SEND ORDER AT CHECK-IN parameter set at this level.
- 2) PADE CLINIC GROUP Re-sending a patient's active clinic orders at check-in for the send area associated with the PADE Clinic Group will honor the RE-SEND ORDER AT CHECK-IN parameter set at this level if the clinic is not also defined at the CLINIC level.
- 3) VISTA CLINIC GROUP Re-sending a patient's active clinic orders at check-in for the send area associated with the VISTA Clinic Group clinic will honor the RE-SEND ORDER AT

CHECK-IN parameter set at this level if a clinic is not also defined at either the CLINIC or PADE CLINIC GROUP levels.

4) PADE WILDCARD CLINIC NAME – Re-sending a patient's active clinic orders at check-in for the send area associated with the PADE Wildcard Clinic Name will honor the RE-SEND ORDER AT CHECK-IN parameter set at this level if a clinic is not also defined at any of the CLINIC, PADE CLINIC GROUP, or VISTA CLINIC GROUP levels.

Figure 47: Re-Send Orders at Check-In—Sample User Entries and System Responses

```
RE-SEND ORDERS AT CHECK-IN: YES// ?
     Enter "YES" if medication clinic orders should be resent when a patient
     checks into a clinic with the same SEND AREA as the send area for the
     orders.
     Choose from:
       1
                YES
       0
                NO
RE-SEND ORDERS AT CHECK-IN: YES// ??
   This parameter allows clinic orders to be resent when a patient checks
   into a clinic appointment (either directly or via PADE background job)
   sharing the same send area as the orders. This parameter follows the same
   hierarchy to determine if clinic orders will be resent, as is used for
   the routine sending of PADE order messages. That hierarchy is (1) Clinic
   (2) PADE Clinic Group (3) VistA Clinic Group (4) PADE Wildcard Clinic
   Name and the parameter is available at all of these levels. If set to
   YES at this SYSTEM level, any setting of the parameter at these lower
   levels (e.g Clinic, PADE Clinic group, VistA Clinic Group, PADE Wildcard
   Clinic Name), being left blank or set to YES, will send their associated
   Clinic orders messages on check-in. This parameter does not need to be
   set to YES or NO for lower level YES or NO values to be honored.
     Choose from:
       1
                YES
       \cap
                NO
RE-SEND ORDERS AT CHECK-IN: YES//
```

3.4.2.10 Send Controlled Substance Orders

When the "SEND CS ORDERS ONLY?:" prompt is set to YES, and the "SEND ORDER MESSAGES?" prompt is also set to YES; then only order messages for medications with a dispense drug having a DEA, SPECIAL HDLG (#3) field of the DRUG (#50) file containing 2, 3, 4, or 5 will transmit to PADE for the wards and clinics defined for this division. Use the SPECIAL HDLG (#3) field if you only use the PADE cabinets of this division to stock controlled substances.

Figure 11: Send Controlled Substance Orders Prompt—Sample User Entries and System Responses

3.4.2.11 Send all Clinic Medication Orders to PADE

At the "SEND MESSAGES FOR ALL CLINICS?: NO//" prompt, enter **YES** if *all* clinic medication order messages will be sent to PADE. This also includes SIU messages generated by clinic appointment activity/triggers.

When set to YES, *all* clinic messages (orders and SIU) will be sent to PADE for *all* clinics in that division using the *full* clinic name instead of a DEFAULT CLINIC ORDER SEND AREA. This can create a distinct location on the vendor side for each unique clinic name passed.



CAUTION: Take caution when choosing to send *all* clinic messages (orders and ADT) from a particular division due to the potentially large volume of messages sent. This is particularly true if you answer YES to this field and leave the DEFAULT CLINIC ORDER SEND AREA field NULL/Blank.

Be sure to work with the vendor to ensure their capabilities prior to setting this field to YES.

Figure 16: Send all Clinic Medication Orders to PADE Prompt—Sample User Entries and System Responses

```
SEND MESSAGES FOR ALL CLINICS?: NO// ??

Choose from:
    Y     YES
    N     NO

SEND MESSAGES FOR ALL CLINICS?: NO// <Enter>
```

3.4.2.12 Select VISTA Clinic Group

You can associate groups of clinics by their membership in the CLINIC GROUP file (#57.8).). It is important to understand that this feature should only be used for sites that do *not* allow one clinic to be in more than one CLINIC GROUP.

In the event that a clinic is defined in *two* clinic groups associated with this file, the message will be sent to the VISTA CLINIC GROUP SEND AREA associated with the first entered CLINIC in the CLINIC GROUP File (#57.8). If this is unacceptable, then that clinic should be defined individually.

Figure 12: Select VISTA Clinic Group Prompt—Sample User Entries and System Responses

```
Select VISTA CLINIC GROUP: MIKE'S CLINIC GROUP// <Enter>
    VISTA CLINIC GROUP: MIKE'S CLINIC GROUP// <Enter>
    VISTA CLINIC GROUP SEND AREA: MIKE'S CLINIC GROUP SA// ??
This is the PADE cabinet location that will be used for this clinic group
when sending messages.
   Choose from:
   AL-SARRTP
   EMERGENCY ROOM 1
   EMERGENCY ROOM 2
  MIKE'S CLINIC GROUP SA
   NICU FLOOR 7
   OP CLINIC
   SURGERY FLOOR 2
    VISTA CLINIC GROUP SEND AREA: MIKE'S CLINIC GROUP SA// <Enter>
    INCLUDE CLINICS IN BG JOB: YES// ??
    Choose from:
               YES
    INCLUDE CLINICS IN BG JOB: YES// <Enter>
Select VISTA CLINIC GROUP: <Enter>
```

At the "INCLUDE CLINICS IN BG JOB: YES//" prompt, enter **YES** if the nightly background (BG) job should run for all clinics in this group and generate appointment messages to PADE. Do *not* answer YES to this prompt if check-in is done in these clinics as check-in will generate appointment messages to PADE in real time.

3.4.2.13 Select PADE Clinic Group

The PADE CLINIC GROUP allows you to create a custom grouping of clinics for PADE messages that will all transmit to the same PADE CLINIC GROUP SEND AREA. The benefit of adding clinics to this group, rather than individually, would be that the OP PADE CLINIC GROUP SEND AREA only has to be defined *once* for the group vs. each time if the clinics were added individually.

It also makes the process easier for changing the PADE CLINIC GROUP SEND AREA for an entire group, vs. if they were defined individually.

Figure 18: Select PADE Clinic Group Prompt—Sample User Entries and System Responses

```
Select PADE CLINIC GROUP: TONY'S PADE CLINIC// <Enter>
PADE CLINIC GROUP: TONY'S PADE CLINIC// <Enter>
```

3.4.2.14 Select PADE Clinic

If you want to set up a clinic group just for PADE use only to send messages to a particular PADE location then you can do so here by defining all the clinics and putting them under one group.

If you intend to use the CLINIC GROUP already existing in VistA and there is no overlap of clinics within those clinic groups then you can do so by selecting the VISTA CLINIC GROUP multiple provided as part of the input template.

Figure 19: Select PADE Clinic Prompt—Sample User Entries and System Responses

```
Select PADE CLINIC: SHERYL'S CLINIC// ??
   Choose from:
   SHERYL'S CLINIC
   REGINA'S CLINIC
   Select PADE CLINIC: SHERYL'S CLINIC// <Enter>
PADE CLINIC GROUP SEND AREA: EMERGENCY ROOM 1
         // <mark>33</mark>
This is the PADE cabinet location that will be used to send messages
associated with clinics under this group.
   Choose from:
  AL-SARRTP
  EMERGENCY ROOM 1
  EMERGENCY ROOM 2
  MIKE'S CLINIC GROUP SA
  NICU FLOOR 7
  OP CLINIC
  SURGERY FLOOR 2
PADE CLINIC GROUP SEND AREA: EMERGENCY ROOM 1
         // <Enter>
INCLUDE CLINICS IN BG JOB: YES// ??
     Choose from:
               YES
    INCLUDE CLINICS IN BG JOB: YES// <Enter>
  Select PADE CLINIC GROUP: <Enter>
```

At the "INCLUDE CLINICS IN BG JOB: YES//" prompt, enter **YES** if the nightly background (BG) job should run for all clinics in this group and generate appointment messages to PADE. Do *not* answer YES to this prompt if check-in is done in these clinics as check-in will generate appointment messages to PADE in real time.

3.4.2.15 Select PADE Wildcard Clinic Name

The PADE WILDCARD CLINIC NAME allows you to define clinics for PADE that follow a specific naming convention. For example, if all of surgery clinics in a division begin with **AL-SURGERY** XXXX, then you could define all of them by creating a wildcard called "**AL-SURGERY**". When an order for a clinic is completed, or a SIU event for that clinic is triggered, the software checks the clinic name against this pattern/wildcard to determine if the message should be sent to PADE.

Figure 13: Select PADE Wildcard Clinic Name Prompt—Sample User Entries and System Responses (1 of 2)

```
Select PADE WILDCARD CLINIC NAME: ALB-ER// <Enter>
    PADE WILDCARD CLINIC NAME: ALB-ER// <Enter>
    PADE WILDCARD CLINIC SEND AREA: ??
This is the PADE cabinet location that will be used to send messages
associated with clinics with this naming convention.
   Choose from:
  ANWERS SEND AREA
  AL-SARRTP
  EMERGENCY ROOM 1
  EMERGENCY ROOM 2
  MIKE'S CLINIC GROUP SA
  NICU FLOOR 7
   OP CLINIC
   SURGERY FLOOR 2
    PADE WILDCARD CLINIC SEND AREA: EMERGENCY ROOM 2
INCLUDE CLINICS IN BG JOB: ??
    Choose from:
            YES
    INCLUDE CLINICS IN BG JOB: YES
  Select PADE WILDCARD CLINIC NAME: <Enter>
```

At the "INCLUDE CLINICS IN BG JOB:" prompt, enter **YES** if the nightly background (BG) job should run for these clinics and generate appointment messages to PADE. If you do check-in then do *not* answer YES to this prompt as check-in will also generate appointment messages to PADE.

3.4.2.16 Select CLINIC

The CLINIC field allows you to select clinics that are associated with PADE. When an order for a clinic is completed, or an ADT event for that clinic is triggered, messages will be sent to PADE.

Figure 14: Select CLINIC Prompt—Sample User Entries and System Responses

```
Select CLINIC: CT SCAN// ??
  Choose from:
  MIKE'S MEDICAL CLINIC
  SHERYL'S CLINIC
  REGINA'S CLINIC
  Select CLINIC: MIKE'S MEDICAL CLINIC// <Enter>
   CLINIC: MIKE'S MEDICAL CLINIC// <Enter>
    CLINIC SEND AREA: NICU FLOOR 7// ??
This is the PADE cabinet location that will be used for this clinic when
sending messages.
  Choose from:
  AL-SARRTP
  EMERGENCY ROOM 1
  EMERGENCY ROOM 2
  MIKE'S CLINIC GROUP SA
  NICU FLOOR 7
  OP CLINIC
  SURGERY FLOOR 2
   CLINIC SEND AREA: NICU FLOOR 7// <Enter>
   INCLUDE CLINIC IN BG JOB: YES// ??
    Choose from:
      Y YES
    INCLUDE CLINIC IN BG JOB: YES
Select CLINIC: <Enter>
```

At the "INCLUDE CLINIC IN BG JOB:" prompt, enter **YES** if the nightly background (BG) job should run for this clinic and generate appointment messages to PADE. Do *not* answer YES to this prompt if check-in is done in this clinic as check-in will generate appointment messages to PADE in real time.

3.4.2.17 Send INPT IV Package Orders

At the "SEND INPT IV PACKAGE ORDERS?: YES//" prompt, enter **YES** if all IV package orders associated with wards of this division will send messages to PADE.

Figure 22: Send INPT IV Package Orders Prompt—Sample User Entries and System Responses

3.4.2.18 Select Ward Group

You can use ward groups to associate all the wards within a "P" type ward group to this Division instead of defining them individually. If you also define a WARD individually, which is part of a ward group defined within this field, then the WARD GROUP SEND AREA in this multiple will be ignored for that ward and the send location of the individually defined ward will be used to send messages. This allows you to define behavior for an entire ward group but create exceptions for specific wards that are part of that group.

Figure 23: Select Ward Group Prompt—Sample User Entries and System Responses

```
Choose from:
   10C SARRTP-AL
  Select WARD GROUP: 10C SARRTP-AL// <Enter>
    WARD GROUP: 10C SARRTP-AL// <Enter>
    WARD GROUP SEND AREA: AL-SARRTP// ??
       All the messages associated to the wards under this ward group
        will be sent to the PADE location defined here.
   Choose from:
   ANWERS SEND AREA
   AL-SARRTP
   EMERGENCY ROOM 1
  EMERGENCY ROOM 2
  MIKE'S CLINIC GROUP SA
  NICU FLOOR 7
   OP CLINIC
   SURGERY FLOOR 2
   WARD GROUP SEND AREA: AL-SARRTP// <Enter>
WARD GROUP SEND AREA: ??
       All the messages associated to the wards under this ward group will
       be sent to the PADE location defined here.
   Choose from:
   ANWERS SEND AREA
   EMERGENCY ROOM 1
   EMERGENCY ROOM 2
Select WARD GROUP: <Enter>
```

3.4.2.19 Create a New PADE Bed Group

The PADE BED GROUP NAME is an arbitrary name of your choosing that will be used to group beds for which the messages for patients in those beds will be sent to a specific send location.

You should only define this for wards that have multiple PADE cabinets (i.e., two "wings"); where the bed designations can indicate which PADE cabinet will support the patients in that groups of beds. If both cabinets will support all patients on the ward, then the ward only need be defined and *not* specific groups of beds.

Figure 15: Create a New PADE Bed Group—Sample User Entries and System Responses (1 of 2)

```
Select PADE BED GROUP NAME: PDBG1// <Enter>
PADE BED GROUP NAME: PDBG1// <Enter>
Select PADE INDIVIDUAL BED: AS-9// ??

Choose from:
A-2
AS-1
AS-9

Select PADE INDIVIDUAL BED: AS-9// <Enter>
PADE BED GROUP SEND AREA: SURGERY FLOOR 2//
```

The PADE BEDS contains the room-beds belonging to this group. Grouping the beds is helpful if there are more than one PADE cabinets supporting a ward. Defining the related send area with the accurate group of beds will help send HL7 messages to the PADE BED GROUP SEND AREA.

Figure 25: Create a New PADE Bed Group—Sample User Entries and System Responses (2 of 2)

```
PADE BED GROUP SEND AREA: SURGERY FLOOR 2// ??

This is the PADE cabinet location that will be used for this bed group when sending messages.

Choose from:
ANWERS SEND AREA
AL-SARRTP
EMERGENCY ROOM 1
EMERGENCY ROOM 2
MIKE'S CLINIC GROUP SA
NICU FLOOR 7
OP CLINIC
SURGERY FLOOR 2

PADE BED GROUP SEND AREA: SURGERY FLOOR 2// <a href="mailto:surgery-select-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-pade-lect-p
```

3.4.2.20 Select Ward

The WARD prompt allows you to select wards that are associated with PADE. When an order for an inpatient is completed, or an ADT event for that Ward is triggered, messages will be sent to PADE.

Figure 26: Select Ward Prompt—Sample User Entries and System Responses

```
Select WARD: UNIT 1// ??

Choose from:
5 West Psych
MIKE'S IP WARD
UNIT 1

Select WARD: UNIT 1// Enter>
WARD SEND AREA: EMERGENCY ROOM 1// ??

This is the PADE cabinet location that will be used for this ward when sending messages.

Choose from:
ANWERS SEND AREA
EMERGENCY ROOM 1
EMERGENCY ROOM 2
```

3.4.2.21 Select Operating Room

You have the option to enter a new OPERATING ROOM. If you have set the "SEND SURGERY MESSAGES?" prompt to **YES** for this division, you *must* also define the operating rooms whose scheduled cases should generate surgery messages to PADE.

Figure 27: Select Operating Room Prompt—Sample User Entries and System Responses

```
Select OPERATING ROOM: GENERAL SURGERY// ??
   Choose from:
   GENERAL SURGERY
  Select OPERATING ROOM: GENERAL SURGERY// <Enter>
    OPERATING ROOM: GENERAL SURGERY// <Enter>
    OPERATING ROOM SEND AREA: SURGERY FLOOR 2// ??
Choose a send location for the surgery messages that will generate for
surgical cases scheduled for this operating room. If you leave this field
blank, the operating room name will be used as the location for the
message.
   Choose from:
   ANWERS SEND AREA
  AL-SARRTP
  EMERGENCY ROOM 1
   EMERGENCY ROOM 2
  MIKE'S CLINIC GROUP SA
  NICU FLOOR 7
  OP CLINIC
   SURGERY FLOOR 2
    OPERATING ROOM SEND AREA: SURGERY FLOOR 2// <enter>
  Select OPERATING ROOM: <Enter>
Select DIVISION: <Enter>
Select PADE SYSTEM SETUP:
```

3.5 PADE Send Surgery Cases

Use the PADE Send Surgery Cases [PSJ PADE SEND SURGERY CASES] option to send surgery cases manually to PADE for that date or future date.

Figure 28: PADE Send Surgery Cases Option—Sample User Entries and System Responses

```
SA
          PADE Send Area Setup
   SS
          PADE System Setup
   ΙN
          PADE Inventory Setup ...
   RΡ
          PADE Reports ...
   SC
          PADE Send Surgery Cases
          PADE Send Patient Orders
   SO
Select PADE Main Menu <TEST ACCOUNT> Option: SC <Enter> PADE Send Surgery
Cases
Enter date of Surgery cases to send to PADE: T// <Enter> (JUN 17, 2016)
Do you want to continue? NO// YES
Requested Start Time: NOW// <Enter> (JUN 17, 2016@10:19:57)
Task Queued !
```

3.6 PADE Send Patient Orders

Use the PADE Send Patient Orders [PSJ PADE SEND ORDERS] option to send patient UD/IV orders to PADE, especially when initializing PADE with initial load of all the orders, so that the patients can be established along with their orders.

Figure 29: PADE Send Patient Orders Option—Sample User Entries and System Responses

```
PADE Send Area Setup
   SS
          PADE System Setup
   ΙN
          PADE Inventory Setup ...
   RP
          PADE Reports ...
          PADE Send Surgery Cases
   SC
          PADE Send Patient Orders
Select PADE Main Menu <TEST ACCOUNT> Option: SO <Enter> PADE Send Patient
Orders
Select By: (PT/WD/CL/E): PT// ?
Enter 'PT' to send orders by Patient
      'WD' to send orders by Ward
      'CL' to send orders by Clinic
   or 'E' or '^' to exit
     Select one of the following:
          PT
                   PATIENT
          WD
                   WARD
          CL
                   CLINIC
                    EXTT
Select By: (PT/WD/CL/E): PT// <Enter> PATIENT
Select PATIENT: ANTPATNM, A, A < Enter > ANTPATNM, A 666-00-0099 04/10/08
3 NORTH GU
  1 Order(s) Queued for ANTPATNM, A (0099)
Select By: (PT/WD/CL/E): PT// WD <Enter> WARD
Select PADE: PYXIS
You are logged under PADE: PYXIS
Select DIVISION: TROY <Enter> 888
You are logged under Division: TROY
Select a Ward or ^ALL for all Wards: ?
Answer with WARD LOCATION NAME, or SERVICE, or *NSERV, or SYNONYM
Do you want the entire WARD LOCATION List? N (No)
Select a Ward or ^ALL for all Wards:
Select a Ward or ^ALL for all Wards: ^ALL
Sending ward 3 NORTH SURG
 No patients with active orders for this ward
```

```
Sending ward 3 NORTH GU
  1 Order(s) Queued for ANTPATNM, A (0099)
Sending ward ICU/CCU
 No patients with active orders for this ward
No patient in WARD REHAB
No patient in WARD DSS OBSERVATION
Select By: (PT/WD/CL/E): WD// CLINIC
You are logged under PADE: PYXIS
Select DIVISION: TROY <Enter>
                                888
Select a Clinic or ^ALL for all Clinics:
  CECELIA'S CLINIC
                          TROY
                                  PSJPROVIDER, ONE T
Orders Queued to be sent to PADE
Select a Clinic or ^ALL for all Clinics: MIKE
S MENTAL CLINIC
                         TROY PSJPROVIDERY, ONE T
Clinic is not setup for this PADE.
Select a Clinic or ^ALL for all Clinics: ^
Select By: (PT/WD/CL/E): CL//
```

3.7 Nightly Job

There are two options for nightly jobs:

1. PADE Appointment Task [PSJ PADE APPOINTMENT TASK]

Use this option to schedule a nightly job to generate HL7 messages of the appointments for that day to send to a PADE. If the DAYS TO PULL AHEAD FOR BG JOB field (#3.6) in the PADE SYSTEM SETUP (#58.7) file have a value, the appointments for those days will be included in the messages.

2. PADE Surgery Task [PSJ PADE SURGERY TASK]

Use this option to schedule a nightly job to generate HL7 messages of surgery cases for that day to be sent to PADE.

4 Phase 3: Inbound to VistA Setup

Phase 3 Roles:

The following roles are involved with Phase 3: Inbound to VistA Setup:

- Pharmacy Staff (ADPAC)
- Vendor Engineer or Implementation Support
- Clinical Product Support

Table 4: Phase 3: Inbound to VistA Tasks

Phase 3:	Inbound to VistA Task	POC
	1. HL7 Multi-Listener	
	2. (IN) PADE Inventory Setup (Inbound)	Pharmacy
	3. PADE Inventory Error Messages	
	Dispensed Without Orders (DWO) Messages	

4.1 HL7 Multi-Listener

PADE uses the VA Standard VistA HL7 multi-listener of port **5000** for production systems for all inbound HL7 messages from Health Connect. For *non*-production accounts/*non*-VA Sites, IP address/port numbers are needed by Health Connect for processing of inbound messaging to VistA.

Contact your System Administrator for details on your sites VistA HL7 multi-listener configuration and status.

4.2 PADE Inbound Setup Capture

PADE Inventory System requires configuration at the PADE system level, and at the PADE dispensing device (or cabinet) level. There are many system and cabinet parameters available that allow PADE inventory functionality to be adjusted to meet the needs of the facility; however, there are three setup items that *must* be completed to enable the core PADE Inventory functionality:

1. PADE Inbound System:

This step *must* be done first, and it *must* be done *before* any incoming PADE HL7 messages can be filed. In order to file incoming PADE pocket activity transactions in the PADE INBOUND TRANSACTIONS (#58.6) file, the PADE Inventory System *must* be defined in the PADE INVENTORY SYSTEM (#58.601) file via the PADE Inventory System Setup [PSJ PADE INVENTORY SYSTEM] option.

- a. The PADE Inventory System name *must* exactly match the value of the Dispensing System field (**ZPM-2**) received in the incoming HL7 message.
- b. PADE dispensing devices (cabinets) are automatically filed into the PADE DISPENSING DEVICE (#58.63) file as they are received via HL7 messaging. Therefore, the suggested approach to initially populating the PADE DISPENSING DEVICE (#58.63) file with the new PADE dispensing devices is to define the PADE INVENTORY SYSTEM (#58.601) file, then trigger an "inventory", or "count" message from each PADE dispensing device.

The above actions will automatically file all PADE dispensing devices in VistA. If the dispensing devices are added manually, an incorrect device name may be inadvertently entered.

c. As each transaction is filed into the PADE INBOUND TRANSACTIONS (#58.6) file, the total balance for each PADE dispensing device/cabinet is updated in the PADE INVENTORY SYSTEM (#58.601) file.

2. Dispensing Device Division:

In order to access the incoming PADE transaction and PADE inventory information via PADE reports, each PADE dispensing device (cabinet) *must* be associated with a division via the PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] option.

3. Dispensing Device Dispense Location:

In order for PADE drug balance information to display in the Inpatient Order Entry [option name?] option, each PADE dispensing device (cabinet) *must* be associated with one (or more) of the following:

- Ward Location
- Ward Group
- Clinic Location
- Clinic Group
- Wildcard Clinic Name

Figure 30: Example: Define a PADE Inventory System—Sample User Entries and System
Responses

```
Select OPTION NAME: PSJ PADE MAIN MENU <Enter> PADE Main Menu
         PADE Send Area Setup
  SS
        PADE System Setup
       PADE Inventory Setup ...
  RP
         PADE Reports ...
         PADE Send Surgery Cases
  SC
         PADE Send Patient Orders
  SO
Select PADE Main Menu <TEST ACCOUNT> Option: IN <Enter> PADE Inventory
Setup
  DEV PADE Dispensing Device Setup
        PADE Inventory System Setup
Select PADE Inventory Setup <TEST ACCOUNT> Option: SYS <Enter> PADE
Inventory System Setup
Select PADE INVENTORY SYSTEM: TESTSYS
 Are you adding 'TESTSYS' as a new PADE INVENTORY SYSTEM (the 6TH)? No//
Y <Enter> (Yes)
PADE INVENTORY SYSTEM: TESTSYS//
```

Figure 31: Example: Define a PADE Dispensing Device/Cabinet—Sample User Entries and System Responses

```
Select OPTION NAME: PSJ PADE MAIN MENU <Enter> PADE Main Menu
          PADE Send Area Setup
   SS
          PADE System Setup
          PADE Inventory Setup ...
          PADE Reports ...
   RΡ
   SC
          PADE Send Surgery Cases
          PADE Send Patient Orders
   SO
Select PADE Main Menu <TEST ACCOUNT> Option: IN <Enter> PADE Inventory
Setup
          PADE Dispensing Device Setup
   DEV
          PADE Inventory System Setup
Select PADE Inventory Setup <TEST ACCOUNT> Option: DEV <Enter> PADE
Dispensing Device Setup
Select PADE DISPENSING DEVICE: PV 1 <Enter>
                                              TESTSYS
                                                          ACTIVE
         ...OK? Yes// <Enter> (Yes)
DIVISION: // XXXXX <Enter>
                                 500A4
Select WARD GROUP: // TESTWG
Select WARD LOCATION: GENERAL SURGERY// <Enter>
Select CLINIC GROUP: // TESTCG
Select CLINIC LOCATION: // AMB CLINIC
Select WILDCARD CLINIC NAME: // DIABETES
```

4.3 PADE Inventory System

The PADE INVENTORY SYSTEM is the name of the Pharmacy Automated Dispensing Equipment (PADE) system that sends PADE activity to VistA. This *must* be the same as the Sending Application in the message header (**ZPM.2**) of the HL7 messages received from the PADE vendor interface.

4.3.1 DWO Message Entity

Dispensed Without Order (DWO) Entities link Pharmacy Automated Dispensing Equipment (PADE) to mail groups that will receive a message when a medication is dispensed from PADE with no VistA Pharmacy order. DWO entities, in order from highest to lowest priority, are:

- 1. PADE DEVICE (CABINET)
- 2. WARD/CLINIC
- 3. WARD GROUP/CLINIC GROUP
- 4. PADE SYSTEM/DIVISION

Messages are *only* sent for entities defined with the highest priority. For example, if a ward, clinic, and ward group are all linked to a PADE device, and all contain DWO mail groups, only mail group(s) associated with the ward and clinic receive a DWO message, since they both have the same priority (2), and it is higher than the ward group priority (3).



NOTE: For more details, see Section 4.6, "Dispensed Without Orders (DWO) Messages."

Figure 32: DWO Message Entity Help Text

```
Enter one of the following:
          DIV. EntryName to select a DIVISION for DWO messages.
          PS.EntryName to select a PADE SYSTEM for DWO messages.
          WG.EntryName to select a WARD GROUP for DWO messages.
          WD.EntryName to select a WARD for DWO messages.
          CL.EntryName to select a CLINIC for DWO messages.
          CG.EntryName to select a CLINIC GROUP for DWO messages.
          PC.EntryName to select a PADE DEVICE for DWO messages.
        To see the entries in any particular file type <Prefix.?>
        If you simply enter a name then the system will search each of
        the above files for the name you have entered. If a match is
        found the system will ask you if it is the entry that you desire.
        However, if you know the file the entry should be in, then you can
        speed processing by using the following syntax to select an entry:
              <Prefix>.<entry name>
                        or
              <Message>.<entry name>
                        or
              <File Name>.<entry name>
    Also, you do NOT need to enter the entire file name or message
    to direct the look up. Using the first few characters will suffice.
Select DWO MESSAGE ENTITY:
```

4.3.2 DWO Entity Mail Group

Dispensed Without Order (DWO) Entity Mail Groups receive a message when a medication is dispensed from PADE with no VistA Pharmacy order, for the DWO entity associated with the mail group. Messages are only sent for cabinets that also have the SEND DWO MESSAGES prompt in the PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] option set to **YES**.

4.3.3 Config Errors Mail Group

Config Errors Mail Groups receive PADE Configuration error messages when PADE configuration problems are encountered by the PADE HL7 inbound interface processor. Examples of PADE inbound configuration errors are when a PADE HL7 message is received for an undefined inbound PADE system, or when a PADE HL7 message is received for a PADE cabinet that is *not* associated with a VistA division.

4.3.4 Data Errors Mail Group

Data Errors Mail Groups receive PADE Data validation error messages when data validation problems are encountered by the PADE HL7 inbound interface processor. Examples of PADE inbound data validation errors are missing or invalid patient, drug, or other required data.

4.3.5 Alternate System Name

Alternate System Name is an alternate name or alias name used to identify the PADE Inventory System name during lookups.

4.3.6 Display PADE Balances in IOE?

The Display PADE Balances in IOE? field is used by the Inpatient Order Entry [PSJ OE] option to determine if PADE information should be displayed in the following lookups:

- Inpatient Profile
- Inpatient Order (detailed) View
- Dispense Drug

The field sets the PSJ PADE OE BALANCES Kernel parameter.

4.4 Set Up PADE Dispensing Device (Cabinet)

PADE dispensing devices (cabinets) *must* be configured prior to first use.

The PADE dispensing devices are set up using the PADE Dispensing Device Setup [PSJ PADE INVENTORY SYSTEM] option, which is available via the following menus:

Figure 33: PADE Dispensing Device Setup Option [PSJ PADE INVENTORY SYSTEM]—Menu Location

```
PADE Main Menu [PSJ PADE MAIN MENU]
PADE Inventory Setup [PSJ PADE INVENTORY MENU]
PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP]
```

The specific fields in the PADE Inbound System set up are listed in Table 5.

Table 5: PADE Inventory System Setup Fields

- 1) DISPENSING DEVICE
- 2) PADE STATUS
- 3) RESET/INITIALIZE PADE DEVICE?
- 4) DELETE SINGLE DRUG FROM PADE CABINET?
- 5) DIVISION
- 6) WARD GROUP
- 7) WARD LOCATION
- 8) CLINICGROUP
- 9) CLINICLOCATION
- 10) WILDCARD CLINICNAME
- 11) SEND 'PATIENT NOT ON FILE' MSG
- 12) SEND DWO MESSAGES
- 13) DWO ENTITY
- 14) DWO ENTITY MAIL GROUP

4.4.1 Dispensing Device

The DISPENSING DEVICE field contains the name of the PADE dispensing device/cabinet. The name *must* exactly match the name of the device on the PADE vendor system, as it appears in the HL7 messages received by the PADE inbound interface. The DISPENSING DEVICE name *must* only be

unique within the specific PADE Inbound system; while it is advisable to avoid duplicate device/cabinet names across different vendor systems to avoid confusion. The PADE inbound configuration allows the same dispensing device name to be used by different PADE inbound inventory systems.

4.4.2 PADE Status

The PADE STATUS field allows a PADE dispensing device's status to be set to **ACTIVE** or **INACTIVE**. Setting the status to **INACTIVE** does *not* affect the PADE's medication balances; however, an **INACTIVE** status prevents the PADE cabinet's medication balances from being displayed as available in the Inpatient Order Entry [option name?] option. Inactive PADE cabinets will continue to display in all PADE reports.

If a PADE cabinet is being removed from service, the list of medications stocked in a cabinet may be deleted using the RESET/INITIALIZE PADE DEVICE? field.

4.4.3 Reset/Initialize PADE Device?

The RESET/INITIALIZE PADE DEVICE? field removes all medications linked to this PADE cabinet in VistA, making the cabinet appear empty to VistA users. Resetting a PADE cabinet does *not* affect the PADE vendor, and does *not* trigger any HL7 messages to the PADE system. Resetting a PADE cabinet makes the device unavailable for selection when running the PADE INVENTORY REPORT, and also removes the device from the list PADE cabinets used to display PADE information in the Inpatient Order Entry [PSJ OE] option.

After a PADE cabinet is reset, medications will be automatically added back to the PADE cabinet as new HL7 messages are received from the vendor.

4.4.4 Delete Single Drug from PADE Cabinet?

The Delete Single Drug from PADE Cabinet removes one drug item from a specific pocket from the PADE dispensing device in VistA. This does *not* affect the PADE vendor, and does *not* trigger any HL7 messages to be sent to the PADE vendor system. Manually deleting a drug item reduces the quantity of the drug that displays as available in VistA when running the PADE INVENTORY REPORT, and also removes the drug from balances displayed in the Inpatient Order Entry [PSJ OE]option.

After a drug is deleted, the drug can be added back to the cabinet's inventory as new HL7 messages are received from the vendor.

4.4.5 Division

The DIVISION field contains the primary division associated with the PADE dispensing device/cabinet. The PADE cabinet supplies medications to hospital locations associated with this division, and division is required for inventory and reporting purposes. PADE activity received via HL7 messages will be filed into the PADE INBOUND TRANSACTIONS (#58.6) file if the PADE dispensing device/cabinet is *not* associated with a division; however, the transaction will *not* display in the Transaction Report, nor update the Inventory Report, until it is associated with a division.

4.4.6 Ward Group

The WARD GROUP field contains ward groups associated with the PADE dispensing device/cabinet. The PADE cabinet supplies medications to ward locations associated with this ward group. A PADE cabinet can be associated with any combination of ward groups, ward locations, clinic groups, and clinic locations, provided each location is associated with the PADE cabinet's division.

4.4.7 Ward Location

The WARD LOCATION field contains ward locations associated with the PADE dispensing device/cabinet. The PADE cabinet supplies medications to these ward locations. A PADE cabinet may be associated with any combination of ward groups, ward locations, clinic groups, and clinic locations, provided each location is associated with the PADE cabinet's division.

4.4.8 Clinic Group

The CLINIC GROUP field contains clinic groups associated with the PADE dispensing device/cabinet. The PADE cabinet supplies medications to clinic locations associated with this clinic group. A PADE cabinet can be associated with any combination of ward groups, ward locations, clinic groups, and clinic locations, provided each location is associated with the PADE cabinet's division.

4.4.9 Clinic Location

The CLINIC LOCATION field contains clinic locations associated with the PADE dispensing device/cabinet. The PADE cabinet supplies medications to these clinic locations. A PADE cabinet can be associated with any combination of ward groups, ward locations, clinic groups, and clinic locations, provided each location is associated with the PADE cabinet's division.

4.4.10 Wildcard Clinic Name

The WILDCARD CLINIC NAME contains a text string, representing a partial clinic location name, that allows a group of Clinics with a common naming convention, or "wildcard", to be linked to a PADE cabinet, automatically linking all matching clinic location names with the PADE cabinet. The PADE cabinet supplies medications to matching clinic location names.

For example, if all of a division's surgery clinics began with "AL-SURGERY", all the surgery clinics could be linked to a PADE cabinet by creating a wildcard called "AL-SURGERY".

4.4.11 Send 'PATIENT NOT ON FILE' Msg

The SEND 'PATIENT NOT ON FILE' MSG field contains a flag indicating whether or not an error message should be generated by the inbound PADE HL7 interface when a patient ID received from PADE does *not* exist in VistA.

4.4.12 Send DWO Messages?

The SEND DWO MESSAGES? field contains a flag indicating if Dispensed Without Order (DWO) MailMan messages should be sent when this PADE device is involved in a dispense transaction that is *not* linked to a pharmacy order.

This field *must* be set to **YES** in order for the PADE cabinet to generate a DWO message; however, a DWO Entity and a DWO Entity Mail Group *must* also be defined for the DWO message to be routed to members of a mail group.

4.4.13 DWO Entity Mail Group

The DWO ENTITY MAIL GROUP field contains mail groups that receive Dispensed Without Orders (DWO) MailMan messages when a PADE dispense transaction is received without a corresponding pharmacy order.

When setting up a PADE dispensing device/cabinet, the DWO Entity is always the PADE cabinet; multiple mail groups can be entered, and the DWO message will be sent to all members of all mail groups defined.

4.5 PADE Inventory Error Messages

The VistA PADE Inventory interface receives HL7 messages when there is activity at the dispensing device (cabinet). Examples of dispensing device activity that generates an HL7 messages are loading, unloading, and dispensing drug items. When a PADE HL7 message is received that contains missing or invalid data, an error message may be sent if the VistA PADE System has been configured to send error messages.

There are two types of PADE Inventory error messages, CONFIGURATION and DATA error messages.

- **CONFIGURATION error messages**—This type of error indicates there is a problem with the configuration of the PADE Inventory interface. The two specific errors that are classified as CONFIGURATION errors are:
 - Missing or Invalid Required HL7 Segment(s)
 - o Missing or Unknown PADE Inventory System
- **DATA error messages**—This type of error indicates there is a problem with the validation of the data received from the PADE vendor system. The following errors are classified as DATA errors:
 - o Missing or Invalid USER ID
 - Missing or Invalid Transaction Date/Time
 - Missing or Invalid Transaction Type
 - o Patient Not on File (optional-controlled by parameter)
 - o FileMan Error Transaction not Filed
 - o Drug Not on File
 - Outdated Transaction

Mail groups can be defined separately for Configuration and Data errors using the PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] option. Configuration error messages are sent to mail groups defined at the CONFIG ERRORS MAIL GROUPS parameter, and Data error messages are sent to mail groups defined at the DATA ERRORS MAIL GROUPS parameter. Multiple mail groups can be defined for each type of error. If an error occurs and *no* mail recipients are defined, the interface checks for holders of the PSJ PADE MGR security key, and forwards the error message to all holders of that key.

To set up mail groups to receive Configuration errors, enter one or mail groups at the "Select CONFIG ERRORS MAIL GROUPS:" prompt using the PADE Inventory System Setup [PSJ INVENTORY SYSTEM] option:

Figure 16: PADE Inventory Setup Option: Setting up Mail Groups for CONFIGURATION Errors— Sample User Entries and System Responses

```
Select OPTION NAME: PSJ PADE MAIN MENU <Enter> PADE Main Menu
          PADE Send Area Setup
   SA
   SS
        PADE System Setup
   IN
         PADE Inventory Setup ...
   RP
          PADE Reports ...
   SC
          PADE Send Surgery Cases
   SO
          PADE Send Patient Orders
Select PADE Main Menu <TEST ACCOUNT> Option: IN <Enter> PADE Inventory
Setup
   DEV
          PADE Dispensing Device Setup
   SYS
         PADE Inventory System Setup
Select PADE Inventory Setup <TEST ACCOUNT> Option: SYS <Enter> PADE
Inventory System Setup
Select PADE INVENTORY SYSTEM: TESTSYS
PADE INVENTORY SYSTEM: TESTSYS // ^CONFIG ERRORS MAIL GROUP
Select CONFIG ERRORS MAIL GROUPS: MAILGROUP1
  Are you adding 'MAILGROUP1' as
    a new CONFIG ERRORS MAIL GROUP (the 1ST for this PADE INVENTORY
SYSTEM)? No// Y <Enter> Yes)
Select CONFIG ERRORS MAIL GROUPS:
```

To set up mail groups to receive Data errors, enter one or mail groups at the "Select DATA ERRORS MAIL GROUPS:" prompt using the PADE Inventory System Setup [PSJ INVENTORY SYSTEM] option:

Figure 35: PADE Inventory Setup: Setting up Mail Groups for DATA Errors —Sample User Entries and System Responses

```
Select OPTION NAME: PSJ PADE MAIN MENU <Enter>
                                                    PADE Main Menu
   SA
          PADE Send Area Setup
   SS
          PADE System Setup
   IN
          PADE Inventory Setup ...
   RP
          PADE Reports ...
   SC
          PADE Send Surgery Cases
   SO
          PADE Send Patient Orders
Select PADE Main Menu <TEST ACCOUNT> Option: IN <Enter> PADE Inventory
Setup
          PADE Dispensing Device Setup
   DEV
          PADE Inventory System Setup
   SYS
Select PADE Inventory Setup <TEST ACCOUNT> Option: SYS <Enter> PADE
Inventory System Setup
Select PADE INVENTORY SYSTEM: TESTSYS
PADE INVENTORY SYSTEM: TESTSYS // ^DATA ERRORS MAIL GROUP
Select DATA ERRORS MAIL GROUPS: MAILGROUP2
  Are you adding 'MAILGROUP2' as
    a new DATA ERRORS MAIL GROUP (the 1ST for this PADE INVENTORY SYSTEM)?
No// Y <Enter> (Yes)
Select DATA ERRORS MAIL GROUPS:
```

Patient Not on File parameter

The PATIENT NOT ON FILE error message, indicating a patient ID is *not* recognized, will *not* be sent unless the PADE dispensing device involved in the incoming PADE activity has been configured in VistA to send PATIENT NOT ON FILE errors. The SEND 'PATIENT NOT ON FILE' MSG parameter controlling this error message can be set using the PADE DISPENSING DEVICE SETUP [PSJ PADE DEVICE SETUP] option. If *not* set, the parameter is interpreted as **NO**, and PATIENT NOT ON FILE error messages will *not* be sent.

To send PATIENT NOT ON FILE error messages, set the "SEND 'PATIENT NOT ON FILE' MSG" prompt to YES using the PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] option.

Figure 36: PADE Inventory Setup Option: Setting up SEND 'PATIENT NOT ON FILE' MSG
Parameter—Sample User Entries and System Responses

```
Select OPTION NAME: PSJ PADE MAIN MENU <Enter>
                                                   PADE Main Menu
         PADE Send Area Setup
  SA
  SS
        PADE System Setup
       PADE Inventory Setup ...
         PADE Reports ...
  RP
  SC
         PADE Send Surgery Cases
         PADE Send Patient Orders
Select PADE Main Menu <TEST ACCOUNT> Option: IN <Enter> PADE Inventory
Setup
          PADE Dispensing Device Setup
  DEV
         PADE Inventory System Setup
Select PADE Inventory Setup <TEST ACCOUNT> Option: DEV <Enter> PADE
Dispensing Device Setup
Select PADE DISPENSING DEVICE: TESTSTN <Enter>
                                                console
         ...OK? Yes// <Enter> (Yes)
PADE STATUS: "SEND 'PATIENT NOT ON FILE' MSG
SEND 'PATIENT NOT ON FILE' MSG: Y <Enter> YES
```

Figure 37: Example: Missing Required HL7 Segment Message

```
Subj: PADE Error-Msg:482146 [#181575] 06/16/16@14:04 6 lines
From: PADE In 'IN' basket. Page 1 *New*

An error was encountered while processing a message from PADE

Date: Jun 16, 2016 14:04:39
Patient: PIAPATIENT, ELEVEN^768
Error Msg: Missing RQD segment. |CABINET=RDO-01|SYSTEM=TESTSYSO
Header: MSH|~^\&|PSJ PADE SERVER|500~FO-XXXXX.MED.VA.GOV~DNS|PSJ
VISTA|~~D
NS|20160616140433-0400||OMS~O05~OMS_005|500444576|P|2.5|||AL|NE|USA
Enter message action (in IN basket): Ignore//
```



NOTE: For missing required HL7 segment, check with the PADE vendor and provide the information (e.g., date, patient, error msg, and header) as shown in the error message.

Figure 38: Example: Missing or Invalid Data Message

```
Subj: PADE Error-Msg:482152 [#181576] 06/16/16@14:34 5 lines
From: PADE In 'IN' basket. Page 1 *New*

An error was encountered while processing a message from PADE

Date: Apr 11, 2016 12:58:49

Error Msg: TRANS CODE -ZPM.1 is null or invalid|CABINET= RDO-
01|SYSTEM=TESTSYSO
Header: MSH|~^\&|PSJ PADE SERVER|500~FO-XXXXX.MED.VA.GOV~DNS|PSJ
VISTA|~~D
NS|20160616143429-0400||OMS~005~OMS_005|500444582|P|2.5|||AL|NE|USA

Enter message action (in IN basket): Ignore//
```



NOTE: For missing or invalid data, check with the PADE vendor and provide the information (e.g., date, error msg, and header) as shown in the error message.

Figure 39: Example: VA FileMan Error Attempting to File Incoming Transaction Message

```
Subj: PADE Error-Msg:482154 [#181577] 06/16/16@14:47 5 lines
From: PADE In 'IN' basket. Page 1 *New*

An error was encountered while processing a message from PADE

Date: Apr 11, 2015 12:58:49

Error Msg: PADE DEVICE NOT UPDATED Unable to file PADE Device RDO-
01|CABINET=
RDO-01|SYSTEM=TESTSYSO
Header: MSH|~^\&|PSJ PADE SERVER|500~FO-XXXXX.MED.VA.GOV~DNS|PSJ
VISTA|~~D
NS|20160616144653-0400||OMS~005~OMS_005|500444584|P|2.5|||AL|NE|USA

Enter message action (in IN basket): Ignore//
```



NOTE: For PADE DEVICE NOT UPDATED errors check with the PADE vendor (provide the date, error msg, and header as displayed in the error message) if the PADE device is valid. If the PADE device is valid, add the device to the PADE Inventory Setup option. The PADE device inventory will be updated when an HL7 message from PADE is processed.

Figure 40: Example: Drug Not on File Message

```
Subj: PADE Error-Msg:483244-DRUG NOT ON FILE [#181654] 06/23/16@15:54 5 lines
From: PADE In 'IN' basket. Page 1 *New*

An error was encountered while processing a message from PADE

Date: Jun 23, 2016 15:21:01
Error Msg: DRUG/DEVICE NOT UPDATED DRUG NOT ON FILE|DRG ID=8000|NAME=TEST DRUG
:CABINET=RDO-01:SYSTEM= TESTSYSO
    Header: MSH|~^\&|PSJ PADE SERVER|500~FO-XXXXX.MED.VA.GOV~DNS|PSJ VISTA|~~D
NS|20160623155453-0400||OMS~005~OMS_005|500445711|P|2.5|||AL|NE|USA
Enter message action (in IN basket): Ignore//
```



NOTE: For Drug not on File, the drug ID (e.g., **8000**) was *not* found in VistA. Check with the PADE Vendor (provide the date, error msg, and header) if this is a valid drug.

Figure 41: Example: Outdated Transaction

```
Date: Aug 02, 2016 20:12:13

Error Msg: - OUTDATED TRANSACTION - PADE.RDO-01.DRUG=RANITIDINE HCL 30

OMG TAB(1962).POCKET=34940.LAST UPDATED=3160802.212457.TRANS

DT=3160802.201213|

CABINET=RDO-01|SYSTEM=TESTSYSO

Header: MSH|~^\&|PSJ PADE SERVER|~500~FO-XXXXX.MED.VA.GOV~DNS|PSJ

VISTA|~~D

NS|20160802224522|SECURE|OMS~005~OMS_005|ZPM-068776606

2|P|2.5|||AL|NE

Enter message action (in IN basket): Ignore//
```



NOTE: An outdated transaction error message means that the HL7 message from PADE has a date and time stamp that was *prior* to the date and time stamp of the HL7 message that was last used to update the inventory. Hence, the HL7 message was *not* used to update the inventory.

4.6 Dispensed Without Orders (DWO) Messages

A medication dispensed from a PADE dispensing device/cabinet without a corresponding pharmacy order can generate a MailMan message to one or more mail groups. For Dispensed Without Order (DWO) messages to be sent, the SEND DWO MESSAGES field *must* be set to **YES** for each PADE dispensing device that should be triggering DWO messages. The SEND DWO MESSAGES flag can be set via the PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] option. Dispensed Without Order (DWO) mail groups can be defined for seven types of entities that are ranked in order in terms of priority.

The seven types of DWO entities are:

- 1. PADE Dispensing Device (Cabinet)
- 2. Ward Location

- 3. Clinic Location
- 4. Ward Group
- 5. Clinic Group
- 6. PADE System
- 7. Division

The seven types of DWO entities are grouped into four priority categories. The four priority groupings, in order from highest priority to lowest priority, are:

- 1. Priority 1 PADE Device (Cabinet)
- 2. Priority 2 Ward Location/Clinic Location
- 3. Priority 3 Ward Group/Clinic Group
- 4. Priority 4 PADE System/Division

When a PADE HL7 message is received indicating a medication was dispensed without an order, the PADE dispensing device is first checked for a **YES** in the SEND DWO MESSAGES field, and if **YES**, the dispensing device entry is checked for a DWO mail group or groups:

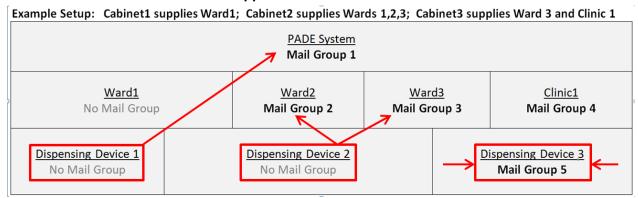
- If DWO mail groups are defined for the dispensing device entry, the DWO message is sent to those mail groups and no other entities are checked.
- If no DWO mail groups are found at the first (cabinet) priority, the next highest entity priority grouping is checked (ward location and/or clinic location).
- If no DWO mail groups are found at the second (ward location and/or clinic location) priority, entities at the next highest entity is checked (ward group and/or clinic group).
- If no DWO mail groups are found, entities at the fourth and lowest priority grouping (PADE System and Division) is checked for any DWO mail groups.

When a DWO mail group is found at a given priority, a DWO message is sent to all mail groups defined at that priority, and all lower ranked DWO entities are ignored. For example, if no DWO mail group is defined for the dispensing device, all ward locations and clinic locations linked to the dispensing device are checked for DWO mail groups, and if at least one DWO mail group is found, a DWO message is sent and no additional checking is done. If multiple mail groups are found, the DWO message is sent to every mail group defined at that priority.

In the diagram in Figure 42:

- A medication dispensed without an order from Dispensing Device 1 sends a DWO message to Mail Group 1, defined for the PADE system, as no mail group is defined for Device 2, or for Ward 1.
- A medication dispensed without an order from Dispensing Device 2 sends a DWO message to Mail Group 2 (defined for Ward 2) and Mail Group 3 (defined for Ward 3), since the Device has no DWO mail group, and the Ward Locations have a higher priority than the PADE System.
- A medication dispensed from dispensing device CAB3 sends a DWO message to mail group TST5, defined for the dispensing device, since the dispensing device has the highest priority and all lower priorities are ignored.

Figure 42: Example Setup: Cabinet1 Supplies Ward1; Cabinet2 Supplies Wards1, 2, 3; Cabinet3 Supplies Ward3 and Clininc1



<u>Figure 43</u> is an example of how to define a DWO Mail Group for Ward OBSERVATION with Exclusive Dispensing Device OBS-CAB, using the PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] option:

Figure 43: PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] Option: Define a DWO Mail Group (1 of 2)

```
Select OPTION NAME: PADE DISPENSING DEVICE SETUP <Enter> PSJ PADE DEVICE
SETUP
         PADE
Dispensing Device Setup
PADE Dispensing Device Setup
Select PADE DISPENSING DEVICE: OBS-CAB <Enter>
                                                 TESTSYS ACTIVE
         ...OK? Yes// <enter> (Yes)
PADE STATUS: ACTIVE// * SEND DWO MESSAGES
SEND DWO MESSAGES: Y < Enter> Y
DWO ENTITY: OBS-CAB
Select DWO ENTITY MAIL GROUP: LOC
        LOC GRP1
        LOC GRP2
CHOOSE 1-2: 1 <Enter> LOC GRP1
  Are you adding 'LOC GRP1' as a new DWO ENTITY MAIL GROUP (the 1ST for
this DWO MESSAGE ENTITY)? No// Y <Enter> (Yes)
  Select DWO ENTITY MAIL GROUP: <Enter>
Select DWO MESSAGE ENTITY:
```

is an example of how to define a DWO mail group for ward NHCU-1, where there is no exclusive dispensing device (i.e., dispensing device is shared with other wards, or ward is supplied by more than on dispensing device), using the PADE Inventory System Setup [PSJ PADE INVENTORY SYSTEM] option. This only generates DWO messages for dispensing devices with the SEND DWO MESSAGES? field set to **YES**.

Figure 44: PADE Dispensing Device Setup [PSJ PADE DEVICE SETUP] Option: Define a DWO Mail Group (2 of 2)

```
Select PADE Inventory Setup Option: PADE Inventory System Setup
Select PADE INVENTORY SYSTEM: TESTSYS
PADE INVENTORY SYSTEM: TESTSYS// <Enter>
Select DWO MESSAGE ENTITY: WD.NHCU
     Searching for a WARD for DWO messages., (pointed-to by DWO MESSAGE
ENTITY) (NH
             NHCU)
     Searching for a WARD for DWO messages.
  NHCU
          XXXXX
        ...OK? Yes// <Enter> (Yes)
 Are you adding 'NHCU' as a new DWO MESSAGE ENTITY (the 1ST for this PADE
INVENTORY SYSTEM)? No// Y <Enter> (Yes)
  Select DWO ENTITY MAIL GROUP: LOC
     1
       LOC GRP1
     2
       LOC GRP2
CHOOSE 1-2: 1 <Enter> LOC GRP1
  Are you adding 'LOC GRP1' as a new DWO ENTITY MAIL GROUP (the 1ST for
this DWO MESSAGE ENTITY)? No// Y <Enter> (Yes)
  Select DWO ENTITY MAIL GROUP: <Enter>
```

<u>Figure 45</u> is an example of a DWO message generated from Dispensing Device OBS-CAB, for drug FIDAXOMICIN 200MG dispensed for patient INPATIENT, ONE:

Figure 45: Example: DWO Message Generated from Dispensing Device

```
Subj: PADE Dispensed Without Order [#179605] 01/26/16020:19 11 lines
From: PADE In 'IN' basket. Page 1 *New*

A medication was dispensed from a PADE device without an order

PADE Device: JOB5

Date: Jan 26, 2016020:19:06

Drug: FIDAXOMICIN 200MG

Patient: INPATIENT, ONE

User: NURSE, ONE - ID: 11361

Enter message action (in IN basket): Ignore//
```

5 Phase 4: Implementation

Phase 4 Roles:

The following roles are involved with Phase 4: Implementation:

- Pharmacy Staff (ADPAC)
- Vendor Engineer or Implementation Support
- REDACTED
- VIE National Admins REDACTED

Phase 4 will be mostly driven by your vendor implementation team, but <u>Table 6</u> lists some items that the pharmacy staff needs to do:

Table 6: Phase 4: Implementation Tasks

Phase 4:	Implementation Task	POC
	Confirm Implementation steps and plan with vendor.	Inpatient Pharmacy ADPAC
	Notify facility (nursing, scheduling, etc.) when the cutover date will occur and any down time. NOTE: There is a down time associated with the initial setup and testing connectivity. The vendors have to wipe out their current patient	Inpatient Pharmacy ADPAC

Phase 4:	Implementation Task	POC
	list as seen at Xxxxx and Long Beach.	
	From VistA, you need to re-send all ward orders across to PADE so that the PADE vendor can rebuild their patients list. Depending on the number of patient and the orders they have, this process will take about 2–3 hours. During this down time (go-live period), the nurses are allowed to take medications from the cabinets using the override feature.	
	Inbound Step: Check the vendor's PADE drug formulary for drug IDs that are <i>not</i> directly mapped to VISTA DRUG (#50) file Internal Entry Numbers (IENs).	
	Verify that there are no purely numeric "non-Vista Drug File" drug IDs in the vendor's drug formulary.	
	If any purely numeric drug IDs are found in the vendor's PADE formulary that do <i>not</i> correspond to the same drug in the VISTA DRUG (#50) file, the vendor's drug ID <i>must</i> be changed to an alpha or alphanumeric ID, so that it is <i>not</i> inadvertently linked to the wrong drug in VistA's PADE inventory functionality.	
	Request Health Connect connection Information. IP and Port information for both PSJ PADE and Vendor Server as well as ACL edit for the VLAN where the Vendor server is located. NOTE: Getting these ACL edits applied by the LAN teams require a couple of weeks lead time.	VIE National Admin Team REDACTED
	Test connectivity once ACL Edits are applied.	VIE National Admin Team/Vendor/VLAN Manager
	Schedule a day/time for the interface to be brought up. This has typically taken 2+ hours. It seems to be best in the early morning hours.	Inpatient Pharmacy ADPAC /Health Connect/Vendor
	Notify the facility.	Inpatient Pharmacy ADPAC /Health Connect/Vendor
	Initialize data and patient information. This will happen right before go-live.	Vendor

Phase 4:	Implementation Task	POC
	Bring up the Interface. NOTE: The Inpatient Pharmacy ADPAC, Health Connect, vendor, and any local or regional IT support need to be present. This typically takes 2+ hours.	Inpatient Pharmacy ADPAC /Health Connect/Vendor
	In VistA, the pharmacist should process new orders and the vendor should confirm the receipt of the orders to ensure the interface is working.	Inpatient Pharmacy ADPAC/Vendor
	Set up the new field, DEFAULT 0 ON PADE PRE-EXCHANGE (#??) to YES in Inpatient Ward Parameters Edit (PSJ IWP EDIT) for wards that are cart less or 100% PADE. If this parameter is set to YES , field defaults to zero in the "Pre-Exchange DOSES:" prompt for orders that may be dispensed from PADE.	Inpatient Pharmacy ADPAC

6 Troubleshooting

6.1 Key Contacts

- Clinical Product Support—Submit a CA ticket for support
- VIE National Admins REDACTED
- Support sites/ Documentation

See the "<u>Introduction</u>" section for all supporting documents. All information and discussion can be found on VA Pulse at: <u>REDACTED</u>

Outbound HL7 messages will remain on file in the PADE OUTBOUND MESSAGES file (#58.72) for 90 days for troubleshooting purposes, after which they are purged by the the nightly unit dose cleanup process.

Common Issues and Resolution

Table 7: Common Issues and Resolution

Issue	Common Resolution	Support Contact
Certain edits/corrections to historical ADT (admission, discharge, transfer) transactions can cause the patients/orders to fall off the cabinet even though they are still admitted.	In this situation, the nurse will contact the pharmacy. The pharmacy can send the orders using the PSJ PADE Send Order option.	
Vendor Messaging Server is <i>not</i> receiving messages.	Submit a CA ticket. Check to see if logical link is working.	
What is the contingency plan if Health Connect goes down?	For all of the applications that are supported by Health Connect, if a site has an issue they think is potentially related to Health Connect, a CA ticket should be opened. In the case of Outpatient Automation Interface (OPAI) or PADE they should open a High Priority CA ticket by calling the VA Service Desk. Request that the help desk get a member of the VIE National Admin team on the phone 24/7. PADE will be supported in the same way as OPAI.	VIE National Admins REDACTED