Patient Data Exchange (PDX) Release Notes & Installation Guide

Department of Veterans Affairs
Office of Information and Technology (OI&T)

Software Version 1.5
Original Software Release: November 1993
Revised Documentation Release: February 2015
## Revision History

NOTE: The revision history cycle begins once changes or enhancements are requested after the document has been baselined.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/2015</td>
<td>Converted document to MS-Word 2007 format and incorporated some format changes from the ProPath User Guide Template.</td>
<td>Infrastructure Technical Writer, Oakland, OIFO</td>
</tr>
<tr>
<td>1/10/05</td>
<td>Reformatted document to follow ISS styles and guidelines, no other content updates made. Reviewed document and edited for the &quot;Data Scrubbing&quot; and the &quot;PDF 508 Compliance&quot; projects.</td>
<td>Infrastructure Technical Writer, Oakland, OIFO</td>
</tr>
<tr>
<td></td>
<td><strong>Data Scrubbing</strong>—Changed all patient/user TEST data to conform to HSD&amp;D standards and conventions as indicated below:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The first three digits (prefix) of any Social Security Numbers (SSN) start with &quot;000&quot; or &quot;666.&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Patient or user names are formatted as follows: NHEPATIENT,[N] or NHEUSER,[N] respectively, where the N is a number written out and incremented with each new entry (e.g., NHEPATIENT, ONE, NHEPATIENT, TWO, etc.).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Other personal demographic-related data (e.g., addresses, phones, IP addresses, etc.) were also changed to be generic.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>PDF 508 Compliance</strong>—The final PDF document was recreated and now supports the minimum requirements to be 508 compliant (i.e., accessibility tags, language selection, alternate text for all images/icons, fully functional Web links, successfully passed Adobe Acrobat Quick Check).</td>
<td></td>
</tr>
<tr>
<td>11/1993</td>
<td>Initial Patient Data Exchange V. 1.5 software documentation creation.</td>
<td>Albany, NY OIFO</td>
</tr>
</tbody>
</table>

Table i: Documentation revision history
Contents

Revision History ........................................................................................................................................... ii
Figures and Tables ....................................................................................................................................... iv
Orientation .................................................................................................................................................. v

1. Release Notes ........................................................................................................................................ 1-1
   User Release Notes .................................................................................................................................. 1-1
   Functionality Changes .............................................................................................................................. 1-1
   Technical Release Notes ......................................................................................................................... 1-4
   Files ......................................................................................................................................................... 1-4
   Routines .................................................................................................................................................. 1-5
   Templates ................................................................................................................................................ 1-6
   Options .................................................................................................................................................. 1-8
   Mail Groups ............................................................................................................................................ 1-9
   Bulletins ............................................................................................................................................... 1-9

2. Installation Guide ................................................................................................................................... 2-1
   Introduction ............................................................................................................................................ 2-1
   Software Integration ............................................................................................................................... 2-1
   Software Initialization/Conversion Time Estimates .................................................................................. 2-2
   Resource Requirements ......................................................................................................................... 2-3
   Pre-Installation .................................................................................................................................... 2-3
   Installation ............................................................................................................................................ 2-5
   Appendix A—Version 1.0 Routines ........................................................................................................... A-1
   Appendix B—Version 1.5 Routines ............................................................................................................ B-1
   Appendix C—PDX V. 1.5 Sample Installation .......................................................................................... C-1
   Appendix D—File Descriptions ............................................................................................................... D-1
   Appendix E—File Conversion .................................................................................................................. E-1
Figures and Tables

Table i: Documentation revision history
Table ii: Documentation symbol descriptions
Table 1-1: PDX options with security keys
Table 1-2: PDX file correlation from version 1.0 to version 1.5
Table 1-3: PDX V. 1.5 new files
Table 1-4: Routine naming conventions
Table 2-1: Estimated installation time per operating system
Table 2-2: Sample conversion data per site
Figure 2-1: Deleting VAQ namespaced routines
Figure 2-2: Modifying the GMTS IRM/ADPAC PARAMETER EDIT option
Figure 2-3: Changing the PDX Server action to RUN IMMEDIATELY
Figure 2-4: Scheduling the VAQ PDX PURGE option
Table 2-3: Obsolete/Deleted PDX options
Figure C-1: Sample PDX V. 1.5 installation at the Albany OIFO
Table E-1: Sample PDX calls from Programmer Mode
Orientation

How to Use this Manual

Throughout this manual, advice and instructions are offered regarding the installation and use of the Patient Data Exchange (PDX) software within Veterans Health Information Systems and Technology Architecture (VistA) Infrastructure and Security Services (ISS) software products.

This manual uses several methods to highlight different aspects of the material:

- Various symbols are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![i]</td>
<td>Used to inform the reader of general information including references to additional reading material</td>
</tr>
<tr>
<td>![⚠️]</td>
<td>Used to caution the reader to take special notice of critical information</td>
</tr>
</tbody>
</table>

Table ii: Documentation symbol descriptions

- Descriptive text is presented in a proportional font (as represented by this font).
- Conventions for displaying TEST data in this document are as follows:
  - The first three digits (prefix) of any Social Security Numbers (SSN) will be in the "000" or "666."
  - Patient and user names will be formatted as follows: [Application Name]PATIENT,[N] and [Application Name]USER,[N] respectively, where "Application Name" is defined in the Approved Application Abbreviations document and "N" represents the first name as a number spelled out and incremented with each new entry. For example, in Kernel (KRN) test patient and user names would be documented as follows: KRNPATIENT,ONE; KRNPATIENT,TWO; KRNPATIENT,THREE; etc.
  - Sample HL7 messages, "snapshots" of computer online displays (i.e., character-based screen captures/dialogues) and computer source code are shown in a non-proportional font and enclosed within a box. Also included are Graphical User Interface (GUI) Microsoft Windows images (i.e., dialogues or forms).
    - User's responses to online prompts will be boldface.
    - The "<Enter>" found within these snapshots indicate that the user should press the Enter key on their keyboard.
    - Author's comments are displayed in italics or as "callout" boxes.

Callout boxes refer to labels or descriptions usually enclosed within a box, which point to specific areas of a displayed image.

- All uppercase is reserved for the representation of M code, variable names, or the formal name of options, field/file names, and security keys (e.g., the XUPROGMODE key).
Other software code (e.g., Delphi/Pascal and Java) variable names and file/folder names can be written in lower or mixed case.

How to Obtain Technical Information Online

Exported file, routine, and global documentation can be generated through the use of Kernel, MailMan, and VA FileMan utilities.

Methods of obtaining specific technical information online will be indicated where applicable under the appropriate topic.

Help at Prompts

VistA software provides online help and commonly used system default prompts. In character-based mode, users are strongly encouraged to enter question marks at any response prompt. At the end of the help display, you are immediately returned to the point from which you started. This is an easy way to learn about any aspect of VistA software.

To retrieve online documentation in the form of Help in VistA character-based software:

- Enter a single question mark ("?") at a field/promt to obtain a brief description. If a field is a pointer, entering one question mark ("?") displays the HELP PROMPT field contents and a list of choices, if the list is short. If the list is long, the user will be asked if the entire list should be displayed. A YES response will invoke the display. The display can be given a starting point by prefacing the starting point with an up-arrow (^) as a response. For example, ^M would start an alphabetic listing at the letter M instead of the letter A while ^127 would start any listing at the 127th entry.
- Enter two question marks ("??") at a field/promt for a more detailed description. Also, if a field is a pointer, entering two question marks displays the HELP PROMPT field contents and the list of choices.
- Enter three question marks ("???") at a field/promt to invoke any additional Help text that may be stored in Help Frames.

Obtaining Data Dictionary Listings

Technical information about files and the fields in files is stored in data dictionaries. You can use the List File Attributes option on the Data Dictionary Utilities submenu in VA FileMan to print formatted data dictionaries.

For details about obtaining data dictionaries and about the formats available, please refer to the "List File Attributes" chapter in the "File Management" section of the VA FileMan Advanced User Manual.
**Assumptions About the Reader**

This manual is written with the assumption that the reader is familiar with the following:

- VistA computing environment (e.g., Kernel Installation and Distribution System [KIDS])
- VA FileMan data structures and terminology
- M programming language

It provides an overall explanation of the use of the Patient Data Exchange (PDX) software. However, no attempt is made to explain how the overall VistA programming system is integrated and maintained. Such methods and procedures are documented elsewhere. We suggest you look at the various VA home pages on the World Wide Web (WWW) for a general orientation to VistA. For example, go to the VHA OI Health Systems Design & Development (HSD&D) Home Page at the following Web address:

http://vaww.vista.med.va.gov/

**Reference Materials**

Readers who wish to learn more about Patient Data Exchange (PDX) documentation should consult the following:

- *Patient Data Exchange (PDX) Installation Guide & Release Notes* (this manual)
- *Patient Data Exchange (PDX) Technical Manual*
- *Patient Data Exchange (PDX) Security Guide*
- *Patient Data Exchange (PDX) User Manual*
- The Patient Data Exchange Home Page at the following Web address:

  http://vaww.vista.med.va.gov/pdx/index.asp

  This site contains additional information and documentation.

VistA documentation is made available online in Microsoft Word format and in Adobe Acrobat Portable Document Format (PDF). The PDF documents must be read using the Adobe Acrobat Reader (i.e., ACRORREAD.EXE), which is freely distributed by Adobe Systems Incorporated at the following Web address:

http://www.adobe.com/

VistA documentation can be downloaded from the Enterprise VistA Support (EVS) anonymous directories or from the Health Systems Design and Development (HSD&D) VistA Documentation Library (VDL) Web site:

http://www.va.gov/vdl/

For more information on the use of the Adobe Acrobat Reader, please refer to the "Adobe Acrobat Quick Guide" at the following Web address:

http://vista.med.va.gov/iss/acrobat/index.asp
1. Release Notes

User Release Notes

The VistA Patient Data Exchange (PDX) software is a set of modules designed to manage the transfer of patient information (demographics, episode of care, medication, and diagnostic evaluations) between VA Medical Centers using the MailMan electronic mail utility. Once transferred, this information may be combined with pertinent local information and assembled into a coherent composite record.

PDX V. 1.5 still uses the five main functions for sending, receiving, and displaying patient data. PDX V. 1.5 has been totally redesigned using the List Manager for the user interface. A new file design was implemented to ease the move to an HL7 messaging architecture.

Functionality Changes

A. The biggest change is in the user interface. PDX V. 1.5 uses the List Manager extensively. The List Manager is a tool designed to display a list of items to the user. It allows the user to browse back and forth through the items one at a time or by screen. It also allows the user to select items from the list to perform some kind of action. List Manager was initially released as part of MAS V. 5.2 for the scheduling application. It will be released in its own name space with the PIMS V. 5.3 release. This is the version PDX uses.

B. The other big change is the ability to send/request Health Summary components. Health Summary components are being added to provide clinical information from other facilities. This information will be "display only" and cannot be uploaded. The following Health Summary components have been provided.

<table>
<thead>
<tr>
<th>Adverse Reactions/Allergies</th>
<th>Clinical Warnings</th>
<th>Crisis Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietetics</td>
<td>Lab Blood Availability</td>
<td>Lab Blood Transfusions</td>
</tr>
<tr>
<td>Lab Chemistry &amp; Hematology</td>
<td>Lab Cumulative-Selected</td>
<td>Lab Cumulative-Selected 1</td>
</tr>
<tr>
<td>Lab Cumulative-Selected 2</td>
<td>Lab Cumulative-Selected 3</td>
<td>Lab Cumulative-Selected 4</td>
</tr>
<tr>
<td>Lab Cytopathology</td>
<td>Lab Microbiology</td>
<td>Lab Microbiology Brief</td>
</tr>
<tr>
<td>Lab Orders</td>
<td>Lab Orders Brief</td>
<td>Lab Surgical Pathology</td>
</tr>
<tr>
<td>Lab Tests Selected</td>
<td>MAS ADT History</td>
<td>MAS Admissions/Discharges</td>
</tr>
<tr>
<td>MAS Clinic Visits Future</td>
<td>MAS Clinic Visits Past</td>
<td>MAS Demographics</td>
</tr>
<tr>
<td>MAS Demographics Brief</td>
<td>MAS Disabilities</td>
<td>MAS Discharge Diagnosis</td>
</tr>
<tr>
<td>MAS Discharges</td>
<td>MAS Procedures ICD Codes</td>
<td>MAS Surgeries ICD</td>
</tr>
<tr>
<td>MAS Transfers</td>
<td>MAS Treating Specialty</td>
<td>Medicine Summary</td>
</tr>
<tr>
<td>Orders Current</td>
<td>Pharmacy Intravenous</td>
<td>Pharmacy Outpatient</td>
</tr>
<tr>
<td>Pharmacy Unit Dose</td>
<td>Progress Notes</td>
<td>Progress Notes Brief</td>
</tr>
<tr>
<td>Radiology Impression</td>
<td>Radiology Profile</td>
<td>Radiology Status</td>
</tr>
</tbody>
</table>
C. The interface for requesting/sending PDX information provides the ability to place time and occurrence limits on appropriate data segments. When defining the data segment to use, the user will be prompted for time and/or occurrence limits if the data segment is a Health Summary component which requires limits. A default value for each limit will be taken from the VAQ - PARAMETER file which the user may accept or change. Time and occurrence limits will be checked against the maximum values of information the facility is willing to release without user intervention.

D. Other components added as "display only":
   - Means Test
   - Copay

E. Other segment changes:
   - Pharmacy is now two separate components (long and short)
   - A PDX prefix was attached to all the V. 1.0 components

F. The ability to send/request a predefined group of segments. PDX V. 1.0 provided the ability to transfer patient demographics and pharmacy data within a single transmission. V. 1.5 will enable the user to request only those segments of data that are of interest to the user. With this capability, users and application programs can limit their request to only Pharmacy, PIMS, Copay, or certain Health Summary data.

G. The ability to send/request data for a patient from multiple sites and multiple segments. In PDX V. 1.0, you did not get the option to select the data you wanted. It was predetermined for you. In V. 1.5, you will be able to select any combination of the components.

H. To expedite user selection of data segments, it will be possible for users to predefine groups of commonly used data segments. These segment groups will work much like mail groups in that the user may enter a group name to select all segments contained in the group.

I. To expedite user selection of facilities, it will be possible to predefine groups of commonly used facilities. These facility groups will work much like mail groups.

J. The ability to request data on behalf of another user. This is a new feature for PDX V. 1.5. It allows multiple people to be notified via a mail message when data is returned. This could be done for people who do not have access to PDX.

K. The ability to include requested information in a mail message. This is a new feature of PDX V. 1.5. It allows the requested data to be included in the notification message. The prompt will allow the input of local mail groups.

L. The ability to authenticate users via electronic signature. This was added as a security measure to ensure the identity of the requester. All users will have to set up an electronic signature.
M. The ability to encrypt data using existing data encryption methods. This was added as an optional security measure. Sites wishing to encrypt certain fields for security reasons will have to turn the flag on and add those fields to the VAQ - ENCRYPTED FIELDS file (#394.73).

N. An application program interface (API) will be provided so that PDX functions can be directly called by other VistA applications.

O. Sensitive Patient—When data pertaining to a sensitive patient is transferred, the data will be treated as sensitive at the receiving facility.

P. A status screen was added to send/request PDX information. The status screen will indicate current information already on file or pending requests for the selected patient. If desired, the user may display information already on file.

Q. The comments on "process external" have been expanded from 80 characters to a word-processing field. This will allow the user to enter as much information as needed.

R. Load/Edit was enhanced by running all patients through the PIMS duplicate check.

S. Display PDX by user—This option will display all current transactions originated by the user.

T. System reports enhanced by providing more predefined and customizable sort. New reports were added showing transactions which require manual processing and transactions which are currently on file.

U. Security keys have been placed on the following options.

<table>
<thead>
<tr>
<th></th>
<th>Mnemonic</th>
<th>Option</th>
<th>Key</th>
<th>Sub Option key</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>LD</td>
<td>Load/Edit PDX Data</td>
<td>VAQ LOAD</td>
<td>none</td>
</tr>
<tr>
<td>2.</td>
<td>PRGE</td>
<td>Purging</td>
<td>VAQ PURGE</td>
<td>none</td>
</tr>
<tr>
<td>3.</td>
<td>RPT</td>
<td>System Reports</td>
<td>VAQ RPT</td>
<td>VAQ RPT USER</td>
</tr>
<tr>
<td>4.</td>
<td>EDT</td>
<td>PDX Edit Files</td>
<td>none</td>
<td>VAQ EDIT FILE</td>
</tr>
</tbody>
</table>

Table 1-1: PDX options with security keys
Technical Release Notes

The technical release notes outline changes made to Patient Data Exchange (PDX) files, routines, templates, options, mail groups, and bulletins.

Files

PDX V. 1.5 required a full redesign of the file structure. Because of this, the files used in V. 1.0 are being marked for deletion. The following table correlates V. 1.0 files to their V. 1.5 counterparts.

<table>
<thead>
<tr>
<th>File Name (V 1.0)</th>
<th>File #</th>
<th>File Name (V. 1.5)</th>
<th>File #</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDX TRANSACTION</td>
<td>394</td>
<td>VAQ - TRANSACTION</td>
<td>394.61</td>
</tr>
<tr>
<td>PDX DATA</td>
<td>394.1</td>
<td>VAQ - DATA</td>
<td>394.62</td>
</tr>
<tr>
<td>PDX PARAMETER</td>
<td>394.2*</td>
<td>VAQ - PARAMETER</td>
<td>394.81</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VAQ - RELEASE GROUP</td>
<td>394.82</td>
</tr>
<tr>
<td>PDX STATUS</td>
<td>394.3</td>
<td>VAQ - STATUS</td>
<td>394.85</td>
</tr>
<tr>
<td>PDX STATISTICS</td>
<td>394.4</td>
<td>VAQ - WORKLOAD</td>
<td>394.87</td>
</tr>
</tbody>
</table>

Table 1-2: PDX file correlation from version 1.0 to version 1.5

*Information contained in File #394.2 was broken into two files.

When PDX V. 1.5 is installed, information contained in V. 1.0 files will be transferred to the new files. After doing this, V. 1.0 files will be marked for deletion. Deletion of V. 1.0 files will be done during the installation of PDX V. 2.0.

New Files

<table>
<thead>
<tr>
<th>File Name</th>
<th>File #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAQ - DATA SEGMENT</td>
<td>394.71</td>
<td>Defines each segment currently supported by PDX</td>
</tr>
<tr>
<td>VAQ - ENCRYPTION METHOD</td>
<td>394.72</td>
<td>Defines each encryption method currently supported by PDX</td>
</tr>
<tr>
<td>VAQ - ENCRYPTED FIELDS</td>
<td>394.73</td>
<td>Contains all fields that should be encrypted in PDX requests and unsolicited PDXs transmitted by the facility. This file is only active when encryption has been turned on.</td>
</tr>
<tr>
<td>VAQ - OUTGOING GROUP</td>
<td>394.83</td>
<td>Contains groups of facilities commonly accessed by PDX</td>
</tr>
<tr>
<td>VAQ - SEGMENT GROUP</td>
<td>394.84</td>
<td>Contains groups of data segments commonly referenced by the facility</td>
</tr>
<tr>
<td>File Name</td>
<td>File #</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>VAQ - AUTO-NUMBERING</td>
<td>394.86</td>
<td>Used to implement auto-numbering in PDX. Fields with auto-numbering capability will have an entry in this file.</td>
</tr>
<tr>
<td>VAQ - WORK</td>
<td>394.88</td>
<td>Contains the type of work being tracked by the VAQ - WORKLOAD file</td>
</tr>
</tbody>
</table>

Table 1-3: PDX V. 1.5 new files

Routines

PDX V. 1.5 required a full redesign of all routines. Because of this, the routines used in V. 1.0 are being deleted during the install process. The following table provides the routine naming conventions followed for this version.

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Namespace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulletins</td>
<td>VAQBULxx</td>
</tr>
<tr>
<td>Cross-references</td>
<td>VAQXRFxx</td>
</tr>
<tr>
<td>Data Display</td>
<td>VAQDISxx</td>
</tr>
<tr>
<td>Database Interface</td>
<td>VAQDBIxx</td>
</tr>
<tr>
<td>Encryption/Decryption</td>
<td>VAQHSHxx</td>
</tr>
<tr>
<td>Exported Routines</td>
<td>VAQPSExx</td>
</tr>
<tr>
<td>Inits</td>
<td>VAQIxxxx</td>
</tr>
<tr>
<td>Load/Edit PDX Data</td>
<td>VAQLEDxx</td>
</tr>
<tr>
<td>Message Administration</td>
<td>VAQADMxx</td>
</tr>
<tr>
<td>Message Construction</td>
<td>VAQCONxx</td>
</tr>
<tr>
<td>Message Filing</td>
<td>VAQFILxx</td>
</tr>
<tr>
<td>Message Parsing</td>
<td>VAQPARxx</td>
</tr>
<tr>
<td>Onits</td>
<td>VAQOxxxx</td>
</tr>
<tr>
<td>PDX Data Lookup</td>
<td>VAQUPDxx</td>
</tr>
<tr>
<td>Post Inits</td>
<td>VAQPSTxx</td>
</tr>
<tr>
<td>Process External PDX Request</td>
<td>VAQEXTxx</td>
</tr>
<tr>
<td>Purging</td>
<td>VAQPURxx</td>
</tr>
<tr>
<td>Request Patient Information</td>
<td>VAQREQxx</td>
</tr>
<tr>
<td>Send Unsolicited PDX</td>
<td>VAQUNSxx</td>
</tr>
<tr>
<td>System Administration</td>
<td>VAQADSxx</td>
</tr>
</tbody>
</table>
Table 1-4: Routine naming conventions

The list of V. 1.0 routines being deleted and a complete list of V. 1.5 routines can be found in the "Installation Guide" section and Appendices in this manual.

Templates

A. Print Templates

VAQ PRINT STATS from PDX V. 1.0 is replaced by VAQ WORK-LOAD REPORT. This report is associated with VAQ - WORKLOAD file (#394.87).

The following new print templates have been added:

- VAQ CUR. TRANSACTIONS REPORT associated with VAQ - TRANSACTION file (#394.61)
- VAQ REQUIRES PROCESSING REPORT associated with VAQ - TRANSACTION file (#394.61)
- VAQ DATA SEGMENT LIST associated with VAQ - DATA SEGMENT file (#394.71)

B. Sort Templates

The following templates, all of which are associated with VAQ -WORKLOAD file (#394.87), replace VAQ SORT STATS from PDX V. 1.0.

- VAQ WORK-LOAD BY DATE
- VAQ WORK-LOAD BY FACILITY
- VAQ WORK-LOAD BY PATIENT
- VAQ WORK-LOAD BY WORK

The following new sort templates (all associated with VAQ - TRANSACTION file (#394.61)) have been added.

- VAQ REQUIRES PROCESSING
- VAQ TRANSACTIONS BY AUTHORIZER
- VAQ TRANSACTIONS BY DATE SENT
- VAQ TRANSACTIONS BY FACILITY

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>Namespace</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Authentication</td>
<td>VAQAUTxx</td>
</tr>
<tr>
<td>User Interface</td>
<td>VAQUINxx</td>
</tr>
<tr>
<td>Utility Routines</td>
<td>VAQUTLxx</td>
</tr>
</tbody>
</table>
C. Input Templates

The following new input templates have been added.

- VAQ EDIT FILE (#394.71) allow for modification to time and occurrence limits
- VAQ EDIT FILE (#394.73) allows encrypted fields to be added/edited/deleted
- VAQ EDIT FILE (#394.81) allows modification to the site’s VAQ PARAMETER
- file (#394.81)
- VAQ EDIT FILE (#394.82) allows release groups to be added/edited/deleted
- VAQ EDIT FILE (#394.83) allows outgoing groups to be added/edited/deleted
- VAQ EDIT FILE (#394.84) allows all segment groups to be added/edited/deleted
- VAQ EDIT FILE (PRIVATE) (#394.84) allows private segment groups to be added/edited/deleted
- VAQ EDIT FILE (PUBLIC) (#394.84) allows public segment groups to be added/edited/deleted
Options

All V. 1.0 options have been deleted except VAQ-PDX-SERVER and VAQ PDX PURGE.

For a list of deleted options, please refer to Table 2-3: Obsolete/Deleted PDX options in the "Installation Guide" section of this manual.

The new options are as follows.

- VAQ (EDIT) ENCRY FIELD
- VAQ (EDIT) MAX LIMITS
- VAQ (EDIT) OUTGOING GROUP
- VAQ (EDIT) PARAMETER
- VAQ (EDIT) RELEASE GROUP
- VAQ (EDIT) SEGMENT GRP - ALL
- VAQ (EDIT) SEGMENT GRP - PRIV
- VAQ (EDIT) SEGMENT GRP - PUBL
- VAQ (MENU) CUR TRANSACTIONS
- VAQ (MENU) DISPLAY PDX
- VAQ (MENU) EDIT FILES
- VAQ (MENU) MAIN
- VAQ (MENU) PURGING
- VAQ (MENU) SYSTEM REPORTS
- VAQ (MENU) WORK-LOAD
- VAQ PDX DISPLAY (TRN)
- VAQ PDX DISPLAY (USER)
- VAQ PDX LOAD/EDIT
- VAQ PDX PROCESS EXTERNAL
- VAQ PDX PURGE
- VAQ PDX REQUEST
- VAQ PDX UNSOLICITED
- VAQ PURGE BY ENTERED DATE
- VAQ PURGE BY ENTERED LIFE
- VAQ REQUIRES PROCESSING
- VAQ TRANSACTIONS BY AUTHORIZER
- VAQ TRANSACTIONS BY DATE SENT
- VAQ TRANSACTIONS BY FACILITY
- VAQ TRANSACTIONS BY PATIENT
- VAQ TRANSACTIONS BY RECEIPT
- VAQ TRANSACTIONS BY REQUESTOR
- VAQ TRANSACTIONS BY STATUS
- VAQ TRANSACTIONS USER DEFINED
- VAQ WORKLOAD BY DATE
- VAQ WORKLOAD BY FACILITY
- VAQ WORKLOAD BY PATIENT
- VAQ WORKLOAD BY WORK
- VAQ WORKLOAD USER DEFINED
- VAQ-PDX-SERVER

**Mail Groups**

The V. 1.0 mail group VAQ PDX USER has been deleted and replaced by the following.

- VAQ PDX ERRORS   all PDX errors
- VAQ MANUAL PROCESSING  those transactions that require manual processing
- VAQ UNSOLICITED RECEIVED  receipt of an unsolicited request

In PDX V. 1.5, specialized mail groups were set up to allow PDX support personnel to only subscribe to those groups which meet their needs and eliminate unwanted messages.

**Bulletins**

The following V. 1.0 bulletins have been deleted.

- VAQ PDX SERVER - PROCESS
- VAQ PDX SERVER - RETURNED
- VAQ PDX SERVER - UNSOLICITED

The V. 1.5 messages are not in the BULLETIN file (#3.6) and are produced by the PDX routines. These routines are contained in the subname space VAQBUL*.
2. Installation Guide

Introduction

PDX V. 1.5 uses the newest version of the List Manager which was released with V. 5.3 of PIMS. PIMS V. 5.3 was mandated for October 1, 1993.

Please instruct PDX users to set up an electronic signature code. This can be accomplished through the Edit Electronic Signature Code option of the User's Toolbox menu.

It is recommended you slave print the installation process. The data printed out during the post-init should be reviewed.

Software Integration

A. The following software versions (or higher) must be installed prior to loading this version of PDX.

- Kernel 7.0
- VA FileMan 19.0
- VA MailMan 7.0
- PIMS 5.3
- Pharmacy 5.6
- Integrating Billing 1.5
- Health Summary 1.2
- OE/RR 1.96
- Allergy Tracking 2.2

B. Integration between PDX V. 1.0 and PDX V. 1.5.

PDX V. 1.0 is not forward compatible with PDX V. 1.5 unless patch VAQ*1*11 has been applied by V. 1.0 sites.

The message structure for PDX transmissions has been changed with this version. V. 1.5 sites are able to accept messages in V. 1.0 format. If the V. 1.5 site must respond to the message (e.g., return requested data), it sends the response in the appropriate V. 1.0 format.

However, there is a problem when a V. 1.5 site originates communication with a site using V. 1.0 (e.g., sends a PDX Request or an Unsolicited PDX). The V. 1.0 site cannot interpret the format and the message is lost. This patch will make it possible for V. 1.0 sites to receive these PDX messages.
After the patch is installed, the V. 1.0 site will automatically request a retransmission for each PDX Request or Unsolicited PDX from the V. 1.5 site. This is accomplished without user intervention. The retransmission will be sent in the proper format.

The extractions for PDX V. 1.0 and PDX V. 1.5 are different and some fields may be in different formats.

C. The following IB routines are distributed with this version of PDX to allow copay to be an extractable component:
   - IBAPDX
   - IBAPDX0
   - IBAPDX1.

D. GMTSPDX is distributed with this version of PDX to allow for the extraction of the Health Summary components. This routine uses the spooler. If a spooler is not set up at your site, the site will not be able to transmit Health Summary Data. This is significant to note, as it effects the major enhancement to PDX V. 1.5.

Software Initialization/Conversion Time Estimates

The following information was derived from the alpha and beta sites. The information presented are averages. Actual times may vary depending on system utilization. The total install process not including the conversion takes on average one hour or less.

<table>
<thead>
<tr>
<th>Step</th>
<th>MSM</th>
<th>VAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAQINIT</td>
<td>2 min</td>
<td>3 min</td>
</tr>
<tr>
<td>CONVERSION</td>
<td>4 min per transaction (avg)*</td>
<td>5 min per transaction (avg)*</td>
</tr>
</tbody>
</table>

Table 2-1: Estimated installation time per operating system

*These numbers were calculated during peek usage. Conversion time for non-peek was about 1 minute per transaction.

<table>
<thead>
<tr>
<th>Site</th>
<th>Conversion Time</th>
<th>Transactions Converted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston MA</td>
<td>37 hrs</td>
<td>2673 (VAX)</td>
</tr>
<tr>
<td>Bedford MA</td>
<td>4 hrs</td>
<td>180 (VAX)</td>
</tr>
</tbody>
</table>

Table 2-2: Sample conversion data per site

Users can be brought back on the system before the conversion has finished. Converted transactions will become available for use as they complete the conversion process. Transactions in the process of conversion will not be available for use.
Resource Requirements

Sites will see growth in the following three PDX files.

- VAQ - TRANSACTION file (394.61) 200 bytes per entry*
- VAQ - DATA file (394.62) 50 bytes per entry*
- VAQ - WORKLOAD file (394.87) 110 bytes per entry*

*Since variable fields are in these records, average record size was determined by sampling test sites.

It was determined that a single transaction on average will generate 185 data records. This was determined by taking the total number of entries in the VAQ - DATA file and dividing by the total number of entries in the VAQ - TRANSACTION file.

Disk storage requirements are estimated at approximately 10K per transaction. This was determined by taking the 185 data records at 50 bytes each plus a single transaction record at 200 bytes plus a variable number of workload records at 110 bytes each and dividing the total by 1024 bytes.

Global Growth can be controlled by the purge features of PDX.

Pre-Installation

1. Insure that the patches which affect the PDX purge routine, VAQPRG, have been installed. These are VAQ*1*8 and VAQ*1*15.

2. Request PDX staff to process all V. 1.0 requests. This will cut down on conversion time.

3. Run V. 1.0 purger.

   This can be accomplished by rescheduling the start time of the background job (VAQ PDX PURGE) to current date and time plus two minutes.

   Go into the Task Manager and select Schedule/Unschedule Options. At the "Select OPTION to schedule or reschedule" prompt, enter VAQ PDX PURGE. Enter the current date/time at the "Queued to run at what time:" prompt.

4. Determine how PDX V. 1.0 has been distributed (PDX main menu or custom menus) by running Option Access By User. This report is under the Menu Management menu.

5. (optional) Back up System(s).
6. Remove VAQ namespaced routines from the routine map. V. 1.0 had recommended mapping of the following routines:
   - VAQDSP3
   - VAQDSP6
   - VAQUTL
   - VAQUTL1
   - VAQUTL2

7. A spooling device must be installed in order to transmit Health Summary data. Typically VAX sites will already have one installed, while 486 sites will not. 486 sites should refer to the 486 Cookbook for assistance in setting up the spooler. The Health Summary Developers recommend allocating 2 Mb of disk space for the spooler.

8. Determine Spool device name.

9. The POSTMASTER must be given access to the spool device used by your facility. This can be accomplished by using the Edit an Existing User option [XUSEREDIT] and entering YES to the ALLOWED TO USE SPOOLER field.
Installation

1. Request PDX users to be off the system.

2. Sign into UCI where the software will be initially installed (use 40K partition for MSM).

3. Disable Journaling.

4. Delete VAQ namespaced routines.

<table>
<thead>
<tr>
<th>D ^RDELETE  (VAX) or D ^RDEL  (MSM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine(s) ? &gt; VAQ*</td>
</tr>
<tr>
<td>Routine(s) ? &gt; -VAQWK</td>
</tr>
<tr>
<td>(do not delete this routine – used by PIMS)</td>
</tr>
</tbody>
</table>

   Figure 2-1: Deleting VAQ namespaced routines

   For deleted routines, please refer to Appendix A—Version 1.0 Routines.

5. Load PDX V. 1.5 tape/disk using routine restore.

   Sites using MSM will find the name of the file containing the routines on the disk label.

   | D ^RR |
   For a distributed routine list, please refer to Appendix B—Version 1.5 Routines.

6. Verify integrity values.

   | D ^VAQNTEG |

7. Setup system variables.

   | D ^XUP |

   Verify DUZ, DT, DTIME, and U are defined and DUZ(0)="@". The DUZ variable must be defined as an active user number and DUZ(0) variable must equal "@" in order to initialize.

8. D ^VAQINIT

   (Follow Appendix C for VAQINIT responses.)
Please answer all initialization questions carefully.

It is strongly recommended you take the bolded responses from the guide.

A file conversion will be queued at the end of the initialization process. This utility has been included for your convenience. If you do not want to run the conversion, you must enter an up-arrow (^) when prompted for the conversion's device. Please refer to Appendix E if you have chosen to skip the conversion or the file conversion does not run to completion.

9. Update Health Summary Site Parameter option.

The GMTS IRM/ADPAC PARAMETER EDIT option must be modified to prompt for the SPOOL DEVICE NAME. This is done by adding ":.04" to the end of the existing DR {DIE} field. A sample of this is shown below.

```
D ^XUP
Setting up programmer environment
Terminal Type set to: C-VT100
Select OPTION NAME: EVE

Select Systems Manager Menu Option: MENU MANAGEMENT
Select Menu Management Option: EDIT OPTIONS
Select OPTION to edit: GMTS IRM/ADPAC PARAMETER EDIT
NAME: GMTS IRM/ADPAC PARAMETER EDIT Replace ^DR {DIE}
DR (DIE): .02;.03// .02;.03;.04
NO UP-ARROW: ^ (user to enter up-arrow)

Select OPTION NAME: GMTS IRM/ADPAC MAINT MENU
Select Health Summary IRM Maintenance Menu Option: 7 <Enter> Edit Health Summary Site Parameters
Select HEALTH SUMMARY PARAMETERS: HOSPITAL
PROMPT FOR ACTION PROFILE:// <Enter> (take the value in field)
INCLUDE COMMENTS FOR LABS:// <Enter> (take the value in field)
SPOOL DEVICE NAME: < enter device name >
```

Figure 2-2: Modifying the GMTS IRM/ADPAC PARAMETER EDIT option

10. Using the Mail Group Edit option [XMEDITMG], add members to the newly created mail groups. The mail groups are as follows:

- **VAQ PDX ERRORS**—It is recommended that the System Manager be added to this group in order to monitor incoming messages which cannot be served (errors). These messages are saved in S.VAQ-PDX-SERVER mail basket.

- **VAQ MANUAL PROCESSING**

- **VAQ UNSOLICITED RECEIVED**
11. The PDX server (VAQ-PDX-SERVER) needs to be edited in order to associate a mail group with the server. The mail group to add is VAQ PDX ERRORS. The installer will also have to change the server action from QUEUE SERVER ROUTINE to RUN IMMEDIATELY.

```
>D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT100
Select OPTION NAME: EVE <Enter>       Systems Manager Menu

Select Systems Manager Menu Option: Menu Management
Select Menu Management Option: Edit options

Select OPTION to edit: VAQ-PDX-SERVER <Enter>  PDX Server
NAME: VAQ-PDX-SERVER//   ^SERVER ACTION
SERVER ACTION: QUEUE SERVER ROUTINE//  RUN IMMEDIATELY
SERVER MAIL GROUP: VAQ PDX ERRORS//  ^
```

**Figure 2-3: Changing the PDX Server action to RUN IMMEDIATELY**

12. Enter Task Manager and select Schedule/Unschedule Options. At the "Select OPTION to schedule or reschedule" prompt, enter VAQ PDX PURGE and enter the values for the following fields. Fields not listed need to be reviewed for site specific values.

```
QUEUED TO RUN AT WHAT TIME: T+15@2400
RESCHEDULING FREQUENCY: 15D
```

**Figure 2-4: Scheduling the VAQ PDX PURGE option**

13. Verify that the global attributes of ^VAT are as follows.
   
   - SYSTEM = RWD
   - WORLD = RWD
   - GROUP = RWD
   - UCI = RWD

14. For all other systems move PDX routines, and translate ^VAT (if necessary).
15. Delete obsolete options:

<table>
<thead>
<tr>
<th>#</th>
<th>Option Name</th>
<th>Option Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VAQ PDX</td>
<td>PDX Menu</td>
</tr>
<tr>
<td>2</td>
<td>VAQ PDX DISPLAY</td>
<td>Display PDX Data</td>
</tr>
<tr>
<td>3</td>
<td>VAQ PDX DISPLAY MAS</td>
<td>Extended - View A Specific PDX</td>
</tr>
<tr>
<td>4</td>
<td>VAQ PDX DISPLAY MAS/PHA</td>
<td>Extended - View A Specific PDX</td>
</tr>
<tr>
<td>5</td>
<td>VAQ PDX DISPLAY PHA</td>
<td>Extended - View A Specific PDX</td>
</tr>
<tr>
<td>6</td>
<td>VAQ PDX LOAD</td>
<td>Load/Edit Patient File with PDX Information</td>
</tr>
<tr>
<td>7</td>
<td>VAQ PDX PRINT MAS</td>
<td>Brief - View Most Recent PDX From A Site</td>
</tr>
<tr>
<td>8</td>
<td>VAQ PDX PRINT MAS/PHA</td>
<td>Brief - View Most Recent PDX From A Site</td>
</tr>
<tr>
<td>9</td>
<td>VAQ PDX PRINT PHA</td>
<td>Brief - View Most Recent PDX From A Site</td>
</tr>
<tr>
<td>10</td>
<td>VAQ PDX PROCESS</td>
<td>Process External PDX Request</td>
</tr>
<tr>
<td>11</td>
<td>VAQ PDX SHOW MAS</td>
<td>MAS - Display PDX's MAS Information</td>
</tr>
<tr>
<td>12</td>
<td>VAQ PDX SHOW MAS/PHA</td>
<td>Both - Display PDX's MAS &amp; Pharmacy Information</td>
</tr>
<tr>
<td>13</td>
<td>VAQ PDX SHOW PHA</td>
<td>Pharmacy - Display PDX's Pharmacy Information</td>
</tr>
<tr>
<td>14</td>
<td>VAQ PDX STAT DAY</td>
<td>Today - Print Entries Made Today</td>
</tr>
<tr>
<td>15</td>
<td>VAQ PDX STAT GEN</td>
<td>General - Print Entries Made During A Given Range</td>
</tr>
<tr>
<td>16</td>
<td>VAQ PDX STATS</td>
<td>Statistics File Toolbox</td>
</tr>
</tbody>
</table>

Table 2-3: Obsolete/Deleted PDX options

16. Delete obsolete templates:
   - Input Templates - None
   - Sort Templates - VAQ SORT STATS
   - Print Templates - VAQ PRINT STATS

17. Delete obsolete mail group:
   - VAQ PDX USERS

18. Delete obsolete bulletins:
   - VAQ PDX SERVER-PROCESS
   - VAQ PDX SERVER-RETURNED
   - VAQ PDX SERVER-UNSOLICITED
19. Delete the initialization routines VAQIN*, VAQON*, and VAQPSL*.

    Do not delete VAQINITY.

20. At the end of the process, a mail message is sent to the development OIFO indicating that the install is complete.

Appendix A—Version 1.0 Routines

VAQADD  VAQADD1  VAQADD2  VAQADD3  VAQADD4  VAQADD5  VAQADD7  VAQDBUG
VAQDBUG1  VAQDBUG2  VAQDSP1  VAQDSP10  VAQDSP11  VAQDSP12  VAQDSP13  VAQDSP14
VAQDSP15  VAQDSP2  VAQDSP3  VAQDSP3A  VAQDSP4  VAQDSP5  VAQDSP6  VAQDSP7
VAQDSP8  VAQDSP9  VAQIN001  VAQIN002  VAQIN003  VAQIN004  VAQIN005  VAQIN006
VAQIN007  VAQIN008  VAQIN009  VAQIN010  VAQIN011  VAQIN012  VAQIN013  VAQIN014
VAQIN015  VAQINIT  VAQINIT0  VAQINIT1  VAQINIT2  VAQINIT3  VAQMAS  VAQMAS1
VAQMAS1A  VAQMAS2  VAQMAS2A  VAQMAS3  VAQMAS4  VAQMAS5  VAQMAS6  VAQMAS6A
VAQNTEG  VAQPHA1  VAQPRG  VAQPRT  VAQPRT1  VAQRQP  VAQRQP1  VAQRQR
VAQRQR1  VAQRQU  VAQST1  VAQST2  VAQST3  VAQUTL  VAQUTL1  VAQUTL2

72 routines
Appendix B—Version 1.5 Routines

VAQADM2 VAQADM21 VAQADM22 VAQADM23 VAQADM5 VAQADM50 VAQADM51 VAQADS01
VAQAUT VAQBUL VAQBUL01 VAQBUL02 VAQBUL03 VAQBUL04 VAQBUL05 VAQBUL06
VAQBUL07 VAQCON VAQCON0 VAQCON1 VAQCON2 VAQCON3 VAQCON4 VAQCON5
VAQCON6 VAQCON7 VAQCON8 VAQCON93 VAQCON94 VAQCON95 VAQCON96 VAQCON97
VAQCON98 VAQCON99 VAQDBI VAQDBIH1 VAQDBIH2 VAQDBIH3 VAQDBIH4 VAQDBIM
VAQDBIM0 VAQDBIM1 VAQDBIM2 VAQDBIM3 VAQDBIM4 VAQDBIM5 VAQDBIM6
VAQDBIP VAQDBIP3 VAQDBIP4 VAQDBIP5 VAQDBIP6 VAQDBIP7 VAQDBIP8 VAQDBIP9
VAQDIS1 VAQDIS12 VAQDIS15 VAQDIS16 VAQDIS17 VAQDIS20 VAQDIS21 VAQDIS22
VAQDIS23 VAQDIS24 VAQDIS25 VAQDIS26 VAQDIS27 VAQDIS28 VAQDIS29 VAQDIS30
VAQDIS31 VAQDIS32 VAQDIS33 VAQDIS34 VAQDIS35 VAQDIS42 VAQDIS43 VAQEXT01
VAQEXT02 VAQEXT03 VAQEXT04 VAQEXT05 VAQEXT06 VAQFIL10 VAQFIL11 VAQFIL12
VAQFIL13 VAQFIL14 VAQFIL15 VAQFIL16 VAQFIL17 VAQFIL18 VAQFILE VAQFILE1
VAQHSH VAQHSH1 VAQIN001 VAQIN002 VAQIN003 VAQIN004 VAQIN005 VAQIN006
VAQIN007 VAQIN008 VAQIN009 VAQIN010 VAQIN011 VAQIN012 VAQIN013 VAQIN014
VAQIN015 VAQIN016 VAQIN017 VAQIN018 VAQIN019 VAQIN020 VAQIN021 VAQIN022
VAQIN023 VAQIN024 VAQIN025 VAQIN026 VAQIN027 VAQIN028 VAQIN029 VAQIN030
VAQIN031 VAQIN032 VAQIN033 VAQIN034 VAQIN035 VAQIN036 VAQIN037 VAQIN038
VAQIN039 VAQIN040 VAQIN041 VAQIN042 VAQIN043 VAQIN044 VAQIN045 VAQIN046
VAQIN047 VAQIN048 VAQIN049 VAQIN050 VAQIN051 VAQIN052 VAQIN053 VAQIN054
VAQIN055 VAQIN056 VAQIN057 VAQIN058 VAQIN059 VAQIN060 VAQIN061 VAQIN062
VAQIN063 VAQIN064 VAQIN065 VAQIN066 VAQIN067 VAQIN068 VAQIN069 VAQIN070
VAQINIT VAQINIT1 VAQINIT2 VAQINIT3 VAQINIT4 VAQINIT5 VAQINIT6 VAQLED01
VAQLED02 VAQLED03 VAQLED04 VAQLED05 VAQLED07 VAQLED09 VAQLED10 VAQNETEG
VAQNETEG VAQON001 VAQON002 VAQON003 VAQON004 VAQON005 VAQONIT VAQONIT1
VAQONIT2 VAQONIT3 VAQPAR1 VAQPAR10 VAQPAR11 VAQPAR6 VAQPAR60 VAQPAR61
VAQPSE01 VAQPSE02 VAQPSE03 VAQPSE04 VAQPSE05 VAQPSE10 VAQPSE11 VAQPSE12
VAQPST01 VAQPST02 VAQPST03 VAQPST04 VAQPST05 VAQPST10 VAQPST20 VAQPST21
VAQPST22 VAQPST23 VAQPST24 VAQPST25 VAQPST30 VAQPST31 VAQPST40 VAQPUR
VAQPUR10 VAQREQ01 VAQREQ02 VAQREQ03 VAQREQ04 VAQREQ05 VAQREQ06
VAQREQ07 VAQREQ08 VAQREQ09 VAQREQ10 VAQREQ11 VAQIN01 VAQUPD1 VAQUPD2
VAQUPD25 VAQUTL1 VAQUTL2 VAQUTL3 VAQUTL4 VAQUTL92 VAQUTL93 VAQUTL94
VAQUTL95 VAQUTL96 VAQUTL97 VAQUTL98 VAQUTL99 VAQXRF1 VAQXRF2 VAQXRF3

256 routines
Appendix C—PDX V. 1.5 Sample Installation

> D ^VAQINIT

This version (#1.5) of 'VAQINIT' was created on 12-NOV-1993
(at PDX DEVELOPMENT (PRIMARY), by VA FileMan V.20.0)

I AM GOING TO SET UP THE FOLLOWING FILES:

142.99  HEALTH SUMMARY PARAMETERS (Partial Definition)
Note: You already have the 'HEALTH SUMMARY PARAMETERS' File.

394  *PDX TRANSACTION
*BUT YOU ALREADY HAVE 'PDX TRANSACTION' AS FILE #394!
Shall I change the NAME of the file to *PDX TRANSACTION? NO// YES

394  *PDX TRANSACTION
Note: You already have the '*PDX TRANSACTION' File.

394.1  *PDX DATA
*BUT YOU ALREADY HAVE 'PDX DATA' AS FILE #394.1!
Shall I change the NAME of the file to *PDX DATA? NO// YES

394.1  *PDX DATA
Note: You already have the '*PDX DATA' File.

394.2  *PDX PARAMETER
*BUT YOU ALREADY HAVE 'PDX PARAMETER' AS FILE #394.2!
Shall I change the NAME of the file to *PDX PARAMETER? NO// YES

394.2  *PDX PARAMETER
Note: You already have the '*PDX PARAMETER' File.

394.3  *PDX STATUS (including data)
*BUT YOU ALREADY HAVE 'PDX STATUS' AS FILE #394.3!
Shall I change the NAME of the file to *PDX STATUS? NO// YES

394.3  *PDX STATUS (including data)
Note: You already have the '*PDX STATUS' File.
I will OVERWRITE your data with mine.

394.4  *PDX STATISTICS
*BUT YOU ALREADY HAVE 'PDX STATISTICS' AS FILE #394.4!
Shall I change the NAME of the file to *PDX STATISTICS? NO// YES

394.61  VAQ - TRANSACTION

394.62  VAQ - DATA

394.71  VAQ - DATA SEGMENT (including data)
I will OVERWRITE your data with mine.

394.72  VAQ - ENCRYPTION METHOD (including data)
I will OVERWRITE your data with mine.

394.73  VAQ - ENCRYPTED FIELDS (including data)
I will MERGE your data with mine.

394.81  VAQ - PARAMETER

394.82  VAQ - RELEASE GROUP
394.83 VAQ - OUTGOING GROUP
394.84 VAQ - SEGMENT GROUP
394.85 VAQ - STATUS (including data)
I will OVERWRITE your data with mine.
394.86 VAQ - AUTO-NUMBERING
394.87 VAQ - WORKLOAD
394.88 VAQ - WORK (including data)
I will OVERWRITE your data with mine.

SHALL I WRITE OVER FILE SECURITY CODES? NO// <YES>
NOTE: This package also contains SORT TEMPLATES
SHALL I WRITE OVER EXISTING SORT TEMPLATES OF THE SAME NAME? YES// <Enter>
NOTE: This package also contains INPUT TEMPLATES
SHALL I WRITE OVER EXISTING INPUT TEMPLATES OF THE SAME NAME? YES// <Enter>
NOTE: This package also contains PRINT TEMPLATES
SHALL I WRITE OVER EXISTING PRINT TEMPLATES OF THE SAME NAME? YES// <Enter>
NOTE: This package also contains FUNCTIONS
SHALL I WRITE OVER EXISTING FUNCTIONS OF THE SAME NAME? YES// <Enter>
NOTE: This package also contains SECURITY KEYS
SHALL I WRITE OVER EXISTING SECURITY KEYS OF THE SAME NAME? YES// <Enter>
NOTE: This package also contains OPTIONS
SHALL I WRITE OVER EXISTING OPTIONS OF THE SAME NAME? YES// <Enter>

ARE YOU SURE EVERYTHING'S OK? NO// YES

...SORRY, LET ME THINK ABOUT THAT A MOMENT............................
'VAQ (EDIT) ENCRY FIELDS' Option Filed
'VAQ (EDIT) MAX LIMITS' Option Filed
'VAQ (EDIT) OUTGOING GROUP' Option Filed
'VAQ (EDIT) PARAMETER' Option Filed
'VAQ (EDIT) RELEASE GROUP' Option Filed
'VAQ (EDIT) SEGMENT GRP - ALL' Option Filed
'VAQ (EDIT) SEGMENT GRP - PRIV' Option Filed
'VAQ (EDIT) SEGMENT GRP - PUBL' OptionFiled
'VAQ (MENU) CUR TRANSACTIONS' Option Filed
'VAQ (MENU) DISPLAY PDX' Option Filed
'VAQ (MENU) EDIT FILES' Option Filed
'VAQ (MENU) MAIN' Option Filed
'VAQ (MENU) PURGING' Option Filed
'VAQ (MENU) SYSTEM REPORTS' Option Filed
'VAQ (MENU) WORK-LOAD' Option Filed
'VAQ PDX DISPLAY (TRN)' Option Filed
'VAQ PDX DISPLAY (USER)' Option Filed
'VAQ PDX LOAD/EDIT' Option Filed
'VAQ PDX PROCESS EXTERNAL' Option Filed
'VAQ PDX PURGE' Option Filed
'VAQ PDX REQUEST' Option Filed
'VAQ PDX UNSOLICITED' Option Filed
'VAQ PURGE BY ENTERED DATE' Option Filed
'VAQ PURGE BY ENTERED LIFE' Option Filed
'VAQ REQUIRES PROCESSING' Option Filed
'VAQ TRANSACTIONS BY AUTHORIZER' Option Filed
'VAQ TRANSACTIONS BY DATE SENT' Option Filed
'VAQ TRANSACTIONS BY FACILITY' Option Filed
'VAQ TRANSACTIONS BY PATIENT' Option Filed
'VAQ TRANSACTIONS BY RECEIPT' Option Filed
'VAQ TRANSACTIONS BY REQUESTOR' Option Filed
'VAQ TRANSACTIONS BY STATUS' Option Filed
'VAQ TRANSACTIONS USER DEFINED' Option Filed
'VAQ WORKLOAD BY DATE' Option Filed
'VAQ WORKLOAD BY FACILITY' Option Filed
'VAQ WORKLOAD BY PATIENT' Option Filed
'VAQ WORKLOAD BY WORK' Option Filed
'VAQ WORKLOAD USER DEFINED' Option Filed
'VAQ-PDX-SERVER' Option Filed

NOTE THAT FILE SECURITY-CODE PROTECTION HAS BEEN MADE

Begin of Post Init Process

Installing protocols for use by the list processor

This version of 'VAQONIT' was created on 21-JUL-1993
(at PDX DEVELOPMENT (PRIMARY), by OE/RR V.2.5)

PROTOCOL INSTALLATION

...OK, this may take a while, hold on PLEASE.........................
'VAQ ADD PATIENT' Protocol Filed
'VAQ ADD/EDIT REQUEST' Protocol Filed
'VAQ CHANGE PATIENT' Protocol Filed
'VAQ COPY REQUEST' Protocol Filed
'VAQ CREATE REQUEST' Protocol Filed
'VAQ DIS ALL SEGMENT' Protocol Filed
'VAQ DIS SELECTED SEGMENT' Protocol Filed
'VAQ DIS1 (MENU)' Protocol Filed
'VAQ DISPLAY BY REQUESTOR' Protocol Filed
'VAQ DISPLAY PDX' Protocol Filed
'VAQ DISPLAY SELECT' Protocol Filed
'VAQ DUPLICATE' Protocol Filed
'VAQ LOAD DATA' Protocol Filed
'VAQ LOAD EDIT' Protocol Filed
'VAQ LOAD FIELD' Protocol Filed
'VAQ NEW PATIENT' Protocol Filed
  VAQ DUPLICATE added as item to VAQ NEW PATIENT.
'VAQ PDX1 (MENU)' Protocol Filed
  VAQ DISPLAY PDX added as item to VAQ PDX1 (MENU).
  VAQ CREATE REQUEST added as item to VAQ PDX1 (MENU).
'VAQ PDX10 (MENU)' Protocol Filed
  VAQ DISPLAY BY REQUESTOR added as item to VAQ PDX10 (MENU).
'VAQ PDX11 (MENU)' Protocol filed
  VAQ DIS SELECTED SEGMENT added as item to VAQ PDX11 (MENU).
  VAQ DIS ALL SEGMENT added as item to VAQ PDX11 (MENU).
'VAQ PDX12 (MENU)' Protocol filed
  VAQ NEW PATIENT added as item to VAQ PDX2 (MENU).
'VAQ PDX2 (MENU)' Protocol Filed
  VAQ CHANGE PATIENT added as item to VAQ PDX2 (MENU).
  VAQ ADD/EDIT REQUEST added as item to VAQ PDX2 (MENU).
  VAQ TRANSMIT REQUEST added as item to VAQ PDX2 (MENU).
  VAQ COPY REQUEST added as item to VAQ PDX2 (MENU).
'VAQ PDX3 (MENU)' Protocol Filed
  VAQ PROCESS MANUAL added as item to VAQ PDX3 (MENU).
'VAQ PDX4 (MENU)' Protocol Filed
  VAQ PROCESS RELEASE added as item to VAQ PDX4 (MENU).
  VAQ PROCESS REJECT added as item to VAQ PDX4 (MENU).
'VAQ PDX5 (MENU)' Protocol Filed
  VAQ LOAD EDIT added as item to VAQ PDX5 (MENU).
'VAQ PDX6 (MENU)' Protocol Filed
  VAQ LOAD DATA added as item to VAQ PDX6 (MENU).
  VAQ LOAD FIELD added as item to VAQ PDX6 (MENU).
Protocol Installation is Complete.

Protocol install completed

Installing list templates for use by list processor

*VAQ DIS MIN NUPD* List Template...Filed.
*VAQ DIS MIN UPD* List Template...Filed.
*VAQ DIS PATIENT PDX9* List Template...Filed.
*VAQ DIS REQUESTOR PDX10* List Template...Filed.
*VAQ DISPLAY DATA PDX12* List Template...Filed.
*VAQ DISPLAY MINIMUM* List Template...Filed.
*VAQ DISPLAY SEGMENT PDX11* List Template...Filed.
*VAQ DUPLICATE PDX8* List Template...Filed.
*VAQ LED DIFFERENCES PDX6* List Template...Filed.
*VAQ LED STATUS PDX5* List Template...Filed.
*VAQ MATCHES PDX8* List Template...Filed.
*VAQ PROCESS PDX3* List Template...Filed.
*VAQ PROCESS PDX4* List Template...Filed.
*VAQ REQUEST PDX2* List Template...Filed.
*VAQ STATUS PDX1* List Template...Filed.

** List Template install completed

>>> Exported routines will now be loaded

Copying of VAQPSE01 into GMTSPDX            Done
Copying of VAQPSE02 into IBAPDX                Done
Copying of VAQPSE03 into IBAPDX0              Done
Copying of VAQPSE04 into IBAPDX1            Done

Done
Initialization of VAQ Parameter file  (See Appendix D #1)

Enter missing field(s)

Default Time Limit:
Default Occurrence Limit:

** Missing fields added, initialization complete

Updating pointers to Health Summary components and initializing maximum time and occurrence limits (when appropriate)........

Updating completed

Initialization of VAQ - Auto-numbering file
** Initialization of VAQ - Auto-numbering file complete

Initialization of VAQ - Encrypted Fields File... (add/edit/delete)

Select VAQ - ENCRYPTED FIELDS Encrypt Field:  
(See Appendix D #2)

** Initialization of VAQ - Encrypted Fields File complete

Initialization of VAQ - Release Group File...

Updating VAQ - Release Group file from version 1.0

Update from version 1 completed

Add/Edit/Delete entries in VAQ - Release Group

Select VAQ - RELEASE GROUP Remote Facility:  
(See Appendix D #3)

** Initialization of VAQ - Release Group File complete

Initialization of VAQ - Outgoing Group File... (add/edit/delete)

Select VAQ - OUTGOING GROUP Group Name:  
(See Appendix D #4)

** Initialization of VAQ - Outgoing Group File complete

Initialization of VAQ - Segment Group File...

Creating a segment group called "ALL"
This group will contain all data segments
  Adverse Reactions/Allergies - added
  Clinical Warnings - added
  Crisis Notes - added
  Dietetics - added
  Integrated Billing - added
  Lab Blood Availability - added
  Lab Blood Transfusions - added
  Lab Chemistry & Hematology - added
  Lab Cumulative-Selected - added
  Lab Cumulative-Selected 1 - added
  Lab Cumulative-Selected 2 - added
  Lab Cumulative-Selected 3 - added
  Lab Cumulative-Selected 4 - added
  Lab Cytopathology - added
  Lab Microbiology - added
  Lab Microbiology Brief - added
  Lab Orders - added
  Lab Orders Brief - added
  Lab Surgical Pathology - added
  Lab Tests Selected - added
  MAS ADT History - added
  MAS Admissions/Discharges - added
  MAS Clinic Visits Future - added
  MAS Clinic Visits Past - added
  MAS Demographics - added
  MAS Demographics Brief - added
  MAS Disabilities - added
  MAS Discharge Diagnosis - added
  MAS Discharges - added
  MAS Minimum Patient Information - added
  MAS Procedures ICD Codes - added
MAS Registration Information - added
MAS Surgeries ICD Codes - added
MAS Transfers - added
MAS Treating Specialty - added
Means Test Information - added
Medication Profile - Long Form - added
Medication Profile - Short For - added
Medicine Summary - added
Orders Current - added
Pharmacy Intravenous - added
Pharmacy Outpatient - added
Pharmacy Unit Dose - added
Progress Notes - added
Progress Notes Brief - added
Radiology Impression - added
Radiology Profile - added
Radiology Status - added
Surgery Reports - added
Surgery Reports Brief - added
Vital Signs - added
Vital Signs Selected - added

Done

Create entries in Segment Groups for Health Summary Type File? NO// <Enter>

Add/Edit/Delete entries in VAQ - Segment Group File

Select VAQ - SEGMENT GROUP Group Name:  (See Appendix D #5)

** Initialization of VAQ - Segment Group File complete
Creating Mail Groups for PDX
'VAQ PDX ERRORS' mail group created
'VAQ MANUAL PROCESSING' mail group created
'VAQ UNSOLICITED RECEIVED' mail group created
Mail Groups created

- Conversion of version 1.0 files will now be tasked -

Entering 'HOME' as the device for output will cause conversion to be run without an output device. It is recommended that a device be chosen so that errors during the conversion can be reported.

Entering '^
' as the device for output will skip the conversion process. Please refer to the INSTALLATION GUIDE if you choose to do this.

Enter device to use during conversion: HOME// {conditional response}

{If you have chosen to convert V. 1.0 data, respond as follows:}

Enter device to use during conversion: HOME// <DEVICE> {user should enter a device on the system}

Requested Start Time: NOW// <Enter>

Conversion tasked (TASK #)
{If you have chosen not to convert V. 1.0 data, respond as follows:}

Enter device to use during conversion: HOME// *

- Conversion will not be done at this time -

To run conversion at a later date the entry point TASK^VAQPST20 should be used.

If you have chosen to skip the conversion the entry point DELETE^VAQPST24(1) must be used in order to delete entries contained in the 1.0 files.

{The following information will be printed after answering the device prompt shown above.}

**********************************************************************
* IMPORTANT * The following things need to be done.
* *
* - Members need to be added to the newly created mail groups.
* The option is XMEDITMG.
* *
* - The PDX Server (VAQ-PDX-SERVER) needs to be edited in order
* to associate a mail group with the server. The mail group
* to add is 'VAQ PDX ERRORS'. The installer will also have
* to change the server action from 'QUEUE SERVER ROUTINE' to
* 'RUN IMMEDIATELY'
**********************************************************************

In order to effectively use PDX, the following terminal type attributes must be defined for each terminal type used. Please verify these attributes against the Terminal Type file at your facility.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value for a VT series terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Feed</td>
<td>$C(27,91,50,74,27,91,72)</td>
</tr>
<tr>
<td>XY CRT</td>
<td>$C(27,91)<em>$(DY+1)</em>$(59)<em>$(DX+1)</em>$(72)</td>
</tr>
<tr>
<td>Erase to End of Page</td>
<td>$C(27,91,74)</td>
</tr>
<tr>
<td>Insert Line</td>
<td>$C(27)_&quot;[1L&quot;</td>
</tr>
<tr>
<td>Underline On</td>
<td>$C(27,91,52,109)</td>
</tr>
<tr>
<td>Underline Off</td>
<td>$C(27,91,109)</td>
</tr>
<tr>
<td>High Intensity</td>
<td>$C(27,91,49,109)</td>
</tr>
<tr>
<td>Normal Intensity</td>
<td>$C(27,91,109)</td>
</tr>
<tr>
<td>Save Cursor Position</td>
<td>$C(27,55)</td>
</tr>
<tr>
<td>Restore Cursor Position</td>
<td>$C(27,56)</td>
</tr>
<tr>
<td>Set Top/Bottom Margin</td>
<td>$C(27,91)<em>+(1OBTM)</em>$(59)<em>+(1OBM)</em>$(114)</td>
</tr>
</tbody>
</table>

Post init process completed

Figure C-1: Sample PDX V. 1.5 installation at the Albany OIFO
Appendix D—File Descriptions

1. **VAQ - PARAMETER file (#394.81)**
   
   This file contains site specific information concerning the use of PDX. This file is initialized from V. 1.0 data.

2. **VAQ - ENCRYPTED FIELDS file (#394.73)**
   
   This file contains all fields that should be encrypted when PDX Requests and Unsolicited PDXs are transmitted by the facility. This file is only relevant when encryption has been turned on. The installer has the option to populate this file at this time. Entries are not required.

3. **VAQ - RELEASE GROUP file (#394.82)**
   
   This file contains the facilities that have been granted "automatic processing". In order for a request to be automatically processed, the requesting facility must have an entry in this file. This file has been populated from the entries found in V. 1.0. The init also allows the installer to make changes to this file at this time.

4. **VAQ - OUTGOING GROUP file (#394.83)**
   
   This file contains groups of facilities commonly accessed by PDX. This will work much like mail groups. When requesting a PDX, you could access an outgoing group called G.BETA. This would be the equivalent of entering in the beta sites individually.

5. **VAQ - SEGMENT GROUP file (#394.84)**
   
   This file contains groups of data segments commonly referenced by the facility. Groups marked as PUBLIC may be referenced by all users of PDX. Groups marked as PRIVATE may only be referenced by the individual that created the group. This works the same as mail groups and outgoing groups (i.e., G.CLINICAL - this could contain any combination of the Health Summary components).
Appendix E—File Conversion

If the conversion does not run to completion, the entry point TASK^VAQPST20 should be used to requeue the conversion. This is the same entry point used by the post-init, and all prompts and responses will be consistent with those previously mentioned.

If you would prefer to run the conversion in the foreground (i.e., from your terminal), the entry point INTER^VAQPST20 should be used. If you do not want information concerning the conversion printed to the current device, the entry point NONINTER^VAQPST20 should be used.

If you choose not to run the conversion, the data contained in the V. 1.0 files should still be deleted. To do this, the entry point DELETE^VAQPST24 should be used. If you want information concerning the deletion printed to the current device, a parameter of "1" should be passed.

Sample PDX Calls from Programmer Mode

<table>
<thead>
<tr>
<th>Call</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D TASK^VAQPST20</td>
<td>Prompts for device and queues conversion (choose the HOME device if silent mode is desired).</td>
</tr>
<tr>
<td>D NONINTER^VAQPST20</td>
<td>Runs conversion in silent mode (nothing printed).</td>
</tr>
<tr>
<td>D INTER^VAQPST20</td>
<td>Runs conversion using current device.</td>
</tr>
<tr>
<td>D DELETE^VAQPST24( )</td>
<td>Deletes entries in V. 1.0 files in silent mode (nothing printed).</td>
</tr>
<tr>
<td>D DELETE^VAQPST24(1)</td>
<td>Deletes entries in V. 1.0 files using current device.</td>
</tr>
</tbody>
</table>

Table E-1: Sample PDX calls from Programmer Mode