

**Patient Care Encounter (PCE) V. 1.0 Technical Manual  
and Visit Tracking V. 2.0 Technical Manual  
August 1996**

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# Introduction

## **Purpose of PCE**

Patient Care Encounter (PCE) helps sites collect, manage, and display outpatient encounter data (including providers, procedure codes, and diagnostic codes) in compliance with the 10/1/96 Ambulatory Care Data Capture mandate from the Undersecretary of Health.

Patient Care Encounter (PCE) adds to current **VISTA** (DHCP) patient information by capturing clinical data resulting from a patient encounter, including problems treated, procedures done and provider information, as well as immunizations, skin tests, treatments, and patient education.

The goal of PCE is to provide an underlying database structure which enables the collection and management of clinical data from multiple data collection sources, including scanners, user interfaces, and non-interactive ancillary interfaces. The key users of this clinical data are clinicians, management, Quality Assurance, and Scheduling personnel.

## **Functionality**

The primary functions exported with Version 1.0 of PCE are:

- Collection and management of outpatient encounter data
- Presentation of outpatient encounter data through Health Summary components and Clinical Reports

Outpatient encounter data is captured through interactive and non-interactive interfaces.

### *Interactive interfaces*

- Online data capture through a user interface developed with List Manager tools.
- Online data capture in which Scheduling integrates with PCE to collect checkout information.

### *Non-interactive interfaces*

- PCE Device Interface, which supports the collection of encounter form data from scanners such as PANDAS, Teleform, and Automated Information Collection System (AICS), also supports workstation collection of outpatient encounter data.
- PCE application programming interfaces (API) which support the collection of outpatient encounter data from ancillary packages such as Laboratory, Radiology, Text Integration Utility (TIU), and Computerized Patient Record System (CPRS).

### **Impact of PCE on IRM**

- Sites must evaluate functionality exported with PCE and then choose to implement the portions that will enhance current data collection practices at their facilities.
- PCE will need a clinical coordinator to help facilitate data capture implementation and health summary type modifications.
- Patient Care Encounter is used as a clinical repository for data from many data collection sources, including scanning devices such as PANDAS and TELEFORM, the Automated Information Collection System (AICS), or the Graphical User Interface (GUI) physician workstation, as well as manual data entry options in Scheduling and PCE. The table below lists estimated disk space requirements for PCE/Visit Tracking for four levels of facility complexity. Estimates are based on adding 83k to the database for every 100 encounters, where each encounter averages two procedures, one diagnosis, and one provider. Each visit averages 1.9 encounters, based on stop code reporting per visit transmitted to Austin.

<b>Complexity Level</b>	<b>Average # of Ambulatory Visits/Year</b>	<b>Estimated Disk Space Requirements/Year</b>
1	254,018	400mb
2	149,101	234mg
3	92,761	146mb
4	71,371	112mb

**MSM SITES:** Increase your Stack/Step to 24k to avoid STKOV errors, and the size of your partitions to 85k to avoid PGMOV errors.

**SAC Exemption:** PCE has requested an exemption to SAC 2.2.7 which states the maximum routine size.

To avoid PGMOV errors, add an entry and exit action to dynamically increase/decrease the partition size as described below for the following options:

```
Appointment Management [SDAM APPT MGT]
Appointment Check-in/Check-out [SDAM APPT CHECK IN/OUT]
Add/Edit Stop Codes [SDADDEDIT]
Check-in/Unsched. Vsit [SDI]
Make Appointment [SDM]
Multiple Appointment Booking [SDMULTIBOOK]
Disposition an Application [DG DISPOSITION APPLICATION]
Disposition Log Edit [DG DISPOSITION EDIT]

Entry action: S %K=85 D INT^%PARTSIZ
Exit action: S %K=40 D INT^%PARTSIZ
```

**DSM SITES:** Expand string length for data and global references to accommodate Standards and Conventions (SAC) 2.3.2.2 which extends the full evaluated length of a global reference to 200 characters.

Since the current default for maximum global reference length is 128 for DSM sites, do the following:

What UCI: **MGR**  
YOU'RE IN UCI: MGR,DEV

```
>D ^VOLMAN
Volume Management Utilities
  1.  ADD                      (ADD^VOLMAN)
  2.  CREATE                   (CREATE^VOLMAN)
  3.  EXTEND                   (EXTEND^VOLMAN)
  4.  MAXIMUM GLOBALS         (MAXGLO^VOLMAN2)
  5.  STRING LENGTH           (EXPSTR^VOLMAN2)
Select Option > 5.  STRING LENGTH
Volume Set to set EXPANDED STRING LENGTH flag for > ^TMP
Expanded string length for data and global references is currently
DISALLOWED on this Volume Set:
  255 bytes is the maximum data length, and
  128 bytes is the maximum global reference length.
When you enable expanded strings and global references on a Volume Set,
then:
  512 bytes is the maximum data length, and
  249 bytes is the maximum global reference length.

*** WARNING *** Once you have enabled a Volume Set for use with expanded
strings and subscripts, that flag may NOT be reset.

Allow expanded string lengths on Volume Set ^TMP [Y OR N] ? <N> Y

Expanded string length is now ENABLED on Volume Set ^TMP.
```

**NOTE:** The new settings will not take effect until the DSM configuration is shut down and re-started on all nodes.

## **Impact of PCE on Providers**

Providers will be impacted by PCE through entry and retrieval of outpatient encounter data. Below is a scenario demonstrating a possible sequence of events:

**1.** A provider has a patient encounter (appointment, walk-in, telephone call, Hospital Based Home Care (HBHC), etc.).

Materials available to a provider which relate to PCE:

- *Health Summary* with new components summarizing previous encounters, and a health reminders component with reminders based on clinical repository data.
- *Encounter Form* (hard copy or workstation with pre-defined terminology for the provider's clinic/service type). This is the instrument for documenting the encounter information.

**2.** The provider enters encounter information directly into PCE or onto an encounter form.

**3.** A data entry clerk scans the encounter form or manually enters the information from the encounter form into PCE. Scanned encounter data is passed to the PCE Device Interface Module, where the data is stored in PCE files. The encounter data is automatically passed from PCE to Scheduling for clinical workload reporting and billing purposes.

Types of Encounter Form data collected and stored in PCE:

*Encounters*  
*Providers*  
*Problems/Diagnosis/symptoms treated at visit*  
*CPT procedures performed*  
*Immunizations (CPT-mappable)*  
*Skin tests (CPT-mappable)*  
*Patient education*  
*Exams (non-CPT-mappable)*  
*Treatments (non-CPT-mappable)*

**4.** The provider may later view information relating to these encounters on clinical reports or on health summaries. Reminders and maintenance information relating to patients can also be printed on health summaries.

# Implementation & Maintenance

## IMPLEMENTATION

### 1. Assign PCE Menu and Options

#### **PCE IRM Main Menu**

*(This menu includes all options exported with PCE.)*

SP	PCE Site Parameters Menu ...
SITE	PCE Site Parameters Edit
RPT	PCE HS/RPT Parameter Menu ...
PRNT	PCE HS/RPT Parameters Print
HS	PCE HS Disclaimer Edit
RPT	PCE Report Parameter Edit
DISP	PCE Edit Disposition Clinics
TBL	PCE Table Maintenance ...
INFO	PCE Information Only ...
ACT	Activate/Inactivate Table Items ...
CED	Education Topic Copy
ED	Education Topic Add/Edit
EX	Examinations Add/Edit
HF	Health Factors Add/Edit
IM	Immunizations Add/Edit
SK	Skin Tests Add/Edit
TR	Treatments Add/Edit
INFO	PCE Information Only ...
ACT	Activate/Inactivate Table Items ...
E	Exams
ET	Education Topics
H	Health Factors
I	Immunizations
S	Skin Tests
T	Treatments
ED	Education Topic List
EDI	Education Topic Inquiry
EX	Exam List
HF	Health Factors List
IM	Immunizations List
SK	Skin Tests List
TR	Treatments List
CM	PCE Code Mapping List
RM	PCE Reminder Maintenance Menu ...
RL	List Reminder Definitions
RI	Inquire about Reminder Item
RE	Add/Edit Reminder Item
RC	Copy Reminder Item
RA	Activate/Inactivate Reminders
RT	List Reminder Types Logic
TL	List Taxonomy Definitions

	TI	Inquire about Taxonomy Item
	TE	Edit Taxonomy Item
	TC	Copy Taxonomy Item
	TA	Activate/Inactivate Taxonomies
CR		PCE Clinical Reports ...
	PA	Patient Activity by Clinic
	CP	Caseload Profile by Clinic
	WL	Workload by Clinic
	DX	Diagnoses Ranked by Frequency
	LE	Location Encounter Counts
	PE	Provider Encounter Counts
HOME		Directions to Patient's Home Add/Edit
CO		PCE Coordinator Menu ...
	SUP	PCE Encounter Data Entry - Supervisor
	PCE	PCE Encounter Data Entry
	DEL	PCE Encounter Data Entry and Delete
	NOD	PCE Encounter Data Entry without Delete
	TBL	PCE Table Maintenance ...
	INFO	PCE Information Only ...
	HOME	Directions to Patient's Home Add/Edit
	PARM	PCE HS/RPT Parameters Menu ...
	DIE	PCE Device Interface Error Report
	DISP	PCE Edit Disposition Clinics
CL		PCE Clinician Menu
	RPT	PCE Clinical Reports ...
	ENC	PCE Encounter Data Entry and Delete
	INFO	PCE Information Only...
	HOME	Directions to Patient's Home Add/Edit

**Assign the *PCE IRM Main Menu* to the IRM person who will maintain and set up the package and who will need access to all of the PCE options.**

## ***PCE IRM Main Menu Descriptions***

### **PX SITE PARAMETER MENU - Site Parameter Menu**

This menu includes all options that deal with defining and displaying entries in the PCE PARAMETERS file (#815). The PCE Site Parameters Edit option includes all editable fields, for IRM/ADPAC use. The PCE HS/RPT Parameter Print option can be included on a Health Summary Coordinator's menu if the coordinator is involved with the definition of Clinical Reminders to be printed on the Health Summary. This option is also included on the PCE Coordinators menu and the PCE Reports option menu. The PCE HS Parameters option can be included on a Health Summary Coordinators menu, and is included on the PCE Coordinator's menu. This user should be familiar with the PCE Reminders and the use of the reminder disclaimer on the "Clinical Maintenance" and "Clinical Reminder" components. The PCE Report Parameters Setup option can be included on a PCE Coordinator's menu to setup the local file definitions to use to represent Emergency Clinics and various categories of Lab tests by the PCE Report Module.

### **PXTT TABLE MAINTENANCE - PCE Table Maintenance**

The options on this menu are used to add or edit the types of data to be collected by PCE such as Health Factors, Patient Education, Immunizations, Skin Tests, etc. Once these tables have been defined, the table entries will be selectable for encounter data entry (PCE package) and encounter form definitions (AICS package). The patient information collected based on these table definitions is viewable on Health Summaries. This menu also includes options to edit the Clinical Reminder/Health Maintenance definitions, based on your site's clinical terminology in the tables. Once reminder criteria have been defined, they may be included in the Health Summary Type definitions for the "Clinical Reminder" and "Health Maintenance" Components. These options may be used in conjunction with the "PCE Information Only" menu options to manage the contents of the files or tables supporting PCE.

### **PXTT PCE INFORMATION ONLY - PCE Information Only**

This is a menu of options that list information about the files/tables used by PCE. Some of the files/tables determine what clinical data will be collected as the sites' clinical terminology for specific categories of data such as Immunizations, Skin Tests, Patient Education, and Treatments. The PCE Code Mapping file determines whether two entries should be made from one clinical data item entered. For example, if an immunization is entered into the V Immunization file, a CPT code is generated in the V CPT file for billing and workload. The mapping definition of the CPT relationship with the Immunization type is viewable from the PCE Code Mapping list option. The reminder lists allow the user to see what the clinical reminders definitions are for use with the Health Summary package.

#### PXRM REMINDER MENU - PCE Reminder Maintenance Menu

This is the menu for editing reminder logic and making queries about the files involved with Clinical Reminders and Clinical Maintenance components in the Health Summary package.

#### PXRR CLINICAL REPORTS - PCE Clinical Reports

This is a menu of PCE clinical reports that clinicians can use for summary level information about their patients, workload activity, and encounter counts.

#### PX EDIT LOCATION OF HOME - Directions to Patient's Home Add/Edit

This option lets you enter directions to a patient's home; especially useful for Hospital-Based Home Care staff. The Health Summary package contains a new PCE component that displays the directions entered through this option.

#### PX PCE CLINICIAN MENU - PCE Clinician Menu

This menu contains PCE options which may be useful to the clinician.

#### PX PCE COORDINATOR MENU - PCE Coordinator Menu

This is the menu for the ADPAC for PCE. It includes all of the user interface options as well as the options for file maintenance. The data entry options may be assigned to clerk and/or clinician menus as needed. The HS and Report parameter options manage fields for site specific preferences/definitions in the Health Summary and PCE Reports.

The first four options/menus are used by IRM staff or coordinators who will be responsible for setting up PCE, maintaining the entries in the PCE tables (such as Patient Education, Immunization, Treatments, etc.), and defining the clinical reminders/maintenance system for your site. Data entry options on the PCE Coordinator and PCE Clinician Menus should be assigned as follows:

- Assign *PCE Encounter Data Entry - Supervisor* to users who can document a clinical encounter and can also delete any encounter entries, even though they are not the creator of the entries.
- Assign *PCE Encounter Data Entry* to data entry staff who can document a clinical encounter and who can delete their own entries.
- Assign *PCE Encounter Date Entry and Delete* to users who can document a clinical encounter and can also delete any encounter entries, even though they are not the creator of the entries.
- Assign *PCE Encounter Data Entry without Delete* to users who can document a clinical encounter, but should not be able to delete any entries, including ones that they have created.

**2. Set PCE Site Parameters using the PCE Site Parameters Menu on the PCE IRM Menu.** This menu includes all options that deal with defining and displaying entries in the PCE PARAMETERS file (815) and all editable fields for IRM/ADPAC use.

### ***PCE Site Parameter Menu***

PX PCE SITE PARAMETERS EDIT - PCE Site Parameters Edit

This option is used to edit entries in the PCE PARAMETERS file. The parameters that are set are used as the default controls for the user interface when it starts up. You can set your default view as Appointment or Encounter and a range of dates.

PX HS DISCLAIMER EDIT - PCE HS Disclaimer Edit

This option is used to specify a Site Reminder Disclaimer to be used by the Health Summary package whenever the Health Summary "Clinical Maintenance" and "Clinical Reminder" components are displayed in a Health Summary.

PX HS/RPT PARAMETERS PRINT - PCE HS/RPT Parameters Print

This option prints the current PCE Parameter definitions that are used by Health Summary and some of the PCE Reports.

PX REPORT PARAMETER EDIT - PCE Report Parameter Edit

This option is used to define parameters that will be used by the PCE Report Module. The report edit option allows your site to specify which clinics in file 44 represent "Emergency Room" clinics, and what Lab tests from file 60 should be used for looking up patient data for Glucose, Cholesterol, LDL Cholesterol and HBA1C lab results. These fields are used by the reports Caseload Profile by Clinic, and Patient Activity by Clinic. To get a printout of current definitions in the PCE Parameters fields for these fields, use the PCE HS/RPT Parameters Print.

PCE EDIT DISPOSITION CLINICS - PCE Edit Disposition Clinics

This option is used to define which clinics are used as Administrative Disposition Clinics.

The PCE HS/RPT Parameter Print and PCE HS Parameters options can be included on a Health Summary Coordinator's menu if the coordinator is involved with the definition of Clinical Reminders to be printed on the Health Summary. These options are also included on the PCE Coordinator menu and the PCE Reports option menu.

## PCE exports a disclaimer to appear on Health Summaries: Default Reminder Disclaimer:

The following disease screening, immunization, and patient education recommendations are offered as guidelines to assist in your practice. These are only recommendations, not practice standards. The appropriate utilization of these for your individual patient must be based on clinical judgment and the patient's current status.

If your site determines it would prefer a site defined reminder disclaimer instead of the disclaimer distributed by PCE, use the HS Disclaimer Edit option to define your site's disclaimer text. This disclaimer appears on the top of each display of Health Summary "Clinical Maintenance" and "Clinical Reminder" components.

The PCE Report Parameters Edit option can be included on a PCE Coordinator's menu to set up the local file definitions to use to represent Emergency Clinics and various categories of Lab tests by the PCE Report Module. The *Caseload Profile by Clinic* and *Patient Activity by Clinic* reports track Critical Lab Values and Emergency Room Visits. The PCE Report Parameter Edit option allows your site to specify which clinics in file 44 represent "Emergency Room" clinics and what tests from the Laboratory Test file (#60) should be used for looking up patient data for Glucose, Cholesterol, LDL Cholesterol and HBA1C lab results. (This is necessary since the Laboratory Test File is not standardized and each site may have customized it differently.)

### ***PCE HS/RPT Parameters Print Example***

```
Select PCE HS/RPT Parameter Menu Option:prnt PCE HS/RPT Parameters Print
DEVICE: VAX RIGHT MARGIN: 80// [ENTER]
```

```
PCE HS/RPT PARAMETERS PRINT MAY 21,1996 11:52 PAGE 1
```

```
-----
PARAMETERS related to HEALTH SUMMARY
-----
```

```
Default Reminder Disclaimer:
```

```
    The following disease screening, immunization and patient
    education recommendations are offered as guidelines to
    assist in your practice.
    These are only recommendations, not practice standards.
    The appropriate utilization of these for your individual
    patient must be based on clinical judgment and the
    patient's current status.
```

```
Site Reminder Disclaimer (Replaces default disclaimer if defined):
```

```
PARAMETERS related to PCE REPORTS
-----
```

```
Report ER Clinic Names: EYE
Report Glucose Names: URINE GLUCOSE
Report Cholesterol Names: CHOLESTEROL
Report LDL Cholesterol Names:
Report HBA1C Names:
```

## **PCE Site Parameters Edit**

The default Startup View may be set to Appointment or Visit/Encounter. We recommend that you set the default Startup View to Appointment, which displays all the appointments that have been made during the default date range.

The default date range is determined by values that are defined for the Date Offset fields. There are four Date Offset fields. The first two, Beginning Patient Date Offset and Ending Patient Date Offset, determine the default date range for display of patient data. The last two, Beginning Hos Loc Date Offset and Ending Hos Loc Date Offset, determine the default date range for display of patient data based on hospital location (clinic or ward). A number subtracted from today's date is the Beginning Patient Date Offset (e.g., -30) and a number added to today's date is the Ending Patient Date Offset (e.g., 1). Do not put in specific dates, but count backwards and forward from the current date.

The Multiple Primary Diagnosis prompt lets sites who use scanning devices choose whether to receive warnings or not have the encounter processed if more than one diagnosis is listed as primary.

You can also set the switch-over date from using the Scheduling interface for checkouts and dispositions, and the starting date for displaying PCE data on Health Summaries.

```
Select PCE IRM Main Menu Option: SP  PCE Site Parameter Menu
SITE  PCE Site Parameters Edit
RPT   PCE HS/RPT Parameter Menu ...
DISP  PCE Edit Disposition Clinics

Select PCE Site Parameter Menu Option: SI PCE Site Parameters Edit
Select PCE PARAMETERS ONE: 1
STARTUP VIEW: ENCOUNTER
BEGINNING PATIENT DATE OFFSET: -30//[ENTER]
ENDING PATIENT DATE OFFSET: 1//[ENTER]
BEGINNING HOS LOC DATE OFFSET: -7//[ENTER]
ENDING HOS LOC DATE OFFSET: 0//[ENTER]
RETURN WARNINGS: YES//[ENTER]
MULTIPLE PRIMARY DIAGNOSES: RETURN WARNING//?    If errors are returned by
the Device Interface then the whole encounter is
not processed.
  Choose from:
    0          RETURN WARNING
    1          RETURN ERROR
MULTIPLE PRIMARY DIAGNOSES: RETURN WARNING//[ENTER]
SD/PCE SWITCH OVER DATE: JUL 1,1996
HEALTH SUMMARY START DATE: JUL 28,1996 Select PCE PARAMETERS ONE: [ENTER]
```

**3. Review entries contained in PCE Supporting Files:** Data is exported for Education Topics, Examinations, Health Factors, Immunizations, Skin Tests, and Treatments. With the exception of “treatments” data was exported with a status of “active.” Entries in each of the supporting files should be evaluated and assigned an appropriate status. Use the *Activate/Inactivate Table Items Menu* option to review and assign a status for entries. Unless you activate current entries or create new entries for “Treatments,” users will not be able to add treatments to an encounter.

### ***Example of activating Treatment items***

```
Select PCE Coordinator Menu Option: TBL PCE Table Maintenance
Select PCE Table Maintenance Option: ACT Activate/Inactivate Table Items
  E      Exams
  ET     Education Topics
  H      Health Factors
  I      Immunizations
  S      Skin Tests
  T      Treatments
Select Activate/Inactivate Table Items Option: T Treatments

Select TREATMENT NAME: WOUND CARE
INACTIVE FLAG: INACTIVE// ??
  This field is used to inactivate a treatment type. If this field
  contains a "1" then the treatment is inactive. Inactive treatments
  cannot be selected in the manual data entry process. Treatment
  entries should be made inactive when they are no longer used. Do
  not delete the entry or change the meaning of the treatment entry.
  To make an inactive treatment type active, enter the "@" symbol to
  delete the "1" from the field.
  Choose from:
    1      INACTIVE
INACTIVE FLAG: INACTIVE// @
Select TREATMENT NAME: Continue to enter treatments, as needed.
```

**4. Edit the Report Parameters using the PCE Report Parameter Edit option.** This option is used to define parameters that will be used by the PCE Report Module. You need to identify which clinics are considered Emergency Room clinics by clinicians. You also need to identify the lab test names that are used by your site to identify the following types of Lab tests: Glucose, Cholesterol, LDL Cholesterol, and HBA1C.

To get a printout of current definitions in the PCE Parameters fields for these fields, use the PCE HS/RPT Parameters Print.

## **Example of editing report parameters**

```
Select PCE Coordinator Menu Option: parm PCE HS/RPT Parameter Menu
  PRNT  PCE HS/RPT Parameters Print
  HS    PCE HS Disclaimer Edit
  RPT   PCE Report Parameter Edit
Select PCE HS/RPT Parameter Menu Option: RPT PCE Report Parameter Edit
Select PCE PARAMETERS ONE: 1
Select ER CLINIC NAME: eye
  Are you adding 'EYE' as a new REPORT ER CLINIC NAMES (the 1ST for this PCE
PARAMETERS)? y (Yes)
Select ER CLINIC NAME: 2a
  Are you adding '2A' as a new REPORT ER CLINIC NAMES (the 2ND for this PCE
PARAMETERS)? y (Yes)
Select ER CLINIC NAME: [ENTER]
Select GLUCOSE NAMES: ?
  Answer with REPORT EMERGENCY CLINICS GLUCOSE NAMES
  You may enter a new REPORT EMERGENCY CLINICS, if you wish
  Enter the name(s) of the BLOOD GLUCOSE lab assays as they appear in
  the Laboratory Test (60) file . DO NOT INCLUDE Glucose Tolerance or
Fluid
  Glucose test names.
  LAB TEST STORED ONLY AT THE "CH" NODE
  Answer with LABORATORY TEST NAME, or LOCATION (DATA NAME), or
  PRINT NAME
  Do you want the entire LABORATORY TEST List? n (No)
Select GLUCOSE NAMES: glu
  1  GLUCAGON
  2  GLUCOSE
  3  GLUCOSE, OTHER
  4  GLUTAMINE
  5  GLUTETHIMIDE
TYPE '^' TO STOP, OR
CHOOSE 1-5:
  6  GLU URINE GLUCOSE
CHOOSE 1-6: 6 URINE GLUCOSE
  Are you adding 'URINE GLUCOSE' as
  a new REPORT EMERGENCY CLINICS (the 1ST for this PCE PARAMETERS)? y
(Yes)
Select GLUCOSE NAMES:[ENTER]
Select CHOLESTEROL NAMES: ??
  This field will contain the names of any and all TOTAL CHOLESTEROL
  assays as they appear in the Laboratory Test (60) file to allow the
clinic
  reporting module of the Patient Care Encounter Package to monitor
Quality
  of Care Markers. Entries should be made either by IRM personnel or
  Clinic coordinator.
Select CHOLESTEROL NAMES: chol
  1  CHOLESTEROL
  2  CHOLESTEROL CRYSTALS
  3  CHOLINESTERASE
  4  CHOLYLGLYCINE
```

CHOOSE 1-4: 1

Are you adding 'CHOLESTEROL' as  
a new REPORT CHOLESTEROL NAMES (the 1<sup>st</sup> for this PCE PARAMETERS)? **Y**  
(Yes)

Select LDL CHOLESTEROL NAMES: ??

This field will contain the names of any and all LDL CHOLESTEROL assays  
as they appear in the Laboratory Test (60) file to allow the clinic  
reporting module of the Patient Care Encounter Package to monitor  
Quality Assurance

Select LDL CHOLESTEROL NAMES: **CHOLYLGLYCINE**

Are you adding 'CHOLYLGLYCINE' as a new REPORT LDL CHOLESTEROL NAMES (the  
1ST for this PCE PARAMETERS)? **y** (Yes)

Select LDL CHOLESTEROL NAMES: **[ENTER]**

Select HBA1C NAMES: ?

Answer with REPORT HBA1C NAMES

You may enter a new REPORT HBA1C NAMES, if you wish  
Enter the name(s) of the Glycosolated Hemoglobin assays as they  
appear in the Laboratory Test (60) file.

LABS STORED ONLY AT THE "CH" NODE

Answer with LABORATORY TEST NAME, or LOCATION (DATA NAME), or  
PRINT NAME

Do you want the entire LABORATORY TEST List? **n** (No)

Select HBA1C NAMES: **glycosylated HEMOGLOBIN A1C**

Are you adding 'GLYCOSYLATED HEMOGLOBIN A1C' as  
a new REPORT HBA1C NAMES (the 1ST for this PCE PARAMETERS)? **y** (Yes)

Select HBA1C NAMES: **[ENTER]**

Select PCE PARAMETERS ONE: **[ENTER]**

## 5. Make sure the following EVENTS are on the appropriate ITEM protocols:

### EVENT

SDAM PCE EVENT

IBDF PCE EVENTS

PXK SDAM TO V-FILES

IBDF PCE EVENTS

VISIT PATIENT STATUS

### PROTOCOL

ITEM multiple of the PXK VISIT DATA EVENT

ITEM multiple of the PXK VISIT DATA EVENT

ITEM multiple of the SDAM APPOINTMENT  
EVENTS

ITEM multiple of PXCA DATA EVENT

ITEM multiple of DGPM MOVEMENT EVENTS.

## ***Example of EVENT placement on PROTOCOLS.***

```
[DVF,DEV]>D P^DI
VA FileMan 21.0
Select OPTION: INQUIRE TO FILE ENTRIES
OUTPUT FROM WHAT FILE: PROTOCOL (3091 entries)
Select PROTOCOL NAME: PXK VISIT DATA EVENT VISIT RELATED DATA
ANOTHER ONE: SDAM APPOINTMENT EVENTS Appointment Event Driver
ANOTHER ONE: PXCA DATA EVENT PCE Device Interface Module's Data Event
ANOTHER ONE: DGPM MOVEMENT EVENTS.....
STANDARD CAPTIONED OUTPUT? Yes// [ENTER] (Yes)
Include COMPUTED fields: (N/Y/R/B): NO// [ENTER] - No record number (IEN),
no Computed Fields
NAME: PXK VISIT DATA EVENT ITEM TEXT: VISIT RELATED DATA
TYPE: extended action CREATOR: EATON,DENIS
DESCRIPTION: This is a Protocol that PIMS can hook onto to find the data
that was collected by PCE using List Manager, Scanning etc.
PIMS has developed a protocol, SDAM PCE EVENT, which will use the visit
related data to do an auto-checkout.
ITEM: SDAM PCE EVENT
ITEM: IBDF PCE EVENT
EXIT ACTION: K PXKSPX ENTRY ACTION: S PXKSPX=1
TIMESTAMP: 56796,37384
NAME: SDAM APPOINTMENT EVENTS ITEM TEXT: Appointment Event Driver
TYPE: extended action CREATOR: EATON,DENIS
PACKAGE: SCHEDULING
DESCRIPTION: This extended action contains all the actions that need to
be performed when an action is taken upon an appointment, such as checking
in.
ITEM: ORU PATIENT MOVMT
ITEM: IBACM OP LINK SEQUENCE: 1
ITEM: DG MEANS TEST REQUIRED
ITEM: VAFED EDR OUTPATIENT CAPTURE
ITEM: SDAM LATE ENTRY SEQUENCE: 2
ITEM: RMPR SCH EVENT SEQUENCE: 3
ITEM: DVBA C&P SCHD EVENT SEQUENCE: 8
ITEM: PXK SDAM TO V-FILES
ENTRY ACTION: D ANC^SDVSIT2 TIMESTAMP: 56796,37371
NAME: PXCA DATA EVENT
ITEM TEXT: PCE Device Interface Module's Data Event
TYPE: extended action CREATOR: EATON,DENIS
DESCRIPTION: This is the event point invoked by PCE Device Interface
Module when it has not found any errors in the data passed to it. This
makes the data available to other users of the data including users of any
Local data that may be included.
ITEM: IBDF PCE EVENT
TIMESTAMP: 56796,37383
NAME: DGPM MOVEMENT EVENTS ITEM TEXT: MOVEMENT EVENTS v 5.0
TYPE: extended action CREATOR: SCHLEHUBER,PAMELA
PACKAGE: REGISTRATION
DESCRIPTION:
At the completion of a patient movement the following events
take place through this option:
```

1. The PTF record is updated when a patient is admitted, discharged or transferred.
2. The appointment status for a patient is updated to 'inpatient' for admissions and 'outpatient' for discharges. Admissions to the domiciliary have an 'outpatient' appointment status.
3. When a patient is admitted, dietetics creates a dietetic patient file entry and creates an admission diet order. When a patient is discharged, all active diet orders are discontinued. If a patient is absent or on pass, the diet orders are suspended.
4. Inpatient Pharmacy cancels all active orders when a patient is admitted, discharged or on unauthorized absence. A patient can not be given Unit Dose meds unless s/he is admitted to a ward. The patient can receive IV meds; however. When a patient is transferred, an inpatient system parameter is used to determine whether or not the orders should be cancelled. When a patient goes on authorized absence, the inpatient system parameter is used to determine whether the orders should be cancelled, placed on hold or no action taken. When a patient returns from authorized absence any orders placed on hold will no longer be on hold.
5. With ORDER ENTRY/RESULTS REPORTING v2.2, MAS OE/RR NOTIFICATIONS may be displayed to USERS defined in an OE/RR LIST for the patient. These notifications are displayed for admissions and death discharges.

FILE LINK: 11754;DIC(19,

ITEM: ORU AUTOLIST

ITEM: ORU PATIENT MOVMT

ITEM: FHWMAS

ITEM: GMRVOR DGPM

ITEM: PSJ OR PAT ADT

ITEM: IB CATEGORY C BILLING

SEQUENCE: 10

ITEM: DG MEANS TEST DOM

SEQUENCE: 8

ITEM: DGJ INCOMPLETE EVENT

SEQUENCE: 6

ITEM: DGOERR NOTE

SEQUENCE: 7

ITEM: DGPM TREATING SPECIALTY EVENT

SEQUENCE: 1

ITEM: VAFED EDR INPATIENT CAPTURE

ITEM: SD APPT STATUS

SEQUENCE: 2

ITEM: GMRADGPM MARK CHART

ITEM: YS PATIENT MOVEMENT

ITEM: DVB ADMISSION HINQ

ITEM: VSIT PATIENT STATUS

    TIMESTAMP: 56803,40994

Select PROTOCOL NAME: **[ENTER]**

**6. Use the Visit Tracking Parameters Edit option to ensure that the entries in the VISIT TRACKING PARAMETERS file (#150.9) are correct.** (This option is not on a menu— go through MenuMan to access it.) The post-installation routine ^VSITPOST, which is called automatically by the installation process, checks to see if the VISIT TRACKING PARAMETERS file (#150.9) has an entry. If not, it will configure it with default values.

- Answer the SITE PART OF VISIT ID prompt with TEST ACCOUNT if this is in your test or training account.
- Answer with the three-letter identifier for your facility if you are in production.

### ***Example of editing Visit Tracking Parameters***

```
>D ^XUP
Select OPTION NAME: VSIT TRACKING PARM EDIT Visit Tracking Parameters edits.
Select VISIT TRACKING PARAMETERS NAME: 1
DEFAULT TYPE: VA//[ENTER]
DEFAULT INSTITUTION: Enter your institution name here
Select PACKAGE: PCE PATIENT CARE ENCOUNTER PX
...OK? Yes// [ENTER] (Yes)
PACKAGE: PCE PATIENT CARE ENCOUNTER//[ENTER]
ACTIVE FLAG: ON//[ENTER]
Select PACKAGE: SCHEDULING SD
...OK? Yes// [ENTER] (Yes)
PACKAGE: SCHEDULING//[ENTER]
ACTIVE FLAG: OFF// ON
Select PACKAGE:[ENTER]
SITE PART OF VISIT ID: ??
This is a three letter identifier for this computer system that is
unique in the VA, or "TEST" of a test account. This is appended after a
"-" onto the sequence number to form the unique Visit Id in the VA
system. It is important that this is set to the correct value and not
changed.
Choose from:
ALBANY, NY ALN
ALBUQUERQUE, NM ALB
ALEXANDRIA, LA ALX
ALLEN PARK, MI ALL (continuing to display all sites)
Select VISIT TRACKING PARAMETERS NAME:[ENTER]
```

## 7. Create a PXCA PCE ERROR BULLETIN mail group in MAIL GROUP file (#3.8):

```
>D P^DI

VA FileMan 20.0

Select OPTION: ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: MAIL GROUP// [ENTER]
EDIT WHICH FIELD: ALL// [ENTER]

Select MAIL GROUP NAME: PXCA PCE ERROR BULLETIN
  ARE YOU ADDING 'PXCA PCE ERROR BULLETIN' AS
  A NEW MAIL GROUP (THE 65TH)? Y (YES)
Select MEMBER: USER,JOE
  ARE YOU ADDING 'USER,JOE' AS A NEW MEM (THE 1ST FOR THIS MAIL GROUP)?Y(YES)
Select MEMBER: [ENTER]
DESCRIPTION:
  1>A mail group to send error bulletin messages from PXCA.
  2>Used by "PXCA PCE ERROR BULLETIN" bulletin.
  3>[ENTER]
EDIT Option: [ENTER]
TYPE: PU public
ORGANIZER:[ENTER]
COORDINATOR: USER,ANOTHER//[ENTER]
Select AUTHORIZED SENDER:[ENTER]
ALLOW SELF ENROLLMENT?: NO
REFERENCE COUNT:[ENTER]
LAST REFERENCED:[ENTER]
RESTRICTIONS: LOCAL
Select MEMBER GROUP NAME:[ENTER]
Select REMOTE MEMBERS:[ENTER]
Select DISTRIBUTION LIST:[ENTER]

Select MAIL GROUP NAME:[ENTER]

Select OPTION: ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: MAIL GROUP// BULLETIN (86 entries)
EDIT WHICH FIELD: ALL// MAIL GROUP (multiple)
  EDIT WHICH MAIL GROUP SUB-FIELD: ALL// [ENTER]
THEN EDIT FIELD:[ENTER]

Select BULLETIN NAME: PXCA PCE ERROR BULLETIN
Select MAIL GROUP: PXCA PCE ERROR BULLETIN
  ARE YOU ADDING 'PXCA PCE ERROR BULLETIN' AS
  A NEW MAIL GROUP (THE 1ST FOR THIS BULLETIN)? Y (YES)
Select MAIL GROUP:[ENTER]
Select BULLETIN NAME:[ENTER]
```

**8. Create VISIT CREATE ERROR as a mail group (as described above) adding appropriate members.** Visit Tracking sends a message to this mail group when it has an error that prevents it from creating a visit.

**9. Activate PCE components in the Health Summary Component file.**

**10. Implement the PCE Reminder/Maintenance items to appear on Health Summaries.**

The Clinical Reminders feature of PCE uses a combination of PCE Table Maintenance options, PCE Clinical Reminders options, PCE Taxonomy options, Health Summary Create/Modify Health Summary Type options, and AICS Encounter Form options. *Appendices A in the PCE User Manual provides a more detailed description of developing and customizing clinical reminders.*

***Follow the steps below, as applicable, to implement Clinical Reminders.***

**NOTE:** Most of these steps are optional, to be performed only if you want to modify items to meet site needs.

- Use the *List Reminder Definitions* option to print the nationally distributed reminder definitions (both the "VA" and "VA-\*" prefixed). Determine if you want to use the distributed definitions.

***Example of List Reminder Definitions (1st page)***

```
Select PCE IRM Main Menu Option: rm PCE Reminder Maintenance Menu
RL List Reminder Definitions
RI Inquire about Reminder Item
RE Add/Edit Reminder Item
RC Copy Reminder Item
RA Activate/Inactivate Reminders
RT List Reminder Types Logic
TL List Taxonomy Definitions
TI Inquire about Taxonomy Item
TE Edit Taxonomy Item
TC Copy Taxonomy Item
TA Activate/Inactivate Taxonomies
Select PCE Reminder Maintenance Menu Option: RL List Reminder Definitions
DEVICE: [ENTER] VAX RIGHT MARGIN: 80// [ENTER]
```

## BREAST CANCER SCREEN

Print Name: Breast Cancer Screen

Related VA-\* Reminder: 555002

## Reminder Description:

Mammogram should be given every 2 years to female patients, ages 50-69.

The "VA-\*Breast Cancer Screen" reminder is based on the following "Breast Cancer Screen" guidelines specified in the "Guidelines for Health Promotion and Disease Prevention", M-2, Part IV, Chapter 9.

Target Condition: Early detection of breast cancer.

Target Group: All women ages 50-69.

- Identify the reminders that your site wants to implement. Copy, as necessary, using the *Copy Reminder Item* option. After copying the reminders, you can alter the new reminders to meet your site's needs.

**NOTE:** The "VA-" prefix represents the nationally distributed set. When you copy items, the VA-prefix is dropped. "VA-\*" represents the minimum requirements as defined by the National Center for Health Promotion (NCHP). As an alternative, you can create a local site reminder item using the *Edit Taxonomy Item* option.

- Use the Health Summary package to activate Clinical Reminders and Clinical Maintenance components. Then rebuild the Adhoc Health Summary Type.
  - a. Identify which Health Summary Type is used by the implementing clinic.
  - b. Add the Clinical Reminders and/or the Clinical Maintenance components to the Health Summary Type.
  - c. Edit component parameters, identifying desired selection items.
- If a taxonomy definition related to a reminder needs modification, do the following steps:
  - a. Copy the taxonomy using the *Copy Taxonomy Item* option.
  - b. Modify the taxonomy, using the *Edit Taxonomy Item* option.
  - c. Copy the related Reminder.
  - d. Modify the Reminder to reflect the newly created taxonomy, using the *Add/Edit Reminder Item* option.
  - e. As an alternative to copying a taxonomy, local site taxonomy items can be created, using the *Edit Taxonomy Item*.

Modify the Treatment, Immunization, Patient Ed, Skin Test, Exam, and Health Factors files, if necessary, through *PCE Table Maintenance* options. *If clinical reminders are not showing up correctly on Health Summaries, see Appendix A-7 in the PCE User Manual for troubleshooting information which IRM staff with programmer access can use.*

- Coordinate the use of Encounter Forms (through the AICS package) with the use of Health Summary Clinical Maintenance Components. Make sure that the relevant encounter forms contain all appropriate list bubbles for PCE data: Health Factors, Exams, Immunizations, Diagnosis, Patient Education, Procedures, and Skin Tests.
- Inactivate reminders which will not be used, with the *Activate/Inactive Reminders* option.

**11. (optional) Add Health Summary, Problem List, and Progress Notes as actions on PCE screens to allow quick access to those programs while using PCE.**

***Example of adding programs to PCE screens***

```

>D P^DI

VA FileMan 21.0
Select OPTION: ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: 101  PROTOCOL                               (2978 entries)

EDIT WHICH FIELD: ALL// ITEM
  EDIT WHICH ITEM SUB-FIELD: ALL// .01  ITEM
  THEN EDIT ITEM SUB-FIELD: MNEMONIC
  THEN EDIT ITEM SUB-FIELD: [ENTER]
THEN EDIT FIELD: [ENTER]

Select PROTOCOL NAME: PXCE SDAM MENU           Appointment Menu      AV
Select ITEM: PXCE BLANK HS// [ENTER]
  ITEM: PXCE BLANK HS// PXCE GMTS HS ADHOC       Health Summary        HS
  MNEMONIC: HS
Select ITEM: PXCE BLANK PN
  ...OK? Yes//[ENTER]  (Yes)

  ITEM: PXCE BLANK PN// PXCE GMRP REVIEW SCREEN   Progress Notes        PN
  MNEMONIC: PN
Select ITEM: PXCE BLANK PL
  ...OK? Yes// [ENTER]  (Yes)

  ITEM: PXCE BLANK PL// PXCE GMPL OE DATA ENTRY   Patient Problem List  PL
  MNEMONIC: PL
Select ITEM:[ENTER]

Select PROTOCOL NAME: PXCE MAIN MENU
Select ITEM: PXCE BLANK HS// [ENTER]
  ITEM: PXCE BLANK HS// PXCE GMTS HS ADHOC       Health Summary        HS
  MNEMONIC: HS
Select ITEM: PXCE BLANK PN
  ...OK? Yes// [ENTER]  (Yes)

```

```

ITEM: PXCE BLANK PN// PXCE GMRP REVIEW SCREEN           Progress Notes      PN
MNEMONIC: PN
Select ITEM: PXCE BLANK PL
      ...OK? Yes// [ENTER]  (Yes)

ITEM: PXCE BLANK PL// PXCE GMPL OE DATA ENTRY       Patient Problem List  PL
MNEMONIC: PL
Select ITEM: [ENTER]

Select PROTOCOL NAME: [ENTER]

```

**12. Create a DISPOSITION CLINIC for each division in your facility using the "Set Up a Clinic" option on the Scheduling Supervisor Menu.** If you are a multi-divisional facility and you want to credit disposition workload for each division, you will need to set up a DISPOSITION CLINIC for each division. Make sure you define each DISPOSITION CLINIC so that it is easily associated with the division for which you want to credit workload.

- If you are a single-division facility, you should define only one DISPOSITION CLINIC.
- The DISPOSITION CLINICS will *only* be used with Dispositions.
- PCE recommends creating a clinic defined as Disposition, with a Stop Code number of 102. This clinic should be used with all dispositions.
- Use "PCE Edit Disposition Clinics" option located on the "PCE Site Parameter Menu" to enter the DISPOSITION CLINICS that were defined for use with Dispositions for your facility. The purpose of this is to restrict the Hospital Location for a Disposition to DISPOSITION CLINICS only.
- In single-division facilities, the hospital location for Dispositions will be stuffed automatically, and you will not be prompted to select a DISPOSITION HOSPITAL LOCATION.

### ***PCE Edit Disposition Clinics Example***

```

Select PCE Site Parameter Menu Option: PCE Edit Disposition Clinics
Select PCE PARAMETERS ONE: 1
Select DISPOSITION HOSPITAL LOCATIONS: ?
  Answer with DISPOSITION HOSPITAL LOCATIONS
Choose from:
  DISPOSITION 1
  DISPOSITION 2
  You may enter a new DISPOSITION HOSPITAL LOCATIONS, if you wish
Answer with HOSPITAL LOCATION NAME, or ABBREVIATION
Do you want the entire 58-Entry HOSPITAL LOCATION List? n
Select DISPOSITION HOSPITAL LOCATIONS: DISPOSITION 1

```

## **MAINTENANCE**

### **Table Maintenance Options**

The Table Maintenance options let sites add or edit the items in the tables for Health Factors, Patient Education, Immunizations, Skin Tests, etc. Once these tables have been defined, the table entries can be selected for encounter data entry (PCE package) and encounter form definitions (AICS package). Scanning encounter forms with the AICS package will provide PCE with patient information which is stored in the V files. The patient information collected based on these table definitions is viewable on Health Summaries (Health Summary package).

This menu also includes options to edit the Clinical Reminder/Health Maintenance definitions, based on your site's clinical terminology in the tables. Once reminder criteria have been defined, they may be included in the Health Summary Type definitions for the "Clinical Reminder" and "Health Maintenance" Components.

Table items that are distributed with the PCE package can be inactivated using the PCE "Activate/Inactivate Table Items" menu. Use the "Inactive Flag" field to make an item "INACTIVE" for selection in the Encounter form definition process and the PCE encounter data entry process. Enter "@" at the "Inactive Flag" field to reactivate an inactivated item.

These options may be used in conjunction with the "PCE Information Only" menu options to manage the contents of the files or tables supporting PCE. Below is a description of the options.

#### **PXTT ACTIVATE/INACTIVATE MENU - Activate/Inactivate Table Items**

This option is the main menu option to activate or inactivate the entries in the supporting tables. (e.g., Immunizations, Skin Tests, Education Topics)

#### **PXTT COPY EDUCATION TOPICS - Education Topic Copy**

This option lets you copy an existing education topic into a new education topic entry in the Education Topics file (#9999999.09). The original education topic to be copied is selected first. If the topic is prefixed with "VA-" the "VA-" will be stripped off the name automatically. The new name must be unique.

#### **PXTT EDIT EDUCATION TOPICS - Education Topic Add/Edit**

This option lets you create a new Education Topic or edit an Education Topic that was originally created at your site. Education topics distributed with the PCE package can be inactivated using "Activate/Inactivate Table Items."

**PXTT EDIT EXAM - Examinations Add/Edit**

This option allows you to create a new name to represent an examination type or edit an examination type that was originally created at your site.

The examination types originally distributed by PCE are a breakdown of potential categories of exams within a Physical Exam.

**PXTT EDIT HEALTH FACTORS - Health Factors Add/Edit**

This option allows the user to create a new Health Factor or edit a Health Factor that was originally created at your site.

**PXTT EDIT IMMUNIZATIONS - Immunizations Add/Edit**

This option allows a user to create a new Immunization type or edit an existing Immunization type that was originally created at your site.

**PXTT EDIT SKIN TESTS - Skin Tests Add/Edit**

This option allows a user to create a new Skin Test table entry or edit a Skin Test table entry that was originally created at your site.

**PXTT EDIT TREATMENT - Treatments Add/Edit**

This option allows a user to create a new Treatment or edit a Treatment that was originally created at your site.

## **PCE Information Only Menu**

This is a menu of options that list information about the files/tables used by the Patient Care Encounter (PCE) package. Some of the files/tables determine what clinical data will be collected as the sites' clinical terminology for specific categories of data such as Immunizations, Skin Tests, Patient Education, and Treatments. Below is a description of the options.

### **PXTT LIST ACTIVE EDUC TOPICS - Active Educ. Topic List - Detailed**

This lists the current detailed definition of the goals and standards defined for the active education topics.

### **PXTT LIST ALL EDUC TOPICS - Education Topic List**

This option prints a brief list of ALL Education Topics using only two fields: Inactive Flag status and Topic Name.

### **PXTT INQUIRE EDUC TOPIC - Education Topic Inquiry**

This option can be used to print the definition of a specific Education Topic definition.

### **PXTT LIST EXAMS - Exam List**

This option lists all of the exam names, with their Active Status, that are defined in the Exam file for use with PCE.

### **PXTT LIST HEALTH FACTORS - Health Factor List**

This option lists the Health Factors by Category, with their Active Status, that have been defined in the Health Factor file for use with PCE.

### **PXTT LIST IMMUNIZATIONS - Immunization List**

This option lists all immunizations, with their Active Status, which have been defined in the Immunization file for use with PCE. Note: To see what CPT codes may be related to the immunization entries, print the PCE Code Mapping List.

### **PXTT LIST SKIN TESTS - Skin Test List**

This option lists all skin tests, with their Active Status, that have been defined in the Skin Test file for use with PCE.

### **PXTT LIST TREATMENTS - Treatment List**

This option lists all treatments, with their active status, that have been defined in the Treatment file for use with PCE

#### PX PCE CODE MAPPING LIST - PCE Code Mapping List

This option allows the user to see the mapping between CPT codes and a related entry in a PCE supporting file. For example, the CPT code 90732 is related to the Immunization file entry PNEUMOCCOCAL. PCE uses the code mapping relationships to populate multiple files from one data entry step. For example, an entry of PNEUMOCCOCAL in the V Immunization file will also create a CPT entry, 90732 in the V CPT file which is then passed to PIMS.

#### **PCE Reminder Maintenance Menu**

This is the menu for editing reminder logic and making queries about the files involved with Clinical Reminders and Clinical Maintenance components in the Health Summary package. The taxonomy feature of PCE contains expert rules that can provide very timely and pertinent patient information to clinicians on Health Summaries. See the Implementation section of this manual and Appendices A of the PCE User Manual for more detailed information about developing and customizing clinical reminders. Below is a description of the options.

#### PXRM REMINDERS LIST - List Reminder Definitions

Lists the PCE reminder/maintenance items with their definitions. Active items may be selected for use in the Clinical Reminder and Clinical Maintenance components of the Health Summary package.

#### PXRM REMINDER INQUIRY - Inquire About Reminder Item

Allows a user to display the definition of how a clinical reminder/health maintenance item is used in the Health Summary "Clinical Reminder" and "Health Maintenance" components.

#### PXRM REMINDER EDIT - Add/Edit Reminder Item

This option is used to edit the PCE Reminder/ Maintenance Item definitions. Several predefined reminder/maintenance items are distributed with the PCE package based on the Ambulatory Care EP Preventive Health Maintenance Guidelines. Sites may define their own Age Findings, Results Findings, Taxonomy, and Health Factor findings. They may also create routines for computed findings where necessary. Result findings at each site may require modification to represent local use of clinical data named in supporting Lab test, Radiology, Education Topic, Health Factor and PCE Taxonomy data definitions. The distributed reminder item's "Technical Description" will help the coordinator ensure that the reminder definition is modified to reflect local guidelines for reminders.

#### **PXRM REMINDER COPY - Copy Reminder Item**

This option lets you copy an existing reminder item definition into a new reminder item in the PCE Reminder/ Maintenance Item file (#811.9). The original reminder item to be copied is selected first. If the original reminder item is prefixed with "VA-", the "VA-" will be stripped off the name automatically to create the name for the new reminder item. The new name must be unique. If the new name is not unique, you must enter a unique name for the new reminder item entry. If no name is provided, the new entry will not be created. Once a new name is defined for the new reminder item, the new reminder item can be edited to reflect the local reminder definition.

#### **PXRM (IN)/ ACTIVATE REMINDERS - Activate/Inactivate Reminders**

This option is used to make reminders active or inactive.

#### **PXRM TAXONOMY COPY - Copy Taxonomy Item**

This option allows you to copy an existing taxonomy definition into a new taxonomy entry in the PCE Taxonomy file (#811.2). The original taxonomy to be copied is selected first. If the original taxonomy is prefixed with "VA," the "VA-" will be stripped off the name automatically to create the name for the new taxonomy entry. The new name must be unique. If the new name is not unique, the user must enter a unique name for the new taxonomy entry. If no name is provided, the new entry will not be created. Once a new name is defined for the new taxonomy entry, the new taxonomy entry can be edited to reflect the local taxonomy definition.

#### **PXRM TAXONOMY EDIT - Edit Taxonomy Item**

This option is used to edit the PCE Taxonomy Item definitions. Several predefined taxonomy items are distributed with the PCE package based on the Ambulatory Care EP Preventative Health Maintenance Guidelines. The distributed taxonomy items all have a "VA-" prefix. To alter a VA- prefixed taxonomy item, first copy it to a different name and then edit the taxonomy to reflect your site's definition for the taxonomy.

#### **PXRM TAXONOMY INQUIRY - Inquire about a Taxonomy Item**

This option provides a detailed report of a Taxonomy item's definition, with a list of the actual ICD codes that will meet the taxonomy definition from the ICD Diagnosis and ICD Operation/Procedure files.

#### PXRM TAXONOMY LIST - List Taxonomy Definitions

This option lists the current definition of taxonomies defined in the PCE Taxonomy file. The PCE Taxonomy file is used to define the coded values from either ICD Diagnosis, ICD Operation/ Procedures, and CPT codes that can be viewed as being part of a clinical category (taxonomy). These taxonomy low and high range definitions are used in the Clinical Maintenance and Clinical Reminders components to determine if a patient has coded values in the clinical files that indicate the patient is part of the taxonomy.

#### PXRM (IN)/ ACTIVATE TAXONOMIES - Activate/Inactivate Taxonomies

This option allows you to activate/inactivate taxonomies.

### **PCE Clinical Reports**

The PCE Clinical Reports options provide clinicians and managers with data never before available. They extract data from various files in **VISTA**, including laboratory, pharmacy, and PIMS to create output reports which have been requested by physicians all over the VA. Below is a description of the options.

#### PXRR PATIENT ACTIVITY BY CL - Patient Activity by Clinic-

This report provides a summary of patient data for one or more clinics as a measure of continuity of care.

#### PXRR CASELOAD PROFILE BY CL - Caseload Profile by Clinic

This report generates a profile of the patients in a clinic's caseload, given a selected date range. One or more clinics or a stop code may be selected to represent the caseload; it combines PCE encounter, Lab, Radiology, Outpatient Pharmacy, and Admissions data, with report areas of demographics, preventive medicine, quality of care markers, and utilization.

#### PXRR CLINIC WORKLOAD - Workload by Clinic

This report provides a summary of clinic workload based on the evaluation and management codes associated with encounters occurring within a selected date range. The report will have the most complete information if it is run for a date range where clinic activities have been documented online. The representative period of time for the selected date range may be determined by clinical staff.

#### PXRR MOST FREQUENT DIAGNOSES - Diagnoses Ranked by Frequency

This report lists the most frequent diagnostic codes (ICD9) and the most frequent diagnostic categories.

**PXRR LOCATION ENCOUNTER COUNTS - Location Encounter Counts**

This report counts PCE outpatient encounters in a date range by location. The location selection can be based on facility, hospital location(s), or clinic stop(s). The report can be run for all hospital locations or clinic stops in a facility or selected hospital locations or clinic stops.

**PXRR PROVIDER ENCOUNTER COUNTS - Provider Encounter Counts**

This report lists provider counts related to PCE outpatient encounters (in detailed or summary reports). The selection criteria includes facility, service category, provider, and date range.

# File Descriptions

## ***PCE Patient Care Encounter Files***

<b>File Number</b>	<b>File Name</b>	<b>Global</b>	<b>Data</b>	<b>Journaling</b>
811.1	PCE Code Mapping	^PXD(811.1,	YES	
811.2	PCE Taxonomy	^PXD(811.2,	NO	
811.8	PCE Reminder Type	^PXD(811.8,	YES	
811.9	PCE Reminder/ Maintenance Item	^PXD(811.9,	YES	
815	PCE Parameters	^PX(815,	NO	
839.01	PXCA Device Interface Module Errors	^PX(839.01,	NO	ON
839.7	Data Source	^PX(839.7,	YES	
9000001	Patient/IHS	^AUPNPAT(	NO	ON
9000010.06	V Provider	^AUPNVPRV(	NO	ON
9000010.07	V POV	^AUPNVPOV(	NO	ON
9000010.11	V Immunization	^AUPNVIMM(	NO	ON
9000010.12	V Skin Test	^AUPNVSK(	NO	ON
9000010.13	V Exam	^AUPNVXAM(	NO	ON
9000010.15	V Treatment	^AUPNVTRT(	NO	ON
9000010.16	V Patient Ed	^AUPNVPED(	NO	ON
9000010.18	V CPT	^AUPNVCPT(	NO	ON
9000010.23	V Health Factors	^AUPNVHF(	NO	ON
9999999.06	Location	^AUTTLOC(	NO	
9999999.09	Education Topics	^AUTTEDT(	YES	ON
9999999.14	Immunization	^AUTTIMM(	YES	
9999999.15	Exam	^AUTTEXAM(	YES	
9999999.17	Treatment	^AUTTTRT(	YES	
9999999.27	Provider Narrative	^AUTNPOV(	NO	ON
9999999.28	Skin Test	^AUTTSK(	YES	
9999999.64	Health Factors	^AUTTHF(	YES	ON

### **811.1<sup>3</sup>/<sub>4</sub>PCE CODE MAPPING FILE**

This file is used to map entries from two different files such as between CPT codes and a related entry in a PCE supporting file. For example, the CPT code 90732 is related to the Immunization file entry PNEUMOCCOCAL. PCE uses the code mapping relationships to populate multiple files from one data entry step. For example, an entry of PNEUMOCCOCAL in the V Immunization file will also create a CPT entry, 90732 in the V CPT file which will then be passed to PIMS.

### **811.2<sup>3</sup>/<sub>4</sub>PCE TAXONOMY FILE**

This file stores the taxonomies used by the PCE/Reminders/Maintenance sub-module. A Taxonomy entry in this file allows the coded values in another file to be related as a group, identified by the taxonomy name. Once entries are defined in this file, they can be referenced in the PCE Reminders/ Maintenance Item file to define a group of codes to use for reminders/maintenance. The taxonomy entries may be defined in ranges for ICD Diagnosis, ICD Operation/Procedure, and CPT-coded values.

### **811.8<sup>3</sup>/<sub>4</sub>PCE REMINDER TYPE FILE**

This file contains the names of reminder types.

### **811.9<sup>3</sup>/<sub>4</sub>PCE REMINDER/MAINTENANCE ITEM FILE**

This file contains the names of reminders and their definitions which can be selected for use in the Health Summary package components:

#### **PCE CLINICAL REMINDERS**

This component evaluates patient findings to determine if the reminder is "DUE NOW."

#### **PCE CLINICAL MAINTENANCE**

This component evaluates patient findings and reports the findings or lack of findings used to determine if the reminder is due.

### **815<sup>3</sup>/<sub>4</sub>PCE PARAMETERS FILE**

This file has one entry which contains parameters used by PCE. Users can set defaults for start-up views (Appointment or Encounter lists), for a range of dates that will be displayed, whether to display warnings if no diagnoses or procedures are passed, and several Health Summary/Reminders/Reports parameters.

### **839.01<sup>3</sup>/<sub>4</sub>PCE DEVICE INTERFACE MODULE ERROR FILE**

This file holds the PXCA and P XKERROR variables when P XK returns error(s) to the device interface.

### **839.7¾DATA SOURCE FILE**

This file holds the names of the sources that PCE receives encounter data from — scanning devices, scheduling package, PCE User Interface, etc.

### ***V Files¾Files originally from Indian Health Service and involved in Joint Sharing***

In all V-files, the patient name is a pointer to the IHS Patient file, and the visit is a pointer to the visit file. Both of these must exist before data can be entered into any V file. The .01 field may be duplicated in multiple records. Also, a V file can have multiple entries for a visit, to capture multiple procedures, etc. For example, a patient may have several performed; each one would be a separate entry in V-CPT, each pointing to the same patient and visit.

### **9000010¾VISIT**

This file contains a record of all patient visits at health care facilities or by health care providers, including direct outpatient and clinic visits, as well as inpatient encounters with providers of care. All other visit related files, such as purpose of visit (diagnoses), operative procedures, immunizations, examinations, etc. will point to a visit in this file. The records are maintained by date/time of visit, and the patient name field is a pointer to the IHS Patient file, where the patient must exist before data can be added here.

### **9000010.06¾V PROVIDER**

Stores providers related to a visit. There can be multiple providers for a given visit. The primary/ secondary field identifies which provider is considered the primary provider for this visit.

### **9000010.07¾V POV**

Stores problems treated at a visit. At least one purpose of visit (POV) is required for workload and billing purposes for each patient outpatient visit, regardless of the discipline of the provider (i.e. dental, CHN, mental health, etc.). There is no limit to the number of POVs that can be entered for a patient for a given encounter.

### **9000010.11¾V IMMUNIZATION**

This file contains immunizations specific to a particular visit for a particular patient.

**9000010.12<sup>3</sup>/<sub>4</sub>V SKIN TEST**

Stores skin tests done at a visit. There will be one record for each type of skin test given to a patient on a given visit. The record is normally created when a skin test is given, and the results, if available, are entered at a later date and matched to the original record. If results are entered and a skin test given does not exist, a new record is created.

**9000010.13<sup>3</sup>/<sub>4</sub>V EXAM**

Stores exams done at a visit which do not map to a CPT code. This file contains exam information specific to a particular visit for a particular patient.

**9000010.15<sup>3</sup>/<sub>4</sub>V TREATMENT**

Stores miscellaneous clinical data not fitting into any other V-file global. This file contains a record for each treatment provided to a patient on a given patient visit. There will be multiple treatment records for the same treatment (.01) field based on the date on which it was given.

**9000010.16<sup>3</sup>/<sub>4</sub>V PATIENT ED**

Stores patient education done at a visit.

**9000010.18<sup>3</sup>/<sub>4</sub>V CPT**

Stores CPT-related services performed at a visit.

**9000010.23<sup>3</sup>/<sub>4</sub>V HEALTH FACTORS**

Stores patient health factors as of the visit date.

***Supporting Files (evolved from IHS/VA Joint Sharing)*****9000001<sup>3</sup>/<sub>4</sub>Patient/IHS**

This file is IHS's primary patient data file. The NAME (.01) field of this file is a pointer to the VA's patient file (#2). Fields in common between the two dictionaries actually exist only in the VA patient file and are referenced by the IHS patient file as computed fields. All other files containing patient data have backward pointers linking them to this file. The linkage is by patient name and the internal FileMan generated number of the ancillary file is the same number used in this file.

**9999999.06<sup>3</sup>/<sub>4</sub>LOCATION**

Dinumed to the Institution file (#4).

### **9999999.09<sup>3</sup>/<sub>4</sub>EDUCATION TOPICS**

This file contains Patient Education Topics. Patient Education topics are subjects on which a patient needs may receive additional health-related information to facilitate better health care habits. For example, a patient may have had some podiatry work done and therefore was instructed with information about "foot care." The "foot care" information is in this file. It is pointed to by the V Patient Ed file.

### **9999999.14<sup>3</sup>/<sub>4</sub>IMMUNIZATION**

This file contains a list of Immunizations and is pointed to by the V Immunization file. This file contains a full descriptive name for each Immunization, a shortened name of ten characters which is used in the Health Summary Immunization components and on other clinical reports.

### **9999999.15<sup>3</sup>/<sub>4</sub>EXAM**

This file contains a list of Physical Exams and associated codes used to document Examinations performed during an Outpatient or Inpatient Encounter. This file is pointed to by V Exam file. Some of the Exams are used in Surveillance Computations.

### **9999999.17<sup>3</sup>/<sub>4</sub>TREATMENT**

This file contains Patient Treatments which are not included in the CPT codes, but are needed for clinical documentation. This file is pointed to by the V Treatment file. These treatments generally reflect nursing activities performed during a patient encounter, such as ear irrigation, or instructions or counseling given to a patient for a medical problem.

### **9999999.27<sup>3</sup>/<sub>4</sub>PROVIDER NARRATIVE**

This file contains each unique NARRATIVE QUALIFIER.

### **9999999.28<sup>3</sup>/<sub>4</sub>SKIN TEST**

This file contains Skin Tests and their associated codes. It is pointed to by V Skin Test.

### **9999999.64<sup>3</sup>/<sub>4</sub>HEALTH FACTORS**

This file contains Health Factors terms or phrases which describe patient health characteristics (e.g., Current Smoker, Non-Tobacco User), and is pointed to by V Health Factors file. Some entries in this file are categories, used to group related health factors (e.g., Smoking).

## Archiving and Purging

Archiving and purging utilities are not provided in this version of PCE. Initially, PCE was developed to provide a longitudinal database which would document patient care activities.

# Callable Routines

This package provides APIs as callable entry points for use by other developers, as well as those of the PCE Device Interface, which are described in Appendix A of this manual. These APIs and entry points are all by subscription only.

## *PCE APIs*

### **\$\$INTV^PXAPI(WHAT,PKG,SOURCE,.VISIT,.HL,.DFN,APPT,LIMITDT,ALLHLOC)**

This API should be used by subscribing packages to prompt for Visit and related V-file data. The parameters passed by the subscribing packages determine which prompts will be displayed. If VISIT, HL or DFN are passed by reference (.), a value will be returned for those variables.

#### Parameter Description:

##### **1. WHAT**

Required parameter that defines the series of prompts that will be displayed.

- INTV - Includes all prompts for the checkout interview:

1. Patient (if not defined)
2. Hospital Location (if not defined)
3. Appointment/Eligibility (Call to Scheduling API if the encounter is not associated with an appointment and is a new encounter.)
4. Check Out Date/Time
5. Service Connected/Classification Questions
  - Service Connected
  - Agent Orange Exposure
  - Ionizing Radiation Exposure
  - Persian Gulf Exposure
  - Military Sexual Trauma
  - Head and/or Neck Cancer
  - Combat Veteran
6. Provider (multiple)
  - Provider
  - Primary/Secondary Designation
7. Procedures (multiple)
  - CPT code
  - Quantity
8. Diagnosis (multiple)
  - ICD9 code
  - Primary/Secondary Designation

9. Stop Code (multiple) *Discontinued after 10/1/96*  
Stop code

- PRV - Includes all prompts for provider information (multiple):
  1. Provider
  2. Primary/Secondary Designation
  
- POV - Includes all prompts for diagnosis information (multiple):
  1. ICD9 code
  2. Primary/Secondary Designation
  
- CPT - Includes prompts for procedure information and allows association of data with a provider (multiple):
  1. Provider
  2. Primary/Secondary Provider Designation
  3. CPT code
  4. Quantity
  
- SCC - Includes prompts for service connected conditions and classification questions:
  1. Service Connected
  2. Agent Orange Exposure
  3. Ionizing Radiation Exposure
  4. Persian Gulf Exposure
  5. Military Sexual Trauma
  6. Head and/or Neck Cancer
  
- CODT - Includes prompt for check-out date/time:
  1. Date/time Checked Out
  
- ADQ - Includes all administrative prompts related to the interview:
  1. Patient (if not defined)
  2. Hospital Location (if not defined)
  3. Appointment/Eligibility (API called if encounter is not associated with an appointment)
  4. Check Out Date/Time
  5. Service Connected
  6. Agent Orange Exposure
  7. Ionizing Radiation Exposure
  8. Persian Gulf Exposure
  9. Military Sexual Trauma
  10. Head and/or Neck Cancer

- STP - Includes prompt for a stop code (multiple):

1. Stop Code

## **2. PKG**

Required parameter that is the designated namespace for the package as defined in the Package file or is a pointer to the Package file (9.4).

## **3. SOURCE**

Required parameter that is used for auditing purposes and defines the data collection source. This parameter could be the calling routine or a description of the caller, e.g., PIMS CHECKOUT, PXCE DATA ENTRY, PANDAS, TELEFORM. It will be added to the PCE Data Source file (839.7).

## **4. VISIT**

Required parameter except when “INTV” and “ADQ” are called. This parameter defines the encounter and is a pointer to the Visit file (9000010).

## **5. HL**

Optional parameter (passed if known) that defines the hospital location for the encounter and points to the Hospital Location file (44). If the subscribing package knows the hospital location, it should be passed to avoid unnecessary prompting.

## **6. DFN**

Required parameter if there is no known visit (VISIT) and there is an appointment (APPT); otherwise, it is an optional parameter (passed if known) that defines the patient and points to the Patient/IHS file (9000001). If the subscribing package knows the patient, it should be passed to avoid unnecessary prompting.

## **7. APPT**

Optional parameter that points to the Appointment subfile (2.98) of the Patient file (2). This parameter defines the appointment date/time.

## **8. LIMITDT**

Optional parameter that prevents the user from creating a visit before this date (in FileMan format).

## **9. ALLHLOC**

Optional parameter. If this parameter is 1, any Hospital Location can be selected at the Clinic prompt. If this parameter is 0, null, or non-existent, only *clinics* can be selected at the Clinic prompt.

Returned Variables:

If VISIT, HL or DFN are passed by reference (.), a value will be returned for those variables.

- 1 When the call to the API is successful; no errors were encountered.
- 0 When user up-arrows out. Minimally, a visit exists. Other processing may have occurred.
- 1 When user up-arrows out or errors out and nothing has been processed.
- 2 When no visit was created and no subsequent processing occurred.
- 3 When the API was incorrectly called.

## **\$\$DELVFILE^PXAPI(WHICH,VISIT,PKG,SOURCE,ASK,ECHO,USER)**

This function may be used to delete data from the Visit file (9000010) and V files, including V CPT (9000010.18), V EXAM (9000010.13), V HEALTH FACTORS (9000010.11), V PATIENT ED (9000010.16), V POV (9000010.07), V PROVIDER (9000010.06), V SKIN TEST (9000010.12) and V TREATMENT (9000010.15).

### Parameter Description:

#### **1. WHICH**

(required) An ^ delimited string where two or three characters separated by an ^ designate the V file from which data should be deleted, e.g., "PRV^POV^CPT^HF". "ALL" may be used to delete data from all V files. VISIT is the string which will delete the administrative data and STOP is the string which will delete the additional stop codes. An example of a function call which will delete data typically deleted through Delete Check Out is:

```
$$DELVFILE^PXAPI("ALL",VISIT,,1,1)
```

Possible individual strings which may be included in WHICH include:

ALL	To delete all items
CPT	To delete procedures
HF	To delete health factors
IMM	To delete immunizations
PEP	To delete patient education
POV	To delete problem of visit (diagnoses)
PRV	To delete provider
SK	To delete skin tests
STOP	To delete additional stop codes. The primary clinic stop will not be deleted.
TRT	To delete treatments
VISIT	To delete Service Connected, Classification question data, checkout date.
XAM	To delete examinations

#### **2. VISIT**

(required) A number which is a pointer to the VISIT file (9000010). This is the visit for which related data will be deleted.

#### **3. PKG**

(optional) The internal entry number of the package in the Package file (9.4) or the namespace for the package. If passed, only items created by this package will be deleted.

#### **4. SOURCE**

(optional) A string denoting the source of the data. This is an entry in the Data Source file (839.7). If passed, only items created by this source will be deleted.

#### **5. ASK**

(optional) If ASK is passed and it does not equal 0 or "", then PCE will prompt the user to verify that they want to delete the data before proceeding with the deletions. PCE recommends setting ASK to 1 to indicate that the user should be asked to confirm that the data should be deleted.

#### **6. ECHO**

(optional) If ECHO is passed and it does not equal 0 or "", then PCE will display to the user what is being deleted. PCE recommends setting ECHO to 1 to indicate that the data deletions should be displayed to the user, e.g.,

Deleting Procedures  
Deleting Providers  
Deleting Diagnoses

The message will be displayed only if data has been deleted.

#### **7. USER**

(optional) Set USER to the user's DUZ to restrict deletion of data to those entries created by the user. If USER is not passed, is equal to 0 or "", PCE will not apply deletion restriction based on the user.

#### Returned Value:

- 1 If no errors occurred and deletion processed completely.
- 0 If errors occurred but deletion processed completely as possible.
- 1 User indicated that the data should not be deleted, or User up-arrowed out, or errors occurred. In any case, nothing was deleted.
- 2 If unable to identify a valid VISIT.
- 3 If API was called incorrectly.

## **\$\$VISITLST^PXAPI(DFN,BEGINDT,ENDDT,HLOC,SCREEN,APPT,PRMPT)**

Use this API to display a list of encounters. This is an interactive API that allows the user to enter "A" to ADD a new encounter or to select an encounter to edit or delete. If no date range is passed, all entries in the Visit file (9000010 ) for the identified patient will be included in the list. If the HLOC is not passed, all entries in the Visit file (9000010) for the identified patient will be included in the list. If SCREEN is not passed, all encounters, except those that represent historical encounters, will be included in the list. If APPT is not passed, no appointment/encounter relationship will be assessed. If PRMPT is not passed or is null, only selection of an item from the list will be enabled.

### Parameter Description:

#### **1. DFN**

(required) This number represents the patient and is the internal entry number of the Patient's entry in the Patient/IHS file (9000001) which is dinumed to the Patient file (2).

#### **2. BEGINDT**

(optional) This is the beginning date, in an INTERNAL FORMAT, of the date range. If no date range is passed, all entries in the Visit file (9000010 ) for the identified patient will be included in the list.

#### **3. ENDDT**

(optional) This is the ending date, in an INTERNAL FORMAT, of the date range. If no date range is passed, all entries in the Visit file (9000010 ) for the identified patient will be included in the list.

#### **4. HLOC**

(optional) This is the Hospital Location. It is a pointer to the Hospital Location file (44). This restricts display of encounters to those associated with this hospital location. If the HLOC is not passed, all entries in the Visit file (9000010) for the identified patient will be included in the list.

#### **5. SCREEN**

(optional) This is a screen based on the Primary field (15003) and Service Category field (.07) of the Visit file (9000010). It is a set of codes that represents an encounter type, e.g., primary, occasion of service, stop code. More than one code may be used, e.g., PO. If SCREEN is not passed, all encounters, except those that represent historical encounters, will be included in the list. If the screen includes E, only historical encounters will be displayed. If the screen does not include E, only non-historical encounters will be displayed.

- A Occasions of service that are passed to PCE by ancillary packages using DATA2PCE^PXAPI.
- P Primary visits are encounters created for appointments and standalones either through manual data entry or via DATA2PCE^PXAPI.
- O Occasions of Service are encounters that are created when data for an ancillary package such as Radiology or Laboratory is manually entered through Scheduling or PCE. Assignment of this code is determined based on a managed set of stop codes provided by ancillary packages.
- S Stop Codes are child encounters that are created to store additional stop codes for a parent encounter. This will be discontinued after 10/1/96.
- E Historical Encounters are encounters that document clinical activities. They are not associated with an appointment and are not used for billing or workload purposes. Use "XE" to display all historical encounters. This screen must be used in combination with one of the other codes.
- X All encounters, excluding historical encounters. "X" is the default when no SCREEN is defined.

## 6. APPT

(optional) This determines the contents of the encounter list--whether the encounters include appointments and standalones, just appointments or just standalones. If APPT is not passed, no appointment/encounter relationship will be assessed.

- 1 Display only encounters related to an appointment.
- 0 Don't screen on encounter/appointment relationship.
- 1 Display only encounters not related to an appointment (standalones).

## 7. PRMPT

(optional) This determines the prompt used by the API. If PRMPT is not passed or null, only selection of an item from the list will be enabled.

- A Includes ADD in the prompt.
- D Includes DELETE in the prompt.

### Returned Value:

- >0 Internal entry number of the selected encounter, IEN in the Visit file (9000010)
- A User indicated to ADD an encounter.
- D^IEN User selected an encounter to DELETE.
- 1 No visit selected
- 2^Text Error encountered. Text documents error.

## **\$\$ENCEDIT^PXAPI(WHAT,PKG,SOURCE,DFN,BEGDT,ENDT,HLOC,SCREEN,APPT,PRMPT)**

This is an interactive API that may be called to display a list of encounters for selection. It allows adding a new encounter, or selecting an encounter to edit or delete. If the user indicates that an encounter should be added, an entry will be created in the Visit file (9000010), and the user will be prompted based on the WHAT parameter. If an encounter is selected to edit, the user will be prompted based on the WHAT parameter. If an encounter is selected for deletion, all data associated with the encounter will be deleted, and the entry in the Visit file will be assessed for deletion and deleted if possible.

### Parameter Description:

#### **1. WHAT**

(required) This parameter is string text that identifies the set of prompts.

- INTV - Includes all prompts for the checkout interview:

1. Patient (if not defined)
2. Hospital Location (if not defined)
3. Appointment/Eligibility (Call to Scheduling API if the encounter is not associated with an appointment and is a new encounter.)
4. Check Out Date/Time
5. Service Connected/Classification Questions
  - Service Connected
  - Agent Orange Exposure
  - Ionizing Radiation Exposure
  - Persian Gulf Exposure
  - Military Sexual Trauma
  - Head and/or Neck Cancer
  - Combat Veteran
6. Provider (multiple)
  - Provider
  - Primary/Secondary Designation
7. Procedures (multiple)
  - CPT code
  - Quantity
8. Diagnosis (multiple)
  - ICD9 code
  - Primary/Secondary Designation
9. Stop Code (multiple) *Discontinued after 10/1/96*
  - Stop code

- ADQ - Includes all administrative prompts related to the interview:

1. Patient (if not defined)
2. Hospital Location (if not defined)
3. Appointment/Eligibility (API called if encounter is not associated with an appointment)
4. Check Out Date/Time
5. Service Connected
6. Agent Orange Exposure
7. Ionizing Radiation Exposure
8. Persian Gulf Exposure
9. Military Sexual Trauma
10. Head and/or Neck Cancer

## **2. PKG**

(required) This parameter is the assigned package Namespace as designated in the Package file (9.4) or is a pointer to the Package file (9.4).

## **3. SOURCE**

(required) This parameter is used for auditing purposes and defines the data collection source. This parameter could be the calling routine or a description of the caller, e.g., PIMS CHECKOUT, PXCE DATA ENTRY, PANDAS, TELEFORM. It will be added to the PCE Data Source file (839.7).

## **4. DFN**

(required) This parameter represents the patient and is the internal entry number of the Patient's entry in the Patient/IHS file (9000001) which is dinumed to the Patient file (2).

## **5. BEGDT**

(optional) This is the beginning date, in an INTERNAL FORMAT, of the date range. If no date range is passed, all entries in the Visit file (9000010) for the identified patient will be returned.

## **6. ENDT**

(optional) This is the ending date, in an INTERNAL FORMAT, of the date range. If no date range is passed, all entries in the Visit file (9000010) for the identified patient will be returned.

## **7. HLOC**

(optional) This is the Hospital Location. It is a pointer to the Hospital Location file (44). This restricts display of encounters to those associated with this hospital location. If HLOC is not passed, all encounters for the identified patient, irrespective of the hospital location, will be returned.

## **8. SCREEN**

(optional) This is a screen based on the Primary field (15003) and Service Category field (.07) of the Visit file (9000010). It is a set of codes that represents an encounter type, e.g., primary, occasion of service, stop code. More than one code may be used, e.g., PO. If SCREEN is not passed, all encounters, except those that represent historical encounters, will be included in the list. If the screen includes E, only historical encounters will be displayed. If the screen does not include E, only non-historical encounters will be displayed.

- A Occasions of service that are passed to PCE by ancillary packages using DATA2PCE^PXAPI.
- P Primary visits are encounters created for appointments and standalones either through manual data entry or via DATA2PCE^PXAPI.
- O Occasions of Service are encounters that are created when data for an ancillary package such as Radiology or Laboratory is manually entered through Scheduling or PCE. Assignment of this code is determined based on a managed set of stop codes provided by ancillary packages.
- S Stop Codes are child encounters that are created to store additional stop codes for a parent encounter. This will be discontinued after 10/1/96.
- E Historical Encounters are encounters that document clinical activities. They are not associated with an appointment and are not used for billing or workload purposes. Use "XE" to display all historical encounters.
- X All encounters, excluding historical encounters. "X" is the default when no SCREEN is defined.

## **9. APPT**

(optional) This parameter determines the contents of the encounter list--whether the encounter include appointments and standalones, just appointments or just standalones. If APPT is not passed, no appointment/ encounter relationship will be assessed.

- 1 Display only encounters related to an appointment.
- 0 Don't screen on encounter/appointment relationship.
- 1 Display only encounters not related to an appointment (standalones).

## 10. PRMPT

(optional) This determines the prompt used by the API. If PRMPT is not passed or null, only selection of an item from the list will be enabled.

- A Includes ADD in the prompt.
- D Includes DELETE in the prompt.

### Returned Value:

- >0 Internal entry number of the selected encounter, IEN in the Visit file (9000010).  
D^Visit IEN User selected an encounter to DELETE.
- 1 No visit selected, user up-arrowed out, nothing done.
- 2^Text Error encountered. Text string documents error.
- 3^Text Deletion Errors. If deletion occurred, it was incomplete.

### **\$\$\$SWITCHD^PXAPI**

This is a non-interactive API called to get the SD/PCE switchover date.

#### Returned Value:

Switchover date

### **\$\$\$SWITCHCK^PXAPI(DATE)**

This is a non-interactive API called to determine if the date passed is before or after the SD/PCE switchover date.

#### Parameter Description

Date (in FileMan format) to compared to SD/PCE date.

#### Returned Value:

- 1 If the date passed on is on or after the switchover date.
- 0 If the date passed is before the switchover date.

### **\$\$\$SOURCE^PXAPI(SOURCE)**

This is a non-interactive API that converts external to internal format.

#### Parameter Description

The data source in the PCE DATA SOURCE file (#839.7).

#### Returned Value

Returns a pointer to the PCE DATA SOURCE file (#839.7).

## **PCE API to Replace EN3^SDACS**

**PURPOSE** - Provide a utility for ancillary packages such as Laboratory, Surgery, Medicine, Radiology, Text Integration Utility (TIU) and Computerized Patient Record System (CPRS) to non-interactively (silent) add/edit/delete data, including encounter, provider, diagnosis and procedure information.

Dr. Kizer's 10/1/96 mandate which requires a provider, a procedure and a diagnosis to positively document the occurrence of an encounter, and the resulting change to use this data rather than stop codes to document workload and initiate third party billing, necessitated the development of an application programmer interface (API) which would support the mandated requirements. PCE was tasked with developing the API. \$\$DATA2PCE^PXAPI was developed to enable the adding, editing and deletion of encounter, provider, diagnosis and procedure data. Data will be stored in the Visit and V files and will be posted on the P XK VISIT DATA EVENT for use by subscribing packages such as Scheduling.

All software that currently uses EN3^SDACS to report workload must be modified to use \$\$DATA2PCE^PXAPI. Ancillary packages such as Laboratory, Radiology and Integrated Billing must provide a patch which includes this modification for testing with the Ambulatory Care Reporting Project on June 15, 1996.

This document includes:

1. Definitions and Conventions used to describe the API.
2. Description of \$\$DATA2PCE^PXAPI, its parameter definitions, and the returned values.
3. A table which describes the subscripts used for passing data to PCE.
4. An example array for passing data to PCE.

This API will be supported by subscription.

## **DEFINITIONS AND CONVENTIONS**

1. Valid data values: [ 1 | 0 | null ]  
    '1' Denotes TRUE or YES  
    '0' Denotes FALSE or NO  
    null Denotes VALUE NOT KNOWN
2. Counter: "i" is used as a subscript. It denotes a sequence number, i.e., 1, 2, 3.
3. To denote deletion of a data ITEM, pass the "@" symbol as the data value in the node for the item being deleted. You may not delete required data items.
4. To denote deletion of an ENTRY, pass "1" as the data value in the "DELETE" node of the identified entry.

## **\$\$DATA2PCE^PXAPI(INPUT\_ROOT,PKG,SOURCE,.VISIT,USER,ERR\_DISPLAY))**

This is a function which will return a value identifying the status of the call. Data that is processed by PCE will be posted on the PCK VISIT DATA EVENT protocol.

### Parameter Description:

#### **1. INPUT\_ROOT**

(required) Where INPUT\_ROOT is a unique variable name, either local array or global array, which identifies the defined data elements for the encounter. An example of an INPUT\_ROOT is ^TMP("LRPXAPI",\$J) or ^TMP("RAPXAPI",\$J). The gross structure of the array includes four additional subscripts (ENCOUNTER, PROVIDER, DX/PL, PROCEDURE and STOP) for defining the data passed. A detailed description of this array and its structure are included below in a table format.

#### **2. PKG**

(required) Where PKG is a pointer to the Package File (9.4).

#### **3. SOURCE**

(required) Where SOURCE is a string of text (3-30 character) identifying the source of the data. The text is the SOURCE NAME field (.01) of the PCE Data Source file (839.7). If the SOURCE currently does not exist in the file, it will be added. Examples of SOURCE are: "LAB DATA" or "RADIOLOGY DATA" or "PXCE DATA ENTRY" or "AICS ENCOUNTER FORM."

#### **4. VISIT**

(optional) Where VISIT is a pointer to the Visit file (9000010) which identifies the encounter which this data should be associated with.

#### **5. USER**

(optional) User who is responsible for add/edit/delete action on the encounter. Pointer to the New Person file (200). If USER is not defined, DUZ will be used.

#### **6. ERR\_DISPLAY**

(optional) To display errors during development, this variable may be set to "1". If it is defined the errors will be displayed on screen when the error occurs. If ERR\_DISPLAY is not defined, errors will be posted on the defined INPUT\_ROOT subscripted by "DIERR". BLD^DIALOG is used to manage errors. Review BLD^DIALOG and MSG^DIALOG descriptions included in the FileManager v. 21.0 Programmer Manual on pages 189 - 200.

Returned Value:

- 1 If no errors occurred and data was processed.
- 1 An error occurred. Data may or may not have been processed. If ERR\_DISPLAY is undefined, errors will be posted on the INPUT\_ROOT subscribed by "DIERR".
- 2 Unable to identify a valid VISIT. No data was processed.
- 3 API was called incorrectly. No data was processed.

## ENCOUNTER

All data must be associated with an entry in the VISIT file (9000010). Only one “ENCOUNTER” node may be passed with each call to \$\$DATA2PCE^PXAPI. The “ENCOUNTER” node documents encounter specific information and must be passed:

1. To create an entry in the VISIT file (9000010). All provider, diagnosis and procedure data is related to an entry in the VISIT file.
- 2.. To enable adding, editing or deleting “ENCOUNTER” node data elements. When encounter data elements are not added, edited or deleted, the VISIT parameter may be passed in lieu of defining an “ENCOUNTER” node.

SUBSCRIPT	DESCRIPTION	REQ/ OPT	DATA FORMAT
"ENCOUNTER",1,"ENC D/T")	This is the encounter date/ time for primary encounters or the date for occasions of service. If the encounter is related to an appointment, this is the appointment date/time. If this is an occasion of service created by an ancillary package, this is the <u>date/time</u> of the instance of care.  Imprecise dates are allowed for historical encounters. Encounter date/time may be added, but not edited. *Deletions of encounters can occur only when nothing is pointing to the encounter.	R	FileManager Internal Format for date/time
"ENCOUNTER",1,"PATIENT")	This is the patient DFN. This cannot be edited or deleted.	R	Pointer to IHS Patient file (9000001)
"ENCOUNTER",1,"HOS LOC")	This is the hospital location where the encounter took place for primary encounters, or this is the ordering location for ancillary encounters.	R	Pointer to Hospital Location file (44)
"ENCOUNTER",1,"SC")	This encounter is related to a service connected condition.	O	[ 1   0   null ]

SUBSCRIPT	DESCRIPTION	REQ/ OPT	DATA FORMAT
“ENCOUNTER”,1,“AO”)	This encounter is related to Agent Orange exposure.	O	[ 1   0   null ]
“ENCOUNTER”,1,“IR”)	This encounter is related to Ionizing Radiation exposure.	O	[ 1   0   null ]
“ENCOUNTER”,1,“EC”)	This encounter is related to Environmental Contaminant exposure.	O	[ 1   0   null ]
“ENCOUNTER”,1,“MST”)	This encounter is related to Military Sexual Trauma.	O	[ 1   0   null ]
“ENCOUNTER”,1,“HNC”)	This encounter is related to Head and/or Neck Cancer via Nose and/or Throat Radium treatment.	O	[ 1   0   null ]
“ENCOUNTER”,1,“CV”)	This encounter is related to combat.	O	[ 1   0   null ]
“ENCOUNTER”,1,“CHECKOUT D/T”)	This is the date/time when the encounter was checked out.	O	FileManager Internal Format for date/time
“ENCOUNTER”,1,“ELIGIBILITY”)	This is the eligibility of the patient for this encounter.	O	Pointer to Eligibility Code file (8)
“ENCOUNTER”,1,“SERVICE CATEGORY”)	This denotes the type of encounter.	R	<p>A::=Ambulatory Should be used for clinic encounters. “A” s are changed to “I”s by Visit Tracking if patient is an inpatient at the time of the encounter.</p> <p>H::=Hospitalization Should be used for an admission.</p> <p>T::=Telecommunications</p> <p>E::=Event (Historical) Documents encounters that occur outside of this facility. Not used for workload credit or 3rd party billing.</p> <p>X::=Ancillary Package Daily Data. “X” s are changed to “D”s by Visit Tracking if patient is an inpatient at the time of the encounter.</p>

<b>SUBSCRIPT</b>	<b>DESCRIPTION</b>	<b>REQ/ OPT</b>	<b>DATA FORMAT</b>
"ENCOUNTER",1,"DSS ID")	*This is required for ancillary occasions of service such as laboratory and radiology or telephone encounters	*O	Pointer to Clinic Stop file (40.7)
"ENCOUNTER",1,"APPT")	This is the appointment type of the encounter.	O	Pointer to Appointment Type file (409.1)
"ENCOUNTER",1,"ENCOUNTER TYPE")	This identifies the type of encounter, e.g., primary encounter, ancillary encounter, etc. A "Primary" designation indicates that the encounter is associated with an appointment or is a standalone. Examples of ancillary encounters include Laboratory and Radiology instances of care.	R	Set of Codes.  P::=Primary O::=Occasion of Service A::=Ancillary Ancillary packages such as Laboratory and Radiology should pass an "A"
"ENCOUNTER",1,"PARENT")	This is the parent encounter for which the ENCOUNTER is a supporting encounter. For example, this would be the primary encounter for which this occasion of service supports and should be associated.	O	Pointer to Visit file (9000010).
"ENCOUNTER",1,"COMMENT")	Comment	O	Free Text (1-245 characters)
"ENCOUNTER",1,"DELETE")	This is a flag that denotes deletion of the encounter entry. Encounter will not be deleted if other data is pointing to it.	O	[ 1   null ]

## PROVIDER

The "PROVIDER" node may have multiple entries (i) and documents the provider, indicates whether he/she is the primary provider, and indicates whether the provider is the attending provider. Comments may also be passed. To delete the entire "PROVIDER" entry, set the "DELETE" node to 1.

SUBSCRIPT	DESCRIPTION	REQ/ OPT	DATA FORMAT
"PROVIDER",i,"NAME")	Provider's IEN.	R	Pointer to NEW PERSON file (200)
"PROVIDER",i,"PRIMARY")	Indicator that denotes this provider as the "primary" provider for the encounter.	O	[ 1   0   null ]
"PROVIDER",i,"ATTENDING")	Indicator that denotes this provider as the attending provider.	O	[ 1   0   null ]
"PROVIDER",i,"COMMENT")	Comment	O	Free text (1 - 245 characters)
"PROVIDER",i,"DELETE")	This is a flag that denotes deletion of the Provider entry.	O	[ 1   null ]

## **DX/PL**

The “DX/PL” node may have multiple entries (i) and documents diagnoses and/or problems. Only active ICD-9-CM codes will be accepted. The “DX/PL” node adds diagnoses to the PCE database as well as adding an active or inactive diagnosis or problem to the Problem List. If a diagnosis or problem already exists on the Problem List, this node may be used to update it. To delete the entire “DX/PL” entry from PCE (not Problem List), set the “DELETE” node to 1.

<b>SUBSCRIPT</b>	<b>DESCRIPTION</b>	<b>REQ/ PCE</b>	<b>REQ/ PL</b>	<b>DATA FORMAT</b>
“DX/PL”,i,“DIAGNOSIS”)	Diagnosis code	R	O	Pointer to ICD9 Diagnosis file (80)
“DX/PL”,i,“PRIMARY”)	Code that specifies that the diagnosis is the “primary” diagnosis for this encounter. Only one “primary” diagnosis is recorded for each encounter.	O	N/A	[ 1   0   null ]
“DX/PL”,i,“LEXICON TERM”)	This is a term that is contained in the Clinical Lexicon.	O	O	Pointer to the Expressions file (757.01)
“DX/PL”,i,“PL IEN”)	This is the problem IEN that is being acted upon. *This node is required to edit an existing problem on the Problem List.	O	*O	Pointer to Problem List file (9000011)
“DX/PL”,i,“PL ADD”)	*This is required to Add a diagnosis/problem to the Problem List. “1” indicates that the entry should be added to the Problem List.	N/A	*O	[ 1   0   null ]
“DX/PL”,i,“PL ACTIVE”)	This documents whether a problem is active or inactive. The Default is Active if not specified.	N/A	O	A::=Active I::=Inactive
“DX/PL”,i,“PL ONSET DATE”)	The date that the problem began.	N/A	O	FileManager Internal Format for date.
“DX/PL”,i,“PL RESOLVED DATE”)	The date that the problem was resolved.	N/A	O	FileManager Internal Format for date.

SUBSCRIPT	DESCRIPTION	REQ/ PCE	REQ/ PL	DATA FORMAT
“DX/PL”,i,”PL SC”)	This problem is related to a service connected condition.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”PL AO”)	This problem is related to Agent Orange exposure.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”PL IR”)	This problem is related to Ionizing Radiation exposure.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”PL EC”)	This problem is related to Environmental Contaminant exposure.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”PL MST”)	This problem is related to Military Sexual Trauma.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”PL HNC”)	This problem is related to Head and/or Neck Cancer via Nose and/or Throat Radium treatment.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”PL CV”)	This problem is related to combat.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”NARRATIVE”)	The provider’s description of the diagnosis/problem. *If NARRATIVE is not passed for a diagnosis/problem, the Description from the ICD Diagnosis file (80) will be used as the default.	*O	*O	Free text (2-245 characters)
“DX/PL”,i,”PL MST”)	This problem is related to Military Sexual Trauma.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”PL HNC”)	This problem is related to Head and/or Neck Cancer.	N/A	O	[ 1   0   null ]
“DX/PL”,i,”CATEGORY”)	A term that denotes a grouping or category for a set of related diagnosis/problem.	O	N/A	Free text (2-245 characters)
“DX/PL”,i,”ENC PROVIDER”)	Provider who documented the diagnosis/problem.	O	R/ Add	Pointer to New Person file (200)

SUBSCRIPT	DESCRIPTION	REQ/ PCE	REQ/ PL	DATA FORMAT
"DX/PL",i,"EVENT D/T")	Date/Time Diagnosis was documented.	O	N/A	FileManager Internal Format for date/time
"DX/PL",i,"COMMENT")	Comment	O	O	DX Free Text (1-245 char) PL Free Text (3-60 char)
"DX/PL",i,"DELETE")	This is a delete flag used to denote deletion of the diagnosis entry.	O	N/A	[ 1   null ]

## PROCEDURE

The "PROCEDURE" node may have multiple entries (i). Only active CPT/HCPCS codes will be accepted. The "PROCEDURE" node documents the procedure(s), the number of times the procedure was performed, the diagnosis the procedure is associated with and the narrative that describes the procedure. It also enables documentation of the provider who performed the procedure, the date/time the procedure was performed and any comments that are associated with the procedure. To delete the entire "PROCEDURE" entry, set the "DELETE" node to 1.

SUBSCRIPT	DESCRIPTION	REQ/OPT	DATA FORMAT
"PROCEDURE",i,"PROCEDURE")	Procedure code	R	Pointer to CPT file (81)
"PROCEDURE",i,"MODIFIERS", MODIFIER=""	Modifiers associated with procedure.	O	External pointer to CPT Modifier file (81.3).
"PROCEDURE",i,"QTY")	Number of times the procedure was performed.	R	Whole number > 0
"PROCEDURE",i,"DIAGNOSIS")	The diagnosis that is associated with the identified procedure.	O	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"NARRATIVE")	The provider's description of the procedure performed. *If NARRATIVE is not passed for a procedure, the Short Name from the CPT file (81) will be used as the default.	*O	Free text (2-245 characters)
"PROCEDURE",i,"CATEGORY")	A term that denotes a grouping or category for a set of related procedures.	O	Free text (2-245 characters)
"PROCEDURE",i,"ENC PROVIDER")	Provider who performed the procedure.	O	Pointer to New Person file (200)
"PROCEDURE",i,"EVENT D/T")	Date/Time procedure was done.	O	FileManager Internal Format for date/time
"PROCEDURE",i,"COMMENT")	Comment	O	Free Text (1-245 characters)
"PROCEDURE",i,"DELETE")	This is a flag that denotes deletion of the Procedure entry.	O	[ 1   null ]

## EXAMPLE OF DATA PASSED USING \$\$DATA2PCE^PXAPI

Below is an example of data passed to \$\$DATA2PCE^PXAPI where Laboratory is the ancillary package reporting the data.

```
$$DATA2PCE^PXAPI ("^TMP ("LRPXAPI"" , $J)" , 182 , "LAB DATA" )
```

This is an example where Laboratory passes two laboratory tests (Glucose and CPK) which were collected on 4/20/96 at 9:30 a.m. The provider who resulted the tests is Fred Jones. This occasion of service is defined as an Ancillary Package Daily Data (X).

```
^TMP ("LRPXAPI" , 543173595 , "ENCOUNTER" , 1 , "DSS ID" ) = 59
^TMP ("LRPXAPI" , 543173595 , "ENCOUNTER" , 1 , "ENC D/T" ) = 2960420
^TMP ("LRPXAPI" , 543173595 , "ENCOUNTER" , 1 , "HOS LOC" ) = 24
^TMP ("LRPXAPI" , 543173595 , "ENCOUNTER" , 1 , "PATIENT" ) = 1030
^TMP ("LRPXAPI" , 543173595 , "ENCOUNTER" , 1 , "SERVICE CATEGORY" ) = X
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 1 , "ENC PROVIDER" ) = 58
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 1 , "EVENT D/T" ) = 2960420.093
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 1 , "PROCEDURE" ) = 82950
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 1 , "MODIFIER" , 22) = ""
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 1 , "QTY" ) = 1
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 2 , "ENC PROVIDER" ) = 58
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 2 , "EVENT D/T" ) = 2960420.093
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 2 , "PROCEDURE" ) = 82552
^TMP ("LRPXAPI" , 543173595 , "PROCEDURE" , 2 , "QTY" ) = 1
```

## External Relations

PCE is dependent upon the following **VISTA** packages:

<b>Package</b>	<b>Minimum Version</b>
Kernel	8.0
VA FileMan	21
Patient Information Management System (PIMS)	5.3
Order Entry/Results Reporting (OE/RR)	2.5
Automated Information Collection System (AICS)	2.1
PCE Patient/IHS Subset (PXPT)	1.0

## Package-wide Variables

No package-wide variables have been defined for use throughout the Patient Care Encounter package.

The PX namespace is reserved for use by PCE ; however, the joint sharing of files between the Department of Veterans Affairs and the Indian Health Service has necessitated use of some AU-name spaced variables established for use by the Indian Health Service and by the Department of Veterans Affairs to facilitate joint sharing.

# Generating On-line Documentation

## Routines

The namespace for the PCE package is PX. Some AU\* routines are distributed by PCE. Use the Kernel option, List Routines [XUPRROU], to print a list of any or all of the PCE routines. This option is found on the Routine Tools [XUPR-ROUTINE-TOOLS] menu on the Programmer Options [XUPROG] menu, which is a sub-menu of the Systems Manager Menu [EVE] option.

```
Select Systems Manager Menu Option: programmer Options
Select Programmer Options Option: routine Tools
Select Routine Tools Option: list Routines
Routine Print
Want to start each routine on a new page: No// [ENTER]
routine(s) ? > PX*
```

The first line of each routine contains a brief description of the general function of the routine. Use the Kernel option, First Line Routine Print [XU FIRST LINE PRINT] to print a list of just the first line of each Health Summary subset routine.

```
Select Systems Manager Menu Option: programmer Options
Select Programmer Options Option: routine Tools
Select Routine Tools Option: First Line Routine Print
PRINTS FIRST LINES
routine(s) ? >PX*
```

## Globals

Globals exported by PCE include ^PX, ^PXD, and ^AU\*. Use the Kernel option, List Global [XUPRGL], to print a list of any of these globals. This option is found on the Programmer Options menu [XUPROG], which is a sub-menu of the Systems Manager Menu [EVE] option.

```
Select Systems Manager Menu Option: programmer Options
Select Programmer Options Option: LIST Global
Global ^^PX*
```

## Files

The number-spaces assigned to PCE include 800-839.99, and 9000001, 900010.xx, and 9999999.xx. Use the VA FileMan option, List File Attributes [DILIST] to print a list of these files.

## XINDEX

XINDEX is a routine that produces a report called the VA Cross-Referencer. This report is a technical and cross-reference listing of one routine or a group of routines. XINDEX provides a summary of errors and warnings for routines that do not comply with VA programming standards and conventions, a list of local and global variables and what routines they are referenced in, and a list of internal and external routine calls. XINDEX is invoked from programmer mode: D ^XINDEX. When prompted to select routines, enter PX\*.

## Data Dictionaries

The Data Dictionaries (DDs) are considered part of the online documentation. Use VA FileMan option #8 (DATA DICTIONARY UTILITIES) to print DDs.

```
>D P^DI
VA FileMan 21.0
Select OPTION: DATA DICTIONARY UTILITIES
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES
  START WITH WHAT FILE: V MEASUREMENT// 9000010 VISIT
                                   (1 entry)
      GO TO WHAT FILE: VISIT// <RET>
Select LISTING FORMAT: STANDARD// <RET>
DEVICE: PRINTER
```

## Troubleshooting & Helpful Hints

- The Automated Information Collection System (AICS) package includes a Print Manager that allows sites to define reports that should print along with the encounter forms. This can save considerable time preparing and collating reports for appointments. See the *Automated Information Collection System User Manual* for instructions.
- You can add Health Summary, Problem List, and Progress Notes as actions to PCE, to allow quick access to these programs. When you press the [RETURN] key at the quit prompts (or up-arrow out), you are automatically returned to PCE.
- Since problems can occur if you delete patients (the internal entry number of the file can be reassigned, causing discrepancies in the data), we recommend that you NOT delete any patients.
- If clinical reminders are not showing up correctly on Health Summaries, see the PCE User Manual, Appendix A-7, for troubleshooting information which IRM staff with programmer access can access.
- If you see zeroes instead of numbers on encounter dates (e.g., 00/00/95 or 01/00/96)—on reports or encounter displays—they are for Historical Encounters where the exact date is not known.

- *Shortcuts*

After entering a diagnosis, a prompt for Provider Narrative appears. If you don't want to enter additional descriptive information, press the [ENTER] key, and the ICD9 short description for the diagnosis will be stored in the Provider Narrative field. (This only works if you're entering directly into the PCE user interface.)

- *More Shortcuts*

After Diagnosis has been entered, if the Provider Narrative is an exact match, you can enter = and the diagnosis will be duplicated here.

The equals sign (=) can also be used as a shortcut when selecting an action plus encounters or appointments from a list in a single response (e.g., Select Action: ED=2).

To quickly add or edit encounter information, select an appointment number at the first appointment screen.

## Device Interface Error Report

The PCE Device Interface Error Report lets you look up PCE device interface errors by Error Number, Error Date and Time, Encounter Date and Time, or by Patient Name.

Select PCE Coordinator Menu Option: die PCE Device Interface Error Report

Select one of the following:

ERN	Error Number
PDT	Processing Date and Time
EDT	Encounter Date and Time
PAT	Patient Name

Look up PCE device interface errors based on: ERN// Error Number

Enter the beginning error number: (1-4): 1// [ENTER]

Enter the ending error number: (1-4): 4// [ENTER]

DEVICE: HOME// [ENTER] VAX RIGHT MARGIN: 80// [ENTER]

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### PCE Device Interface Error Report

Report based on Error Numbers 1 through 26.

-----  
Error Number: 1

Patient: OUTPATIENT,TEST 123-45-6789  
Hospital Location: DIABETES CLINIC  
Encounter date: May 06, 1996@14:53:17  
Processing date: May 06, 1996@16:18:53

File: 9000010.07 (V POV) IEN: 0 Field .04 (PROVIDER NARRATIVE)  
Error message: Missing Required Fields  
Node: Missing  
Original: Missing  
Updated: Missing

File: 9000010.07 (V POV) IEN: 0 Field .04 (PROVIDER NARRATIVE)  
Error message: Missing Required Fields  
Node: Missing  
Original: Missing  
Updated: Missing **ETC.**

# Glossary

## **AICS**

Automated Information Collection System, formerly Integrated Billing, the program that manages the definition, scanning, and tracking of Encounter Forms.

## **Action**

A functional process that a clinician or clerk uses in the PCE computer program. For example, "Update Encounter" is an action that allows the user to pick an encounter and edit information that was previously entered (either through PCE or the PIMS Checkout process), or add new information (such as an immunization or patient education).

## **Ambulatory Care Data Capture project**

A project assigned to coordinate the efforts of various **VISTA** (DHCP) software packages to meet the 10/1/96 outpatient minimum data set mandate from the Under Secretary for Health.

## **Ancillary Service**

(Occasion of Service) A specified instance of an act of service involved in the care of the patient or consumer which is not an encounter.

## **Appointment**

A scheduled meeting with a provider at a clinic; an appointment can include several encounters involving other providers, tests, procedures, etc.

## **Checkout Process**

Part of Medical Administration (PIMS) appointment processing. The checkout process documents administrative and clinical data related to the appointment.

## **Clinician**

A doctor or other provider in the medical center who is authorized to provide patient care.

## **Encounter**

A contact between a patient and a provider who has responsibility for assessing and treating the patient at a given contact, exercising independent judgment. A patient can have multiple encounters per visit.

## **Encounter Form**

A paper form used to display and collect data pertaining to an outpatient encounter, developed by the AICS package.

### **Episode of Care**

Many encounters for the same problem can constitute an episode of care. An outpatient episode of care may be a single encounter or can encompass multiple encounters over a long period of time. The definition of an episode of care may be interpreted differently by different professional services even for the same problem. Therefore, the duration of an episode of care is dependent on the viewpoints of individuals delivering or reviewing the care provided.

### **Health Summary**

A Health Summary is a clinically oriented, structured report that extracts many kinds of data from **VISTA** and displays it in a standard format. The individual patient is the focus of health summaries, but health summaries can also be printed or displayed for groups of patients. The data displayed covers a wide range of health-related information such as demographic data, allergies, current active medical problems, laboratory results, etc.

### **Indian Health Service (IHS)**

IHS developed a computer program similar to VA's **VISTA**, which contains Patient Care Component (PCC) from which PCE and many of its components were derived.

### **Inpatient Visit**

Inpatient encounters include the admission of a patient to a VAMC and any clinically significant change related to treatment of that patient. For example, a treating specialty change is clinically significant, whereas a bed switch is not. The clinically significant visits created throughout the inpatient stay would be related to the inpatient admission visit. If the patient is seen in an outpatient clinic while an Inpatient, this is treated as a separate encounter.

### **Integrated Billing (IB)**

A **VISTA** package responsible for identifying billable episodes of care, creating bills, and tracking the whole billing process through to the passing of charges to Accounts Receivable (AR). Includes the Encounter Form utility.

### **MCCR**

Medical Care Cost Recovery, a **VISTA** entity which supports Integrated Billing and many data capture pilot projects related to PCE.

### **Minimum Data Set**

Each ambulatory encounter and/or ancillary service with associated provider, procedure, and diagnosis information must be reported to the National Patient Care Data Base (NPCDB), as of 10/1/96.

**NPCDB**

National Patient Care Data Base, a database located in the Austin Accounting Center.

**Occasion of Service**

A specified instance of an act of service involved in the care of a patient or consumer which is not an encounter. These occasions of service may be the result of an encounter; for example, tests or procedures ordered as part of an encounter. A patient may have multiple occasions of service per encounter or per visit.

**Outpatient Encounter**

Outpatient encounters include scheduled appointments and walk-in unscheduled visits. A clinician's telephone communications with a patient may be represented by a separate visit entry.

**Outpatient Visit**

The visit of an outpatient to one or more units or facilities located in or directed by the provider maintaining the outpatient health care services (clinic, physician's office, hospital/medical center) within one calendar day.

**Person Class**

As part of the October 1, 1996 mandate, VAMCs must collect provider information. The provider information reported is the "Person Class" defined for all providers associated with ambulatory care delivery. All VAMC providers must be assigned a Profession/ Occupation code (Person Class) so that a Person Class can be associated with each ambulatory patient encounter.

**Provider**

The entity which furnishes health care to a consumer. It includes a professionally licensed practitioner who is authorized to operate a health care delivery facility—an individual or defined group of individuals who provides a defined unit of health care services (defined = codable) to one or more individuals at a single session.

**Stop Code**

A three-digit number corresponding to an additional stop/service a patient received in conjunction with a clinic visit. Stop code entries are used so that medical facilities may receive credit for the services rendered during a patient visit. After 10/1/96, stop codes will become DSS Identifiers.

**Visit**

The visit of a patient to one or more units of a facility within one calendar day.

**Visit Tracking**

A **VISTA** utility that creates and manages entries in the Visit file which links patient-related information for patient encounters.

**VISTA**

Veterans Information System Technology Architecture, the new name for DHCP.

# Appendix A - Developer Guide - PCE Device Interface Module

## **Introduction**

This document provides information on the callable entry points and the PCE Device Interface module local array structures exported with PCE Version 1.0.

## **Intended Audience**

**VISTA** programmers

## **Conventions**

An Error Suspension file records data that fails the verification process or if there are errors in storing.

1. In listings of valid values [1 | 0 | null]
  - 1 denotes TRUE or YES
  - 0 denotes FALSE or NO
  - null denotes VALUE NOT SUPPLIED BY DATA CAPTURE APPLICATION
2. The PCE Device Interface uses a locally name-spaced array (called LOCAL in this document ) with the following gross structure to receive data from an external device. Developers should use an array in their namespace to represent the LOCAL array. It is possible that data from multiple providers was captured for the encounter. The ENCOUNTER node records information about the "main" provider. It is mandatory that this person be identified in the ENCOUNTER node. Data will NOT be moved to **VISTA** if such a provider is not identified on the ENCOUNTER node. The remaining nodes in the LOCAL( array [VITALS, DIAGNOSIS, PROCEDURE, PROBLEM... ] are specific to the particular PROVIDER associated with the data on that node. If the provider is unknown, (for example, the identity of the nurse who took the vitals was not captured on a scanned encounter form) the provider subscript <PROVIDER IEN> may be set to zero except provider is required for PROBLEM. This is a concession to reality, and should not be encouraged. If a provider CAN be identified, they SHOULD be identified.

### **Locally name-spaced array**

LOCAL("DIAGNOSIS/PROBLEM",<PROVIDER IEN>)  
LOCAL("PROBLEM",<PROVIDER IEN>)  
LOCAL("SOURCE")  
LOCAL("ENCOUNTER")  
LOCAL("DIAGNOSIS",<PROVIDER IEN>)  
LOCAL("PROCEDURE",<PROVIDER IEN>)  
LOCAL("PROVIDER",<PROVIDER IEN>)  
LOCAL("IMMUNIZATION",<PROVIDER IEN>)  
LOCAL("SKIN TEST",<PROVIDER IEN>)  
LOCAL("EXAM",<PROVIDER IEN>)  
LOCAL("PATIENT ED",<PROVIDER IEN>)  
LOCAL("HEALTH FACTORS",<PROVIDER IEN>)  
LOCAL("VITALS",<PROVIDER IEN>)

Vitals are not processed by PCE but are passed to the Vitals/ Measurement package.

LOCAL("LOCAL",

This data doesn't have a home in PCE and will not be processed by PCE, but it may be used to pass local data to a local process (see protocol for local data processing)..

3. The Encounter and Source nodes are required; the rest are optional.
4. All entries in the local array are resolved to internal values as defined below.
5. By convention; use a DUZ = .5 (the POSTMASTER) as a default when one cannot be determined. This is only for tasked jobs on some systems.
6. The data in the ENCOUNTER, PROCEDURE, and DIAGNOSIS/ PROBLEM or DIAGNOSIS nodes are the minimal set for capturing workload starting 10/1/96. The data in the rest of the nodes with the associated providers build on the clinically relevant data set and are not used for workload
7. While ENCOUNTER, PROCEDURE, and DIAGNOSIS/PROBLEM or DIAGNOSIS values are required to capture workload and generate a bill, they may not be present in every data set passed through this event point. For example, data on Vitals may be collected by a Nurse and passed through the event point for storage independent of other data associated with the encounter. Because of this, these are NOT required values in this version.
8. If there is a different (ancillary) hospital location for this patient encounter, you have to do a separate encounter. Separate calls for each hospital location are required.

## Required Input

LOCAL( LOCAL( is a local array as defined in the remainder of this document. Developers should use an array in their namespace to represent the LOCAL array; e.g., IBDFPCE.

## Result returned

PXCASTAT 1 = event processing occurred and the data was passed to DHCP.  
0 = event processing could not occur. There is data in LOCAL("ERROR" explaining why.

LOCAL("ERROR" as described below. Denotes Errors. Data associated with the error was not filed. The node does not exist if errors do not occur.

LOCAL("ERROR",<NODE>,<PROVIDER IEN>,<i>,<PIECE>)=  
"Free text message^REJECTED VALUE"

Where

<NODE>	=	"ENCOUNTER"   "VITALS"   "DIAGNOSIS"   "PROCEDURE"   "PROBLEM"   rest of list
<PROVIDER IEN>	=	internal entry number of provider. Is 0 (ZERO) for ENCOUNTER and SOURCE
<i>	=	sub-entry 'i' for that provider Is 0 (ZERO) for ENCOUNTER, SOURCE and PROVIDER
<PIECE>	=	\$P( selector in LOCAL(<NODE>,<PROVIDER IEN>,<i>) that failed. The value of <PIECE> may be 0 (ZERO) if a problem is found that does not relate to a single specific piece.

LOCAL("WARNING"

as described below. Denotes problems with the data that did not prevent processing. Processing continued after the warnable condition was detected. The node does not exist if warning, conditions do not occur. Warnings do NOT affect the value of PXCASTAT.

LOCAL("WARNING",<NODE>,<PROVIDER IEN>,<i>,<PIECE>)  
="Free text message^QUESTIONABLE VALUE"

Where

<NODE>	=	"ENCOUNTER"   "VITALS"   "DIAGNOSIS"   "PROCEDURE"   "PROBLEM"
<PROVIDER IEN>	=	internal entry number of provider. Is 0 (ZERO) for ENCOUNTER and SOURCE
<i>	=	sub-entry 'i' for that provider Is 0 (ZERO) for ENCOUNTER, SOURCE, and PROVIDER
<PIECE>	=	SP( selector in LOCAL(<NODE>,<PROVIDER IEN>,<i>) in question. The value of <PIECE> may be 0 (ZERO) if a problem is found that does not relate to a single specific piece.

### **Entry Point for processing the data in the foreground**

FOREGND^PXCA(.LOCAL,.PXCASTAT) All data for the event driver is to be stored in the local array, LOCAL(, in the proper format by the source prior to calling this entry point. This entry point validates and verifies the data and then if there are no validation errors, the data is processed in the foreground. Computation by the source will not continue until all processing is completed by any and all 'down-stream' protocol event points.

### **Entry Point for processing the data in the background on the Host**

BACKGND^PXCA(.LOCAL,.PXCASTAT) All data for the event driver is to be stored in the local array, LOCAL(, in the proper format by the source prior to calling this entry point. This entry point validates and verifies the data and then if there are no validation errors, the data is processed in the background via TASKMAN. Computation by the source may continue.

## Entry Point for data validation

VALIDATE^PXCA(.LOCAL) The data in the local array, LOCAL(), is validated and verified, but is not processed. Use of this entry point by your application will result in the data being validated twice, since it is validated prior to processing by the FOREGND^PXCAEP and BACKGND^PXCAEP entry points. If a piece of data cannot be validated, an entry is placed in the LOCAL("ERROR" node as described above

## Protocol for local data processing

PXCA DATA EVENT Other developers who wish to use any of the data in the local array, including local additions, can attach a protocol that calls their routines to the item multiple of this protocol. This protocol is activated if there are no errors in the data validation and after PCE has processed the data.

## For data unique to the encounter

### SOURCE data

LOCAL("SOURCE") = 1^2^3^4^5, where:

Position	Description	Req for PCE & SD	Format
1	Data Source	P	DATA SOURCES file (#839.7)
2	DUZ	P, S	NEW PERSON file (#200)
3	Form numbers		Not stored by PCE
4	Batch ID		Not stored by PCE
5	Record ID		Not stored by PCE

Encounter data

LOCAL("ENCOUNTER") = 1^2^3^4^5^6^7^8^9^10^11^12^13^14^15^16^17^18,  
 where:

Position	Description	Req for PCE & SD	Format
1	Appointment Date/Time	P, S	internal FM format
2	Patient DFN	P, S	IHS PATIENT file (#9000001)
3	Hospital Location IEN Each hospital location is a separate encounter	P, S	HOSPITAL LOCATION file (#44)
4	Provider IEN This is the person that saw the Patient at the scheduled date and time.	P	NEW PERSON file (#200)
5	Visit CPT code IEN		TYPE OF VISIT (#357.69)
6	SC Condition		[1   0   null]
7	AO Condition		[1   0   null]
8	IR Condition		[1   0   null]
9	EC Condition		[1   0   null]
10	MST Condition		[1   0   null]
13	Eligibility Code IEN		ELIGIBILITY CODE file (#8)
14	Check-out date and time		internal FM format
15	Provider indicator (relates to 4)	P	P ::= Primary S ::= Secondary
16	Attending Physician IEN (May or may not be the same as 4)		NEW PERSON file (#200)
17	HNC Condition		[1   0   null]
18	Combat Veteran Condition		[1   0   null]

\* P for required by PCE, S for required by Scheduling; if blank then it is optional.

All of the remaining entries in the LOCAL( array are specific to a particular Provider associated with the data on that node. If the provider is unknown, (for example, the identity of the nurse who took the vitals isn't recorded on a scanned encounter form), the provider subscript <PROVIDER IEN> may be set to zero.

## Diagnosis and/or Problems, specific to one provider

We recommend that you use these nodes instead of the separate Diagnosis and Problem nodes.

If no Diagnosis and/or Problems, '\$D(LOCAL("DIAGNOSIS/PROBLEM"))' is true. LOCAL("DIAGNOSIS/PROBLEM", <PROVIDER IEN>, i) = 1^2^3^4,...17 where:

Position	Description	Req. for DX: PCE & SD	Req. for PL	Format
1	Diagnosis Code IEN	P, S		ICD9 DIAGNOSIS file (#80)
2	Diagnosis Specification Code	P	N/A	P ::= Primary S ::= Secondary
3	Clinical Lexicon Term IEN			EXPRESSIONS file (#757.01)
4	Problem IEN		for existing	PROBLEM LIST file (#9000011)
5	Add to Problem List	N/A	for new	[1   0   null]
6	Problem Active? Default is Active if not specified	N/A		A ::= Active I ::= Inactive
7	Problem Onset Date	N/A		internal FM format
8	Problem Resolved Date	N/A		internal FM format
9	SC Condition			[1   0   null]
10	AO Condition			[1   0   null]
11	IR Condition			[1   0   null]
12	EC Condition			[1   0   null]
13	Provider's Narrative	P	for new	free text, 2-80 Characters
14	Category Header for Provider's Narrative		N/A	free text, 2-80 Characters
15	MST Condition			[1   0   null]
16	HNC Condition			[1   0   null]
17	Combat Vet Condition			[1   0   null]

LOCAL("DIAGNOSIS/PROBLEM",<PROVIDER IEN>, i,"NOTE") = 1, where:

<b>Position</b>	<b>Description</b>	<b>Req. for DX: PCE &amp; SD</b>	<b>Req. for PL</b>	<b>Format</b>
1	Provider's Note or Comment	N/A		free text, 3-60 Characters

NOTE: If the NOTE node is not needed, it does not have to exist.

NOTE: Information is passed to Problem List if there is data for any of the positions 5-8 on the "DIAGNOSIS/PROBLEM" node or if there is "NOTE" node. A provider is required to add a new problem to the Problem List.

**Diagnosis data list, specific to one provider, for Problems being treated at this encounter:**

If no Diagnoses, then '\$D(LOCAL("DIAGNOSIS",<PROVIDER IEN>))is true.  
 LOCAL("DIAGNOSIS",<PROVIDER IEN>,i) = 1^2^3^4^5^6^7^8^13, where:

Position	Description	Req for PCE & SD	Format
1	Diagnosis code IEN	P, S	ICD9 DIAGNOSIS File (#80)
2	Diagnosis specification code		P ::= Primary S ::= Secondary
3	SC Condition		[1   0   null]
4	AO Condition		[1   0   null]
5	IR Condition		[1   0   null]
6	EC Condition		[1   0   null]
7	Associated Problem IEN		PROBLEM LIST file 9000011
8	Physician's term for Diagnosis	P	free text, 2-80 Characters
9	Physician's term for Category Header		free text, 2-80 Characters
	May have been used as a grouping for a set of related Diagnosis which the provider selected from		
10	Lexicon IEN		EXPRESSIONS File (#757.01)
11	MST Condition		[1   0   null]
12	HNC Condition		[1   0   null]
13	Combat Vet Condition		[1   0   null]

**NOTE:** PCE recommends using the DIAGNOSIS/PROBLEM node so that the diagnosis can point to the problem that it relates to.

## Procedures data list, specific to one provider

If no Procedures, then '\$D(LOCAL("PROCEDURE",<PROVIDER IEN>)) is true.  
 LOCAL("PROCEDURE",<PROVIDER IEN>,i) = 1^2^3^4^5^6^7, where:

Position	Description	Req for PCE & SD	Format
1	CPT4 Procedure code	S	CPT file (#81)
2	Quantity Performed	P, S	number > 0
3	Procedure specification code		For CPT only. P ::= Primary S ::= Secondary
4	Date/Time Procedure performed		internal FM format
5	Associated Diagnosis IEN		For CPT only. ICD DIAGNOSIS File (#80)
6	Physician's term for Procedure; a CPT code may not be available	P	free text, 2-80 Characters
7	Physician's term for Category Header May have been used as a grouping for a set of related Procedures which the provider selected from		free text, 2-80 Characters

**NOTE:** If a Procedure doesn't have a CPT code, it can be passed without one and will be stored in the V Treatment file but will not be used for workload or billing.

## Problem data list, specific to one provider

If no Problems, then '\$D(LOCAL("PROBLEM",<PROVIDER IEN>)) is true.

LOCAL("PROBLEM",<PROVIDER IEN>,i) =

1^2^3^4^5^6^7^8^9^10^11^12^13^14^15 where:

Position	Description	Req for PL	Format
1	Problem Name; Required for new Problem List, if Pos. 10 is null	R-Add	free text
2	Problem Onset Date		internal FM format
3	Problem Active? Default is ACTIVE if not specified		[1   0   null]
4	Problem Date Resolved		internal FM format
5	SC Condition		[1   0   null]
6	AO Condition		[1   0   null]
7	IR Condition		[1   0   null]
8	EC Condition		[1   0   null]
9	ICD 9 Code value {optional}		ICD DIAGNOSIS File (#80)
10	Problem IEN null if new problem	R-Editing Existing Problems	PROBLEM LIST file 9000011
11	Physician's term for Problem; null if new problem		free text, 60 Characters Max
12	Lexicon IEN		EXPRESSIONS File (#757.01)
13	MST Condition		[1   0   null]
14	HNC Condition		[1   0   null]
15	Combat Vet Condition		[1   0   null]

**NOTE:** The data in this node is passed to Problem List. A Provider is required to add a new problem to the Problem List. When a new problem is added to the Problem List, the problem IEN is not required. If data is passed to edit existing data, the problem IEN must be passed.

**NOTE:** It is better to use the DIAGNOSIS/PROBLEM node so that the diagnosis can point to the problem that it relates to.

## Provider data list, specific to one provider

If no additional Providers, then '\$D(LOCAL("PROVIDER"< PROVIDER IEN>))  
LOCAL ("PROVIDER",<PROVIDER IEN>= 1^2 where:

Position	Description	Req for PCE	Format
1	Provider indicator	P	P: = Primary S: = Secondary
2	Attending		1 0  null

Use this node to pass of additional providers which do not have data associated with them.

## Immunization data list, specific to one provider

If no immunization entries, then

'\$D(LOCAL("IMMUNIZATION",<PROVIDER IEN>)) is true.

LOCAL ("IMMUNIZATION",<PROVIDER IEN>,i)=1^2^3^4^5^6^7

Position	Description	Req for PCE	Format
1	Immunization	P	IMMUNIZATION File (9999999.14)
2	Series		P::=Partially complete C::=Complete B::=Booster 1::=Series1...8::=Series8
4	Reaction		REACTION Field (9000010.11,.06) SET '0' FOR NONE '1' FOR FEVER; '2' FOR IRRITABILITY; '3' FOR LOCAL REACTION OR SWELLING; '4' FOR VOMITING; '5' FOR RASH OR ITCHING; '6' FOR LETHARGY; '7' FOR CONVULSIONS; '8' FOR ARTHRITIS OR ARTHRALGIAS; '9' FOR ANAPHYLAXIS OR COLLAPSE; '10' FOR RESPIRATORY DISTRESS; '11' FOR OTHER;
5	Contraindicated		1   0   null
6	Event D/T		internal FM format
7	Remarks		Comment

## Skin Test data list, specific to one provider

If no skin test entries, then '\$D(LOCAL("SKIN TEST",<PROVIDER IEN>)) is true.

LOCAL ("SKIN TEST",<PROVIDER IEN>,i)=1^2^3^4^5

Position	Description	Req for PCE	Format
1	SKIN TEST	P	SKIN TEST File (9999999.28)
2	READING		Whole number between 0 and 40 inclusive
3	RESULT		P::=Positive N::=Negative D::=Doubtful 0::=No Take
4	Date Read		internal FM format
5	Date of Injection		internal FM format

### Examination data list, specific to one provider

If no examination entries, then '\$D(LOCAL("EXAM",<PROVIDER IEN>)) is true.  
LOCAL ("EXAM",<PROVIDER.IEN>)=1^2

Position	Description	Req for PCE	Format
1	EXAM	P	EXAM File (9999999.15)
2	RESULT		A::=Abnormal N::=Normal

### Patient Education data list, specific to one provider

If no Patient Education entries, then  
'\$D(LOCAL("PATIENT ED",<PROVIDER IEN>)) is true.  
LOCAL ("PATIENT ED",<PROVIDER IEN>,i)=1^2

Position	Description	Req for PCE	Format
1	Topic	P	EDUCATION TOPICS File (9999999.09)
2	Level of Understanding		1::=Poor 2::=Fair 3::=Good 4::=Group - No Assessment 5::=Refused

### Health Factors data list, specific to one provider

If no Health Factors entries, then  
'\$D(LOCAL("HEALTH FACTORS",<PROVIDER IEN>)) is true.  
LOCAL ("HEALTH FACTORS",<PROVIDER IEN>,i)=1^2

Position	Description	Req for PCE	Format
1	Health Factor	P	HEALTH FACTORS File (9999999.64)
2	Level/Severity		M::=Minimal MO::=Moderate H::=Heavy/Severe

## Vitals data list, specific to one provider

If no Vitals, then '\$D(LOCAL("VITALS",<PROVIDER IEN>)) is true.  
 LOCAL("VITALS",<PROVIDER IEN>,i) = 1^2^3^4, where:

Position	Description	Req for PCE	Format
1	Type	P	AG::= ABDOMINAL GIRTH AUD::= AUDIOMETREY BP::= BLOOD PRESSURE FH::= FUNDAL HEIGHT FT::= FETAL HEART TONES HC::= HEAD CIRCUMFERENCE HE::= HEARING HT::= HEIGHT PU::= PULSE RS::= RESPIRATIONS TMP::=TEMPERATURE TON::=TONOMETRY VC::= VISION CORRECTED VU::= VISION UNCORRECTED WT::= WEIGHT
2	Value	P	Numeric
3	Units Not stored; used for conversions		C::=Centigrade (degrees) CM::=Centimeter F::= Fahrenheit (degrees) IN::=Inches KG::=Kilograms LB::=Pounds
4	Date/Time Measurement taken		internal FM format

*If the TYPE is HT:* If the UNIT is CM it is converted to IN so that it can be stored. If the UNIT is "" it is assumed to be IN.

*If the TYPE is WT* If the UNIT is KG it is converted to LB so that it can be stored. If the UNIT is "" it is assumed to be LB.

*If the TYPE is TMP* If the UNIT is C it is converted to F so that it can be stored. If the UNIT is "" it is assumed to be F.

**NOTE:** This data is passed to the Vitals/Measurement package for validation and storage.

## Local data list, specific to one provider

If no local entries, then '\$D(LOCAL("LOCAL",<PROVIDER IEN>)) is true.  
LOCAL("LOCAL",<PROVIDER IEN>,i) = Site Specific data encoding

Position	Description	Format
1	Site Specific data encoding; Not stored in PCE	free text

**NOTE:** LOCAL("LOCAL" where "LOCAL" is replaced by locally namespaced string.

## Appendix B - PCE Security

PCE security is maintained through menu assignment and VA FileMan protection.

### Menu Assignment

PCE exports one main menu, the PCE IRM Menu, which contains several sub-menus.

SP	PCE Site Parameters Menu ...
TBL	PCE Table Maintenance ...
INFO	PCE Information Only ...
RM	PCE Reminder Maintenance Menu ...
CR	PCE Clinical Reports ...
HOME	Directions to Patient's Home Add/Edit
CO	PCE Coordinator Menu ...
CL	PCE Clinician Menu

- Assign the *PCE IRM Main Menu* to the IRM person who will maintain and set up the package, including reminder items and will need access to all of the PCE options.
- The first four options/menus will be used by IRM staff or coordinators who are responsible for setting up PCE, maintaining the entries in the PCE tables (such as Patient Education, Immunization, Treatments, etc.), and defining the clinical reminders/maintenance system for your site.
- Assign the *PCE Coordinator Menu* to the Application Coordinator who teach and support PCE. The PCE Coordinator Menu contains all of the supporting options/menus, plus the data entry options.
- Assign the *PCE Clinician Menu* to clinicians who enter or edit data, use clinical reports, need the PCE Information Only menu to see the basis for reminders, and might add or edit directions to a patient's home for display on a health summary.
- Assign *Directions to Patient's Home Add/Edit* to anyone who needs to enter directions to a patient's home-especially useful for Hospital-Based Home Care staff (directions can be viewed on Health Summaries).
- Assign *PCE Encounter Data Entry - Supervisor* to users who can document a clinical encounter and can also delete any encounter entries, even though they are not the creator of the entries. This action also allows adding and editing in fields not asked in the other PCE Encounter Data Entry options.

- Assign *PCE Encounter Data Entry* to data entry staff who can document a clinical encounter and who can delete their own entries.
- Assign *PCE Encounter Date Entry and Delete* to users who can document a clinical encounter and can also delete any encounter entries, even though they are not the creator of the entries.
- Assign *PCE Encounter Data Entry without Delete* to users who can document a clinical encounter , but should not be able to delete any entries, including ones that they have created.

## VA FileMan File Protection

The following VA FileMan file protection has been assigned to the files exported by PCE and Visit Tracking.

File Number	Name	DD	RD	WR	DEL	LAY
150.1	ANCILLARY DSS ID	@		@	@	@
150.2	VSIT SITE CODES	@		@	@	@
150.9	VISIT TRACKING	@			@	@
	PARAMETERS					
811.1.	PCE Code Mapping	@		@	@	@
811.2	PCE Taxonomy	@			@	
811.8	PCE Reminder Type	@			@	@
811.9	PCE Reminder/ Maintenance Item	@			@	
815	PCE Parameters	@			@	@
839.01	PXCA Device Interface	@				
	Module Errors					
839.7	PCE Data Source	@			@	
9000001	Patient/IHS	@				
9000010.06	V Provider	@				
9000010.07	V POV	@				
9000010.11	V Immunization	@				
9000010.12	V Skin Test	@				
9000010.13	V Exam	@				
9000010.15	V Treatment	@				
9000010.16	V Patient Ed	@				
9000010.18	V CPT	@				
9000010.23	V Health Factors	@				
9999999.06	Location	@				
9999999.09	Education Topics	@			@	
9999999.14	Immunization	@			@	
9999999.15	Exam	@			@	
9999999.17	Treatment	@			@	
9999999.27	Provider Narrative	@			@	
9999999.28	Skin Test	@			@	
9999999.64	Health Factors	@			@	

### Access recommended for Sites using Kernel Part III.

File Number	Name	User	Coordinator
811.1.	PCE Code Mapping	R	R
811.2	PCE Taxonomy	R	RW
811.8	PCE Reminder Type	R	RW
811.9	PCE Reminder/ Maintenance Item	R	RW
815	PCE Parameters	R	RW
839.01	PXCA Device Interface Module Errors	RWDL	RWDL
839.7	PCE Data Source	RL	RL
9000001	Patient/IHS	RWL	RWL
9000010.06	V Provider	RWDL	RWDL
9000010.07	V POV	RWDL	RWDL
9000010.11	V Immunization	RWDL	RWDL
9000010.12	V Skin Test	RWDL	RWDL
9000010.13	V Exam	RWDL	RWDL
9000010.15	V Treatment	RWDL	RWDL
9000010.16	V Patient Ed	RWDL	RWDL
9000010.18	V CPT	RWDL	RWDL
9000010.23	V Health Factors	RWDL	RWDL
9999999.06	Location	R	R
9999999.09	Education Topics	R	RWL
9999999.14	Immunization	R	RWL
9999999.15	Exam	R	RWL
9999999.17	Treatment	R	RWL
9999999.27	Provider Narrative	RWL	RWL
9999999.28	Skin Test	R	RWL
9999999.64	Health Factors	R	RWL

### Visit Tracking

File Number	Name	User	Coordinator
150.1	Ancillary DSS ID	R	R
150.2	Visit Site Codes	R	R
150.9	Visit Tracking Parameters	R	RW
9000010	Visit	RWDL	RWDL

# Appendix C - Visit Tracking Technical Information

## **Introduction**

The Visit Tracking software is designed to link patient-related information in a file structure that will allow meaningful reporting and historically accurate categorization of patient events and episodes of care.

## **Background**

This version of Visit Tracking is a hybrid of a Visit Tracking module developed by and operating at Indian Health Service (IHS) facilities as part of their Patient Care Component (PCC) and Visit Tracking V. 1.0 developed by the Dallas Information Systems Center (ISC) for the Joint Venture Sharing (JVS) sites and operating at Albuquerque, NM. The primary data file (VISIT file #9000010) developed by IHS is used with some additional fields and modifications for VA needs. The supporting software was developed with the intent to operate without modification in either facility.

## **Relationship to other packages**

Visit Tracking is not a stand-alone application. Other packages will normally call PCE, which will handle the calls to Visit Tracking.

Where appropriate, **VISTA** packages will be able to link an event to a patient visit entry, thereby linking that event to any number of events occurring throughout the hospital during the patient's visit or admission. By linking events to a "visit," historical information surrounding that event can be retrieved from the VISIT file (#9000010) that might ordinarily be unknown, such as the patient's eligibility at time of the event, the category of patient, or the Hospital Location.

## **Functions provided**

The Visit Tracking system provides three primary functions:

- Creating and/or matching a visit record using input criteria and user interaction (optionally)
- Providing a list of visits matching input criteria
- Maintaining the VISIT file (#9000010) and its records

Visit Tracking is a utility that can be used by a variety of **VISTA** modules, with potential benefits for clinical, administrative, and fiscal applications. Visit Tracking will allow **VISTA** packages to link an event to a patient visit entry, thereby linking that event to any number of events occurring throughout the hospital during the patient's outpatient and/or inpatient episode.

## **Benefits**

- The VISIT file (#9000010) will be a key file in the implementation of the clinical repository.
- The VISIT file provides a home for documenting when and where other facility events have occurred.
- Medical Care Cost Recovery (MCCR) can obtain billing information related to a clinic visit, a step towards itemized billing.
- Visit Tracking provides an environment for relating clinical information to the service visit for workload tracking or query by service views, as well as by the aggregate clinic visit view.
- Users have the potential to control the Visit level of granularity while reviewing patient information (e.g., only view visits from the primary clinic visit level: an aggregate view, or only ancillary visits).
- The date and time stamp on clinic and ancillary visits could be useful for retrospective work flow analysis. It may be exploitable as a Clinical Event Summary file useful to researchers doing longitudinal patient studies.
- A breakdown of clinical care provided by primary and secondary providers could help document the clinical experience of trainees (including residents, interns, and other clinicians) who require this information for privileging and credentialing purposes.

- Visit tracking has the capability to generate patient activity reports that are based on accurate historical information.
- The category of patient receiving care can be identified based on a specific episode of care.
- Medical data can be stored for historical purposes without the requirements of specific fields, except for the patient and date.
- Visit tracking has the ability to associate ancillary services provided to a patient with a DSS ID, admission, and non-patient encounter (phone contact, pharmacy mail-out, etc.).

### **Dependencies**

Visit Tracking depends on Patient Care Encounter (PCE). **VISTA** packages that will support and/or use Visit Tracking will require some programming modifications.

## **VISIT CREATION**

The creation of visits is facilitated by the Visit Tracking module. In order to ensure a consistent implementation of visit creation across packages, each package needs to have an agreement with the Visit Administrator to create visits.

The key to the creation of visits will be to ensure the clinical meaningfulness of visits.

Additionally, when a package works out an agreement with Visit Tracking, it must add the triggered cross-reference ADD^AUPNVSIT, SUB^AUPNVSIT, as well as a regular (whole file) cross-reference on the Visit pointer. This ensures that the visit will not be removed by Visit Tracking utilities because the dependent entry counter has been updated.

### **Two approaches for creating clinical visits :**

1. A team of providers can be associated with a primary clinical visit (this is the traditional view taken by IHS).
2. A primary clinic visit can represent the primary provider's care, and a separate visit can be created to reflect the secondary provider's care.

Additionally, the VISIT file will be able to provide a breakdown of other ancillary services provided during the clinically significant visit. Laboratory or Radiology occasions of service are other examples of services provided that could have a separate visit reflecting the service involvement related to a clinic appointment on the same day. DSS and Outpatient Workload will benefit from a service breakdown.

### **IRM Responsibility**

IRM will be responsible for updating the VISIT TRACKING PARAMETERS file (#150.9). IRM will also have the capability to indicate if a package is active or inactive. No other maintenance is required by IRM.

## **GUIDELINES FOR DEVELOPERS**

This section describes the guidelines which should be used for VA developers populating visits in the Visit file. These guidelines are based on a combination of the experience of Albuquerque's joint venture sharing, IHS' PCC pilot test at Tucson VAMC, MCCR data capture pilots, HSR&D workload reporting studies at Hines VAMC, and DMMS/DSS event data capture.

The purpose of the VISIT file in the VA:

The VISIT file has multiple purposes. The primary role is to record when and where clinical encounters related to a patient have occurred. Visits will be recorded for both Outpatient and Inpatient encounters. The initial focus of the Visit file will be for tracking outpatient encounter activity.

- Outpatient encounters include scheduled appointments and walk-in unscheduled visits.
- Inpatient encounters include the admission of a patient to a VAMC and any clinically significant change related to treatment of that patient. For example, a treating specialty change is clinically significant, whereas a bed switch is not. The clinically significant visits created throughout the inpatient stay are related to the inpatient admission visit.
- If the patient is seen in a clinic while an Inpatient, a separate visit will be created representing the appointment visit—this visit is related to the Admission visit.
- A clinician's telephone communications with a patient may be represented by a separate visit.
- The clinical visits can be viewed from two approaches: 1) a team of providers can be associated with a primary clinical visit (this is the traditional view taken by IHS); or 2) a primary clinic visit can represent the primary provider's care, and a separate visit can be created to reflect the secondary provider's care.
- Additionally, the VISIT file can provide a breakdown of other ancillary services provided during the clinically significant visit. Laboratory or Radiology services are other examples of services provided that could have a separate visit reflecting the service involvement related to a clinic appointment on the same day.

## Supported Entry Points

Creating visit entries in the VISIT file is not a free-for-all. Packages wishing to create visits or call Visit Tracking must publish agreements with the DBA. The DBA office provides oversight on agreements.

## Conventions

Italic formatting indicates argument names that are replaced with actual values. The notation “.*argument*” indicates a call by reference.

**Note:** [ ] indicates optional choices { } indicates required choices

Please refer to the section “Description of VISIT file fields” to see which fields are required, which ones will generate default values, and which ones can be used in matching/screening when selecting preexisting visits.

## Create and/or Match Visit Using Input Criteria

### ^VSIT

(see the Package-Wide Variables section)

INPUT:	VSIT	<visit date [and time] in FM format> (time will default to 12 noon if not specified)
	DFN	<patient file pointer>
	[VSIT(0]	<a string of characters that defines how the visit processor will function, see package-wide variables>
	[VSIT("<xxx>")]	<array with mnemonic subscript> (used in match logic if VSIT(0) ["M"] (for SVC, TYP, INS, CLN, ELG, LOC) <b>Note:</b> For multiple field values use [<field value>[^...]] i.e., VSIT("SVC")="H^D" (will find both)
	VSITPKG	<package name space>

OUTPUT: VSIT(<ien N^S[^1]  
 where: N <internal entry number of visit>  
 or -1 if could not get a visit  
 or -2 if calling package is not active  
 in Visit Package Parameters  
 S <value of .01 field of visit>  
 1 <indicates that a new visit was added>  
 VSIT(<ien>,<xxx>) returns the data that is stored in the Visit file

### Update Dependent Entry Counter

*These calls are customarily done through a MUMPS cross reference on the pointer field. The input parameter X is set by FileMan.*

#### ADD^AUPNVSIT

Increase the dependent entry count by one.

INPUT X Visit IEN

#### SUB^AUPNVSIT

Decrease the dependent entry count by one INPUT X Visit IEN

#### \$\$PKG2IEN^VSIT(PKG)

Returns a pointer to the Package file when you pass in the package namespace

INPUT PKG Package namespace  
 OUTPUT Pointer to the package in the Package file #9.4

#### \$\$PKG^VSIT(PKG,VALUE)

Entry point to add or edit package to multiple in tracking param

INPUT PKG Package Name Space  
 VALUE Value on the ON/OFF flag under package  
 multiple  
 1=ON 0=OFF

#### \$\$PKGON^VSIT(PKG)

Returns the active flag for the package

INPUT PKG Package Name Space  
 OUTPUT 1 the package can create visits  
 0 the package cannot create visits  
 -1 called wrong or could not find package in VT  
 parameters file

### **\$\$IEN2VID^VSIT(IEN)**

Returns the Visit ID when you pass in a pointer to a visit

INPUT	IEN	Visit IEN
OUTPUT		Visit ID

### **\$\$VID2IEN^VSIT(VID)**

Returns a pointer to a visit when you pass in the Visit ID

INPUT	VID	Visit ID
OUTPUT		Visit IEN

### **\$\$LOOKUP^VSIT(IEN,FMT,WITHIEN)**

Look up a visit and return all of its information

INPUT	IEN	Visit IEN OR the Visit's ID
		FORMAT is the format that you want the output in, where:
		I ::= internal format
		E ::= external format
		B ::= both internal and external format
		B is the default if anything other than "I" or "E"
		WITHIEN 0 if you do not want the ien of the visit as the first subscript
		1 if you do. "1" is the default.
OUTPUT		-1 if IEN was not a valid IEN or Visit ID
		otherwise returns IEN
		VSIT(<ien>,<xxx>)
	or	VSIT(<xxx>) depending on the value of WITHIEN
		The array is all of the fields in the visit file. If both internal and external format are returned the format is: internal^external

**SELECTED^VSIT(DFN,SDT,EDT,HOSLOC,ENCTYPE,NENCTYPE,SERVCA  
T,NSERVCAT,LASTN)**

Returns selected visits depending on screens passed in.

INPUT	DFN	DFN	of Patient (only required input)
		SDT	Start Date
		EDT	End Date
		HOSLOC	Hospital Location
		ENCTYPE	Encounter types to include
		NENCTYPE	Encounter types to exclude
		SERVCAT	Service Categories to include
		NSERVCAT	Service Categories to exclude
		LASTN	How many starting with the Date and going backwards until have that many or all of them, whichever is first

***ONLY THE DFN IS REQUIRED***

Encounter types are a string of all the encounter types wanted. e.g. "OA" for only Ancillary and Occasion of service. Not Encounter types is a string of all the encounter types not wanted. e.g. "T" for do not include Telephone. If Encounter types and Not Encounter types are null or not passed then all encounter types will be included. Service Categories is a string of all the service categories to include. If non is passed all is assumed. e.g. "H" for just historical, "T" for just Telephone, "AIT" for ambulatory (in and out patient) and Telephone. Not Service categories is a string of all the service categories to not include.

OUTPUT    ^TMP("VSIT",\$J,vsit ien,#)  
Piece 1:: Date and Time from the Visit File Entry  
Piece 2:: Hospital Location ien (pointer to file#44)\_"\_"  
          External Value  
          If service category = "H" then this Piece becomes  
          the following:: Location of Encounter  
          ien (Pointer to file #9999999.06)\_"\_"\_External  
          Value  
Piece 3:: Service Category (Value of field .07 set of codes)  
Piece 4:: Service Connected (Value of field 80001 External  
          Value)  
Piece 5:: Patient Status in/out (Value of field 15002 set of  
          codes)  
Piece 6:: Clinic Stop ien (Pointer to file # 40.7) ";" External  
          value)

**SSHISTORIC^VSIT(IEN)**

Returns a flag indicating whether the visit is historical.

INPUT	IEN	Visit IEN
OUTPUT		1 if it is an Historical visit ("E" in #.07) 0 if it is not an Historical visit. -1 if the IEN is bad

**MODIFIED^VSIT(IEN)**

Sets the Date Last Modified (.13) field to NOW

INPUT	IEN	Visit IEN
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**KILL^VSITKIL(IEN)**

Deletes the visit if there is no files pointing to it. Before deleting checks all the backware pointers to see if the visit is being pointed to.

INPUT	IEN	Visit IEN
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## PACKAGE-WIDE VARIABLES

Visit Tracking V2.0 has no package-wide variables requiring SACC exemptions. Package developers making calls to Visit Tracking must clean up locally created variables before exiting the application option.

The following are local package-wide variables under the VSIT namespace.

VSIT(<xxx>) Variable Names for VISIT file fields,  
file: 9000010, global: ^AUPNVSIT( Where <xxx> is a general reference to the field mnemonic.

<u>Key</u>	<u>Indicates</u>
r	indicated a required field
m	matching/screening logic can/does apply
s	system generated
e	strongly encouraged

<b>Key</b>	<b>Variable</b>	<b>Description</b>
	.001 VSIT("IEN")	NUMBER (visit internal entry number)
rm	.01 VSIT("VDT")	VISIT/ADMIT DATE&TIME (date)
s	.02 VSIT("CDT")	DATE VISIT CREATED (date)
m	.03 VSIT("TYP")	TYPE (set)
rm	.05 VSIT("PAT")	PATIENT NAME (pointer PATIENT file #9000001) (IHS file DINUMed to PATIENT file #2)
m	.06 VSIT("INS")	LOC. OF ENCOUNTER (pointer LOCATION file #9999999.06) (IHS file DINUMed to INSTITUTION file #4)
	.07 VSIT("SVC")	SERVICE CATEGORY (set)
me	.08 VSIT("DSS")	DSS ID (pointer to CLINIC STOP file)
	.09 VSIT("CTR")	DEPENDENT ENTRY COUNTER (number)
	.11 VSIT("DEL")	DELETE FLAG (set)
	.12 VSIT("LNK")	PARENT VISIT LINK (pointer VISIT file #9000010)
	.13 VSIT("MDT")	DATE LAST MODIFIED (date)
	.18 VSIT("COD") ;	CHECK OUT DATE&TIME (date)
	.21 VSIT("ELG")	ELIGIBILITY (pointer ELIGIBILITY CODE file #8)

<b>Key</b>	<b>Variable</b>	<b>Description</b>
mr	.22 VSIT("LOC")	HOSPITAL LOCATION (pointer HOSPITAL LOCATION file #44)
	.23 VSIT("USR")	CREATED BY USER (pointer NEW PERSON file #200)
	.24 VSIT("OPT")	OPTION USED TO CREATE (pointer OPTION file #19)
	.25 VSIT("PRO")	PROTOCOL (pointer PROTOCOL file #101)
	2101 VSIT("OUT")	OUTSIDE LOCATION (free text)
	80001 VSIT("SC")	SERVICE CONNECTED (set)
	80002 VSIT("AO")	AGENT ORANGE EXPOSURE (set)
	80003 VSIT("IR")	IONIZING RADIATION EXPOSURE (set)
	80004 VSIT("EC")	PERSIAN GULF EXPOSURE (set)
	80005 VSIT("MST")	MILITARY SEXUAL TRAUMA (set)
	80006 VSIT("HNC")	HEAD AND/OR NECK CANCER (set)
	80007 VSIT("CV")	COMBAT VETERAN
	15001 VSIT("VID")	VISIT ID (free text)
	15002 VSIT("IO")	PATIENT STATUS IN/OUT (set)
	15003 VSIT("PRI")	ENCOUNTER TYPE (set)
	81101 VSIT("COM")	COMMENTS
	81202 VSIT("PKG")	PACKAGE (pointer PACKAGE file #9.4)
	81203 VSIT("SOR")	DATA SOURCE (pointer PCE DATA SOURCE file #839.7)
	VSIT(0)	A string of characters that defines how the visit processor will function.
	F	Force adding a new entry.
	I	Interactive mode
	E	Use patient's primary eligibility if not defined on call with VSIT("ELG").
	N	Allow creation of new visit.
	D	Look back "n" number of days for match, defaults to one (1). D[<number of days>] i.e., VSIT(0)="D7" e.g., VSIT(0)="D5" (visit date to visit date - 4) use "D0" to require exact match on visit date and time.
	M	Impose criteria on matching/screening of visits. Uses the VSIT(<xxx>) array: Matching elements must equal their corresponding field.
	DFN	Internal entry number of the patient file.
	VSIT	The date (and time) of the visit.
	VSIT(<ien>)	N^S[^1] where: N = <internal entry number of visit> S = <value of .01 field of visit> 1 = <indicates that a new visit was added>
	^TMP("VSITDD", \$J, <xxx><visit subscript>; <field #>; <node>; <piece>; <error message>	
	VSITPKG	Package Name Space