

Department of Veterans Affairs Patient Care Encounter (PCE)

Technical Manual

March 2015 Version 1.0

Revision History

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12/14	PX*1*201	Remediated doc for 508 compliance	Helena Gilbert
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	See section:		
	\$\$CLNCK^SDUTL2(CLN,DSP		
11/19/2004	Manual updated to comply with SOP 192-352 Displaying Sensitive Data	Beverly Jones	Corinne Bailey

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1. Introduction

1.1. 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.

1.2. 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.

1.2.1. 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.

1.2.2. 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).

1.3. 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.

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

1.3.1. MSM Sites

Increase your Stack/Stap to 24k to avoid STKOV errors, and the size of your partitions to 85k to avoid PGMOV errors.

1.3.2. 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
```

1.3.3. 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
^ТМР
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.

1.4. 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.

2. Implementation and Maintenance

2.1. Implementation

1. Assign PCE Menu and Options

PCE IRM Main Menu

(This menu includes all options exported with PCE.)

```
PCE Site Parameters Menu ...
SP
       SITE PCE Site Parameters Edit
             PCE HS/RPT Parameter Menu ...
       RPT
             PRNT
                    PCE HS/RPT Parameters Print
                    PCE HS Disclaimer Edit
             HS
                    PCE Report Parameter Edit
       DISP PCE Edit Disposition Clinics
       PCE Table Maintenance ...
TBL
            PCE Information Only ...
       INFO
             Activate/Inactivate Table Items ...
       ACT
       CED
             Education Topic Copy
       PCE Delete Encounters W/O Visit
DEWO
              Education Topic Add/Edit
       ED
       EΧ
              Examinations Add/Edit
              Health Factors Add/Edit
       ΗF
              Immunizations Add/Edit
       ΙM
                **> Out of order: Do not use!
                Placed out of order by PX*1*201
              Skin Tests Add/Edit
       SK
                **> Out of order: Do not use!
                Placed out of order by PX*1*206
              Treatments Add/Edit
       TR
INFO
       PCE Information Only ...
       ACT
              Activate/Inactivate Table Items ...
                  Exams
              ET Education Topics
                 Health Factors
              Н
                  Immunizations
                  **> Out of order: Do not use!
                  Placed out of order by PX*1*201
```

```
Skin Tests
                S
                Т
                    Treatments
         ΕD
                Education Topic List
         EDI
                Education Topic Inquiry
         EΧ
                Exam List
                Health Factors List
         HF
         ΙM
                Immunizations List
         SK
                Skin Tests List
         TR
                Treatments List
         CM
                PCE Code Mapping List
  RM
         PCE Reminder Maintenance Menu ...
          RL
                 List Reminder Definitions
                 Inquire about Reminder Item
          RΙ
          RE
                 Add/Edit Reminder Item
          RC
                 Copy Reminder Item
          RA
                 Activate/Inactivate Reminders
          RТ
                 List Reminder Types Logic
          TL
                 List Taxonomy Definitions
          TI
                 Inquire about Taxonomy Item
          TE
                 Edit Taxonomy Item
          TC
                 Copy Taxonomy Item
                 Activate/Inactivate Taxonomies
          TA
  CR
         PCE Clinical Reports ...
                Patient Activity by Clinic
         PΑ
         CР
                Caseload Profile by Clinic
                Workload by Clinic
         WL
         DX
                Diagnoses Ranked by Frequency
                Location Encounter Counts
         LE
                Provider Encounter Counts
         PE
        Directions to Patient's Home Add/Edit
  HOME
         PCE Coordinator Menu ...
  CO
                PCE Encounter Data Entry - Supervisor
         SUP
         PCE
                PCE Encounter Data Entry
         DEL
               PCE Encounter Data Entry and Delete
                PCE Encounter Data Entry without
         NOD
Delete
         TBL
                PCE Table Maintenance ...
         INFO
                PCE Information Only ...
```

```
Directions to Patient's Home Add/Edit
        HOME
        MDR
               CIDC Missing Data Report
         PARM
              PCE HS/RPT Parameters Menu ...
        DIE
               PCE Device Interface Error Report
               PCE Edit Disposition Clinics
        DISP
 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, 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.

The option PCE Delete Encounters W/O Visit has been created to provide a routine utility to remove Encounters that have missing Visits. (This is described in detail in the text of patch PX*1*153.)

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

```
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 that 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//?
errors are returned by the Device Interface then the
whole encounter is
not processed.
     Choose from:
                RETURN WARNING
                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

**> Out of order: Do not use! Placed out of order by PX*1*201
```

```
Skin Tests
            **> Out of order: Do not use! Placed out
            of order by PX*1*206
          Treatments
Select Activate/Inactivate Table Items Option:
          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:
                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
Select GLUCOSE NAMES: glu
     1 GLUCAGON
     2 GLUCOSE
     3
       GLUCOSE, OTHER
       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 1st for this PCE PARAMETERS)? Y (Yes)

Select LDL CHOLESTEROL NAMES: ??

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

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 PROTOCOL

SDAM PCE EVENT ITEM multiple of the PXK VISIT DATA
EVENT

IBDF PCE EVENTS ITEM multiple of the PXK VISIT

DATA EVENT

PXK SDAM TO V-FILES ITEM multiple of the SDAM
APPOINTMENT

EVENTS

IBDF PCE EVENTS ITEM multiple of PXCA DATA EVENT

IBDF PCE EVENTS ITEM multiple of PXCA DATA EVENT VSIT PATIENT STATUS 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 autocheckout.

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 cannot 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
PΧ
         ...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: ORDER ENTRY/RESULTS REPORTING
OR
         ...OK? Yes// [ENTER] (Yes)
 PACKAGE: ORDER ENTRY/RESULTS REPORTING//[ENTER]
 ACTIVE FLAG: ON//[ENTER]
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:
                  ALN
   ALBANY, NY
   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
  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 VSIT 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. The PCE User Manual Appendices document (Appendix A) 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
         Copy Taxonomy Item
  TC
         Activate/Inactivate Taxonomies
Select PCE Reminder Maintenance Menu Option: RL List
Reminder Definitions
DEVICE: [ENTER] VAX RIGHT MARGIN: 80// [ENTER]
PCE REMINDER/MAINTENANCE ITEM LIST
22,1996 08:57 PAGE 1
   _____
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.
 - i. a. Identify which Health Summary Type is used by the implementing clinic.
 - ii. b. Add the Clinical Reminders and/or the Clinical Maintenance components to the Health Summary Type.
 - iii. c. Edit component parameters, identifying desired selection items.
- If a taxonomy definition related to a reminder needs modification, do the following steps:
 - i. a. Copy the taxonomy using the Copy Taxonomy Item option.
 - ii. b. Modify the taxonomy, using the Edit Taxonomy Item option.
 - iii. c. Copy the related Reminder.
 - iv. d. Modify the Reminder to reflect the newly created taxonomy, using the Add/Edit Reminder Item option.
 - v. e. As an alternative to copying a taxonomy, local site taxonomy items can be created, using the Edit Taxonomy Item.

Modify the Treatment, Patient Ed, 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 Appendices document 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 that 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
```

24

```
(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

2.2. Maintenance

2.2.1. Table Maintenance Options

The Table Maintenance options let sites add or edit the items in the tables for Health Factors, Patient Education, 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., Skin Tests, Education Topics, and Health Factors, Treatments).

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

**> Out of order: Do not use! Placed out of order by PX*1*201.

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

**> Out of order: Do not use! Placed out of order by PX*1*201

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.

2.2.2. 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

Patient Care Encounter (PCE)

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.

2.2.3. 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 the PCE User Manual Appendices document (Appendix A) 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 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.

2.2.4. 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 or ICD10) 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.

3. File Descriptions

3.1. PCE Patient Care Encounter Files

File Number	File Name	Global	Data	Journaling
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	
920	Vaccine Information	^AUTTIVIS(YES	
	Statement			
920.1	Immunization Info Source	^PXV(920.1,	YES	
920.2	Imm Administration Route	^PXV(920.2,	YES	
920.3	Imm Administration Site (Body)	^PXV(920.3,	YES	
920.4	Imm Contraindications	^PXV(920.4,	YES	
920.5	Imm Refusals	^PXV(920.5,	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

9999999.04	Imm Manufacturer	^AUTTIMAN(YES	
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	
9999999.41	Immunization Lot	^AUTTIML(NO	
9999999.64	Health Factors	^AUTTHF(YES	ON

3.2. 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—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—PCE REMINDER TYPE FILE

This file contains the names of reminder types.

811.9—PCF 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—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—PCE DEVICE INTERFACE MODULE ERROR FILE

This file holds the PXCA and PXKERROR variables when PXK returns error(s) to the device interface.

839.7—DATA SOURCE FILE

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

920—VACCINE INFORMATION STATEMENT FILE

This file stores Vaccine Information Statements (VISs). These are information sheets produced by the Centers for Disease Control and Prevention (CDC) that explain both the benefits and risks of a vaccine to vaccine recipients.

920.1—IMMUNIZATION INFO SOURCE FILE

This file is a table of standard possible sources from which the information about a particular immunization event was obtained. The data in this file are derived from the CDC-defined Immunization Information Source table (NIP001).

920.2—IMM ADMINISTRATION ROUTE FILE

This file is a table of routes of administration for vaccines/immunization events. The data in this table are from the HL7-defined Table 0162 - Route of Administrations.

920.3—IMM ADMINISTRATION SITE FILE

This is a table of administration sites - areas of the patient's body through which a vaccine/immunization can be administered. The values in this table are from the HL7-defined Table 0163 - Administrative site.

V Files – Files 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.

920.4 - IMM CONTRAINDICATIONS FILE

This is a table of contraindications regarding immunizations and skin tests. The data for this table is derived from the CDC table Vaccinations Contraindications.

920.5 - IMM REFUSALS FILE

This is a table of reason for refusal of an immunization or skin test. The data in this file has been derived from the CDC-defined table NIP002 – Substance Refusal Reason.

9000010 - VISIT

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.

9000010.06 - V 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.

9000010.07 - V 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.

9000010.11 - V IMMUNIZATION

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

9000010.12 - 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 - 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 - 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 - V PATIENT ED

Stores patient education done at a visit.

9000010.18 - V CPT

Stores CPT-related services performed at a visit.

9000010.23 - V HEALTH FACTORS

Stores patient health factors as of the visit date.

Supporting Files (evolved from IHS/VA Joint Sharing)

9000001 - Patient/HIS

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.

9999999.04 - IMM MANUFACTURER

This file is a table of immunization and/or vaccine manufacturers. The data in this file are derived from the CDC (Center for Disease Control) HL7 Table 0227 (Manufacturers of Vaccines (MVX)).

9999999.06 - LOCATION

Dinumed to the Institution file (#4).

9999999.09 - 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 - 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 - 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 - 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 - PROVIDER NARRATIVE

This file contains each unique NARRATIVE QUALIFIER.

9999999.28 - SKIN TEST

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

9999999.41 - IMMUNIZATION LOT

This file contains the Immunization Manufacturers' LOT NUMBERS for the immunizations/vaccines administered in the VA. The LOT NUMBERs themselves may not be unique, but the combination of LOT NUMBER and MANUFACTURER must form a unique entry. This file also relies on a nightly background task that checks the entries' EXPIRATION DATE field. If the date is equal to that day's date, or has passed, that entry's STATUS is set to EXPIRED.

9999999.64 - 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).

4. 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.

5. 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.

\$\$CLNCK^SDUTL2

Patient Care Encounter application was modified to check the clinic associated with an encounter to ensure that its corresponding stop pairs conform to the stop code restriction. The following components were affected:

Routines PXBAPI1, PXCEVSIT and PXCE were modified to call API,

\$\$CLNCK^SDUTL2 which checks to ensure a clinic has valid stop code pairs in accordance with restriction type.

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:

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.)
- Check Out Date/Time
- 5. Service Connected/Classification Questions
 - Service Connected
 - Agent Orange Exposure
 - Ionizing Radiation Exposure
 - SW Asia Conditions
 - Military Sexual Trauma
 - Head and/or Neck Cancer
 - Combat Veteran
 - Project 112/SHAD
- 6. Provider (multiple)
 - Provider
 - Primary/Secondary Designation
- 7. Procedures (multiple)
 - CPT code
 - Quantity
- 8. Diagnosis (multiple)
 - ICD code
 - Primary/Secondary Designation

6. Enhanced API

The DATA2PCE and PXCA Application Program Interface (API) Files, which are used by other packages to exchange data with the PCE files, were updated to include the CPT associated diagnoses and the diagnosis classifications of SC, CV, AO, IR, EC, MST, HNC, and Project 12/SHAD.

\$\$DATA2PCE^PXAPI(INPUTROOT,PKG,SOURCE,.VISIT,USER,ERRDISP,.ERRARR AY,PPEDIT,.ERRPROB, .ACCOUNT)

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 PXK VISIT DATA EVENT protocol.

Parameter Description:

1. INPUTROOT

(Required) Where INPUTROOT is a unique variable name, either local array or global array, which identifies the defined data elements for the encounter. An example of an INPUTROOT 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) A dotted variable name. 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. ERRDISP

(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 ERRDISP is not defined, errors will be posted on the defined INPUTROOT 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.

7. ERRARRAY

(Optional) A dotted variable name. When errors and warning occur, the array will contain the PXKERROR array elements to the caller.

8. PPEDIT

(Optional) Set to 1 if you want to edit the Primary Provider. Only use if for the moment that editing is being done.

9. ERRPROB

(Optional) A dotted variable name. When errors and warnings occur, they will be passed back in the form of an array with the general description of the problem.

10. ACCOUNT

(Optional) A dotted variable name, where ACCOUNT is the PFSS Account Reference associated with the data being passed by the calling application. Each PFSS Account Reference represents an internal entry number in the PFSS ACCOUNT file (375).

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 subscripted 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 existing "ENCOUNTER" node data elements. 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 date/time of the instance of care.	R	FileManager Internal Format for date/time
	Imprecise dates are allowed for historical encounters.		
	allowed for historical		

	may be added, but not edited. *Deletions of encounters can occur only when nothing is pointing to the		
"ENCOUNTER",1,"PATIENT")	encounter. 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.	0	[1 0 null]
"ENCOUNTER",1,"CV")	This encounter is related to Combat Veteran.	0	[1 0 null]
"ENCOUNTER",1,"AO")	This encounter is related to Agent Orange exposure.	0	[1 0 null]
"ENCOUNTER",1,"IR")	This encounter is related to lonizing Radiation exposure.	0	[1 0 null]
"ENCOUNTER",1,"EC")	This encounter is related to SW Asia Conditions.	0	[1 0 null]
"ENCOUNTER",1,"SHAD")	This encounter is related to Project 112/SHAD.	0	[1 0 null]
"ENCOUNTER",1,"MST")	This encounter is related to Military Sexual Trauma.	0	[1 0 null]
"ENCOUNTER",1,"HNC")	This encounter is related to Head and/or Neck Cancer via Nose and/or Throat Radium treatment.	0	[1 0 null]

"ENCOUNTER",1,"CHECKOU T D/T")	This is the date/time when the encounter was checked out.	О	FileManager Internal Format for date/time
"ENCOUNTER",1,"ELIGIBILIT Y")	This is the eligibility of the patient for this encounter.	0	Pointer to Eligibility Code file (8)
"ENCOUNTER",1,"SERVICE CATEGORY")	This denotes the type of encounter.	R	A::=Ambulator y
			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.
			H::=Hospitaliza tion
			Should be used for an admission.
			I::=In Hospital
			C::=Chart Review
			T::=Telecomm unications
			N::=Not Found
			S::=Day Surgery
			O::=Observatio
			E::=Event
			(Historical) Documents

			encounters that occur outside of this facility. Not used for workload credit or 3rd party billing. R::=Nursing
			Home D::=Daily Hospitalization Data
			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.
"ENCOUNTER",1,"DSS ID")	*This is required for ancillary occasions of service such as laboratory and radiology or telephone encounters	*0	Pointer to Clinic Stop file (40.7)
"ENCOUNTER",1,"APPT")	This is the appointment type of the encounter.	0	Pointer to Appointment Type file (409.1)
"ENCOUNTER",1,"OUTSIDE LOCATION")	Free text location of service if outside the VA. If set, then the type of visit is set to "Other"	0	Free Text (1- 50 characters)
"ENCOUNTER",1,"INSTITUTI ON")	Facility of service. If set, then the type of visit is set to "VA"	0	Pointer to the Location file (#999999.06) This field points to the

			Institution file (#4) and has the same internal number as that file. The Location has the same name as the Institution file (#4). The location is also referred to as the Facility
"ENCOUNTER",1,"ENCOUNT ER TYPE")	This identifies the type of encounter, e.g., primary encounter, ancillary encounter, etc.	R	Set of Codes. P::=Primary
	A "Primary" designation indicates that the		O::=Occasion of Service
	encounter is associated		S::=Stop Code
	with an appointment or is a standalone.		A::=Ancillary
	Examples of ancillary encounters include Laboratory and Radiology instances of		Ancillary packages such a Laboratory and Radiology
	care.		should pass an "A"
			C::=Credit Stop
"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	0	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.	0	[1 null]

6.1. 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.	0	[1 0 null]
"PROVIDER",i,"ATTENDING")	Indicator that denotes this provider as the attending provider.	0	[1 0 null]
"PROVIDER",i,"COMMENT")	Comment	0	Free text (1 - 245 characters)
"PROVIDER",i,"DELETE")	This is a flag that denotes deletion of the Provider entry.	0	[1 null]

6.2. DX/PL

The "DX/PL" node may have multiple entries (i) and documents diagnoses and/or problems. Only active ICD-9-CM or ICD-10-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.

SUBSCRIPT	DESCRIPTION	REQ/	DATA
		OPT	FORMAT
"DX/PL",i,"DIAGNOSIS")	Diagnosis code	R	0
"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.	0	N/A
"DX/PL",i,"ORD/RES")	Code that specifies that the diagnosis is either an "ordering" diagnosis or is a "resulting" diagnosis or both for this encounter.	0	N/A
"DX/PL",i,"LEXICON TERM")	This is a term that is contained in the Clinical Lexicon.	0	0
"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.	0	*O
"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
"DX/PL",i,"PL ACTIVE")	This documents whether a problem is active or inactive. The Default is Active if not specified.	N/A	0

"DX/PL",i,"PL ONSET DATE")	The date that the	N/A	0
"DX/PL",i,"PL RESOLVED DATE")	The date that the problem was resolved.	N/A	0
"DX/PL",i,"PL SC")	This problem is related to a service connected condition.	N/A	0
"DX/PL",i,"PL CV")	This problem is related to Combat Veteran.	N/A	0
"DX/PL",i,"PL AO")	This problem is related to Agent Orange exposure.	N/A	0
"DX/PL",i,"PL IR")	This problem is related to Ionizing Radiation exposure.	N/A	0
"DX/PL",i,"PL EC")	This problem is related to SW Asia Conditions.	N/A	0
"DX/PL",i,"PL SHAD")	This problem is related to Project 112/SHAD.	N/A	0
"DX/PL",i,"PL MST")	This problem is related to Military Sexual Trauma.	N/A	0
"DX/PL",i,"PL HNC")	This problem is related to Head and/or Neck Cancer.	N/A	0
"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.	*0	*0
"DX/PL",i,"CATEGORY")	A term that denotes a grouping or category for a set of related diagnosis/problem.	0	N/A
"DX/PL",i,"ENC PROVIDER")	Provider who documented the	0	R/Add

	diagnosis/problem.		
"DX/PL",i,"EVENT D/T")	Date/Time Diagnosis was documented.	0	N/A
"DX/PL",i,"COMMENT")	Comment	0	0
"DX/PL",i,"DELETE")	This is a delete flag used to denote deletion of the diagnosis entry.	0	N/A

6.3. 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,"PROCEDU RE")	Procedure code	R	Pointer to CPT file (81)
"PROCEDURE",i,"MODIFIERS ", MODIFIER=""	Modifiers associated with procedure.	0	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 first diagnosis that is associated with the identified procedure and is the primary diagnosis associated with this procedure.	0	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"DIAGNOSIS 2")	The second diagnosis that is associated with the identified procedure.	0	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"DIAGNOSIS 3")	The third diagnosis that is associated with the	0	Pointer to ICD Diagnosis file

	identified procedure.		(80)
"PROCEDURE",i,"DIAGNOSIS 4")	The fourth diagnosis that is associated with the identified procedure.	0	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"DIAGNOSIS 5")	The fifth diagnosis that is associated with the identified procedure.	0	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"DIAGNOSIS 6")	The sixth diagnosis that is associated with the identified procedure.	0	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"DIAGNOSIS 7")	The seventh diagnosis that is associated with the identified procedure.	0	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"DIAGNOSIS 8")	The eighth diagnosis that is associated with the identified procedure.	0	Pointer to ICD Diagnosis file (80)
"PROCEDURE",i,"NARRATIV E")	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.	*0	Free text (2- 245 characters)
"PROCEDURE",i,"CATEGOR Y")	A term that denotes a grouping or category for a set of related procedures.	0	Free text (2- 245 characters)
"PROCEDURE",i,"ENC PROVIDER")	Provider who performed the procedure.	0	Pointer to New Person file (200)
"PROCEDURE",i,"ORD PROVIDER")	Provider who ordered the procedure.	0	Pointer to New Person file (200)
"PROCEDURE",i,"ORD REFERENCE")	Order reference for the ordered procedure.	0	Pointer to Order file (100)
"PROCEDURE",i,"EVENT D/T")	Date/Time procedure was done.	0	FileManager Internal Format for date/time
"PROCEDURE",i,"DEPARTME	A 3-digit code that	0	108::=Laborato

	T -	
NT")	defines the service area.	ry
	Missing Department Codes will be assigned a	160::=Pharma
	Department Code. The	су
	Department Code will be	419::=Anesthe
	the Stop Code	siology
	associated (in the HOSPITAL LOCATION	423::=Prostheti
	file, #44) with the	CS
	Hospital Location of the	180::=Oral
	patient visit.	Surgery
		401::=General
		Surgery
		402::=Cardiac
		Surgery
		401::=General
		Surgery
		402::=Cardiac
		Surgery
		403::=Otorhino
		laryngology
		(ENT)
		404::=Gynecol
		ogy
		406::=Neurosu
		rgery
		407::=Ophthal
		mology
		409::=Orthope
		dics
		410::=Plastic
		Surgery (inc.
		H&N)
		411::=Podiatry
		412::=Proctolo
		gy
		413::=Thoracic
		Surgery
		415::=Peripher
		al Vascular

			457 T
			457::=Transpla ntation
			105::=General Radiology
			109::=Nuclear Medicine
			109::=Cardiolo gy Studies (Nuclear Med)
			115::=Ultrasou nd
			703::=Mammo graphy
			150::=CT Scan
			151::=Magneti c Resonance Imaging
			152::=Angio- Neuro- Interventional
			421::=Vascular Lab
"PROCEDURE",i,"COMMENT"	Comment	0	Free Text (1- 245 characters)
"PROCEDURE",i,"DELETE")	This is a flag that denotes deletion of the Procedure entry.	0	[1 null]

6.4. Skin Test

The "SKIN TEST" node may have multiple entries (i). To delete the entire "SKIN TEST" entry, set the "DELETE" node to 1.

SUBSCRIPT	DESCRIPTION	REQ/ OPT	DATA FORMAT
"SKIN TEST",i,"TEST")	Skin Test code	R	Pointer to Skin Test file (9999999.28)
"SKIN TEST",i,"READING")	Numeric measurement of the surface area	0	Whole number between 0 and

	tested (in millimeters).		40 inclusive.
"SKIN TEST",i,"RESULT")	Results of the Skin Test.	0	P ::=Positive
			D ::=Doubtful
			N ::=Negative
			O ::=No Take
"SKIN TEST",i,"D/T READ")	Date/Time Skin Test was read.	0	FileManager Internal Format for date/time
"SKIN TEST",i,"DIAGNOSIS")	The primary diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"DIAGNOSIS 2")	The second diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"DIAGNOSIS 3")	The third diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"DIAGNOSIS 4")	The fourth diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"DIAGNOSIS 5")	The fifth diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"DIAGNOSIS 6")	The sixth diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"DIAGNOSIS 7")	The seventh diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"DIAGNOSIS 8")	The eighth diagnosis that is associated with the identified Skin Test.	0	Pointer to ICD Diagnosis file (80)
"SKIN TEST",i,"ENC PROVIDER")	Provider who performed the Skin Test.	0	Pointer to New Person file (200)
"SKIN TEST",i,"EVENT D/T")	Date/Time Skin Test was done.	0	FileManager Internal Format for date/time

"SKIN TEST",i,"COMMENT")	Comment	0	Free Text (1- 245 characters)
"SKIN TEST",i,"DELETE")	This is a flag that denotes deletion of the Skin Test entry.	0	[1 null]

6.5. Immunization

The "IMMUNIZATION" node may have multiple entries (i). To delete the entire "IMMUNIZATION" entry, set the "DELETE" node to 1.

SUBSCRIPT	DESCRIPTION	REQ/	DATA
		OPT	FORMAT
"IMMUNIZATION",i,"IMMUN")	Immunization code	R	Pointer to Immunization file (9999999.14)
"IMMUNIZATION",i,"SERIES")	Series specifies the sequence of the series	0	P ::=Partially complete
	for the immunization that was administered.		C ::=Complete
	was auministered.		B ::=Booster
			1 ::=Series1 thru 8::=Series8
"IMMUNIZATION",i,"REACTIO	Observed reaction to the	0	0 ::=None
N")	immunization.		1 ::=Fever
			2 ::=Irritability
			3 ::=Local reaction or swelling
			4 ::=Vomiting
			5 ::=Rash or itching
			6 ::=Lethargy
			7

			::=Convulsions
			8 ::=Arthritis or arthralgias
			9 ::=Anaphylaxis or collapse
			10 ::=Respiratory distress
			11 ::=Other
"IMMUNIZATION",i,"CONTRAI NDICATED")	This field may be used to indicate that this immunization should not be administered again. "1" indicates that the immunization should not be given to the patient in the future	0	[1 0 null]
"IMMUNIZATION",i,"DIAGNOS IS")	The primary diagnosis that is associated with the identified Immunization.	0	Pointer to ICD Diagnosis file (80)
"IMMUNIZATION",i,"DIAGNOS IS 2")	The second diagnosis that is associated with the identified Immunization.	O	Pointer to ICD Diagnosis file (80)
"IMMUNIZATION",i,"DIAGNOS IS 3")	The third diagnosis that is associated with the identified Immunization.	0	Pointer to ICD Diagnosis file (80)
"IMMUNIZATION",i,"DIAGNOS IS 4")	The fourth diagnosis that is associated with the identified Immunization.	0	Pointer to ICD Diagnosis file (80)
"IMMUNIZATION",i,"DIAGNOS IS 5")	The fifth diagnosis that is associated with the identified Immunization.	0	Pointer to ICD Diagnosis file (80)
"IMMUNIZATION",i,"DIAGNOS IS 6")	The sixth diagnosis that is associated with the identified Immunization.	0	Pointer to ICD Diagnosis file (80)
"IMMUNIZATION",i,"DIAGNOS	The seventh diagnosis	0	Pointer to ICD

IS 7")	that is associated with the identified Immunization.		Diagnosis file (80)
"IMMUNIZATION",i,"DIAGNOS IS 8")	The eighth diagnosis that is associated with the identified Immunization.	0	Pointer to ICD Diagnosis file (80)
"IMMUNIZATION",i,"ENC PROVIDER")	Provider who performed the Immunization.	0	Pointer to New Person file (200)
"IMMUNIZATION",i,"EVENT D/T")	Date/Time Immunization was done.	0	FileManager Internal Format for date/time
"IMMUNIZATION",i,"COMMEN T")	Comment	0	Free Text (1- 245 characters)
"IMMUNIZATION",i,"DELETE")	This is a flag that denotes deletion of the Immunization entry.	0	[1 null]

6.6. 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 3/27/03 at 12:00 P.m. The provider who resulted the tests is Fred Jones. This occasion of service is defined as an Ancillary Package Daily Data (X). There are two diagnoses to support the tests, both of which are non–service connected; however, both are associated with Agent Orange exposure.

```
^TMP("LRPXAPI",543173595,"DX/PL",1,"DIAGNOSIS")=465
^TMP("LRPXAPI",543173595,"DX/PL",1,"PRIMARY")=1
^TMP("LRPXAPI",543173595,"DX/PL",1,"PL SC")=0
^TMP("LRPXAPI",543173595,"DX/PL",1,"PL AO")=1
^TMP("LRPXAPI",543173595,"DX/PL",2,"DIAGNOSIS")=466
^TMP("LRPXAPI",543173595,"DX/PL",2,"PL SC")=0
^TMP("LRPXAPI",543173595,"DX/PL",2,"PL AO")=1
^TMP("LRPXAPI",543173595,"ENCOUNTER",1,"DSS ID") = 59
```

```
^TMP("LRPXAPI",543173595,"ENCOUNTER",1,"ENC D/T") =
3030328
^TMP("LRPXAPI",543173595,"ENCOUNTER",1,"HOS LOC") = 19
^TMP("LRPXAPI",543173595,"ENCOUNTER",1,"PATIENT") =
281
^TMP("LRPXAPI",543173595,"ENCOUNTER",1,"SERVICE
CATEGORY") = X
^TMP("LRPXAPI",543173595,"PROCEDURE",1,"ENC PROVIDER")
^TMP("LRPXAPI",543173595,"PROCEDURE",2,"ORD PROVIDER")
= 66
^{\text{TMP}}(\text{"LRPXAPI"}, 543173595, \text{"PROCEDURE"}, 1, \text{"EVENT D/T"}) =
3030327.12
^TMP("LRPXAPI",543173595, "PROCEDURE",1, "PROCEDURE") =
^TMP("LRPXAPI",543173595,"PROCEDURE",1,"DIAGNOSIS") =
465
^TMP("LRPXAPI",543173595,"PROCEDURE",1,"DIAGNOSIS 2")
^TMP("LRPXAPI",543173595, "PROCEDURE",1, "MODIFIER",22) =
^TMP("LRPXAPI",543173595,"PROCEDURE",1,"OTY") = 1
^TMP("LRPXAPI",543173595,"PROCEDURE",2,"ENC PROVIDER")
= 58
^TMP("LRPXAPI",543173595,"PROCEDURE",2,"ORD PROVIDER")
^{\text{TMP}}(\text{"LRPXAPI"}, 543173595, \text{"PROCEDURE"}, 2, \text{"EVENT D/T"}) =
3030327.12
^TMP("LRPXAPI",543173595,"PROCEDURE",2,"PROCEDURE") =
^TMP("LRPXAPI",543173595, "PROCEDURE",2, "QTY") = 1
```

6.7. \$\$CLNCK^SDUTL2(CLN,DSP)

This API will be used by the subscribing package to check the clinic associated with an encounter to ensure that its corresponding stop pairs conform to the stop code restriction. Effective 10/1/2003, stop codes (also known as DSS Identifiers) are assigned a restriction type of primary, secondary, or either. Primary types can only be used in the primary stop code position; secondary types can only be used in the secondary stop code position; and those with a type of either can be used in the primary or secondary stop code position. Stop codes that have a restriction type of primary or secondary will also have a restriction date to track when the stop code is designated as a restricted stop code.

Parameter Description:

CLN The internal entry number of the clinic from file #44.

DSP Interactive display of error message, 1 - Display or 0 No Display

Returned Value:

1 If clinic has conforming stop codes.

0^error If clinic has non-conforming stop codes plus error message.

7. External Relations

PCE is dependent upon the following **V**/ST**A** packages:

Package	Minimum Version
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

8. 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.

9. Generating Online Documentation

9.1. 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*
```

9.2. 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*
```

9.3. 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.

9.4. 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*.

9.5. 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
```

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START WITH WHAT FILE: V MEASUREMENT// 9000010 VISIT (1 entry)

GO TO WHAT FILE: VISIT// <RET>

Select LISTING FORMAT: STANDARD// <RET>

DEVICE: PRINTER

10. Troubleshooting and 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 Appendices document, 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.

10.1. 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 or ICD10 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.

10.2. 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:
             Error Number
         ERN
         PDT
                  Processing Date and Time
               Encounter Date and Time
         EDT
         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]
                                       Aug 08, 1996
4:05:09 pm Page 1
                     PCE Device Interface Error
Report
Report based on Error Numbers 1 through 26.
Error Number: 1
   Patient: PCEPATIENT, ONE 000-45-6789
  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.

11. 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.

12. Appendix A – Developer Guide – PCE Device Interface Module

PCE Device Interface module local array structures exported with PCE. 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>)

 $$\operatorname{\text{Vitals}}$$ are not processed by PCE but are passed to the Vitals/Measurement package.

LOCAL ("LOCAL",

This data doesn 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/

 $$\operatorname{PROBLEM}$$ 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

 $$\operatorname{\textsc{DIAGNOSIS}}$$ values are required to capture workload and generate a \backslash

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

 $% \left(1\right) =\left(1\right) \left(1\right)$ 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

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|
                      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
                                      ::= $P(
                          <PIECE>
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.
```

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```
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> ::= $P(
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.
```

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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'

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

protocol event points.

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 $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

```
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:
   Piece 1
        Data Source
        Required for PCE
        Required for SD
        Format: DATA SOURCES file (#839.7)
   Piece 2
        DUZ
        Required for PCE
        Required for Scheduling
   Piece 3
        Form numbers
        Not stored by PCE Piece 4
        Batch ID
        Not stored by PCE Piece 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:
   LOCAL("ENCOUNTER", modifier[E;1/.01]) = ""
   Piece 1
        Appointment Date/Time
        Required for PCE
        Required for Scheduling
```

```
Format: Fileman Date/Time
  Piece 2
        Patient DFN
        Required for PCE
        Required for Scheduling
        Format: Pointer to IHS PATIENT file (#9000001)
  Piece 3
        Hospital Location IEN
        Each hospital location is a separate encounter
P,S
        Format: Pointer to HOSPITAL LOCATION file
(#44)
  Piece 4
        Provider IEN
        This is the person that saw the Patient at the
scheduled date and
        time.
        Required for PCE
        Format: Pointer to NEW PERSON file (#200)
  Piece 5
        Visit CPT code IEN
        Format: Pointer to TYPE OF VISIT (#357.69)
  Piece 6
        SC Condition
        Format: [1 | 0 | null]
  Piece 7
       AO Condition
        Format: [1 | 0 | null]
  Piece 8
        IR Condition
        Format: [1 | 0 | null]
  Piece 9
        EC Condition
        Format: [1 | 0 | null]
  Piece 10
       MST Condition
        Format: [1 | 0 | null]
  Piece 13
```

```
Eligibility Code IEN
        Format: Pointer to ELIGIBILITY CODE file (#8)
   Piece 14
        Check-out date and time
        Format: Fileman Date/Time
   Piece 15
        Provider indicator (relates to 4)
        Required for PCE
        Format: Set of Codes
             P ::= Primary
             S ::= Secondary
  Piece 16
        Attending Physician IEN
        (May or may not be the same as 4)
        Format: Pointer to NEW PERSON file (#200)
   Piece 17
        HNC Condition
        Format: [ 1 | 0 | null ]
   Piece 18
        CV Condition
        Format: [ 1 | 0 | null ]
  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, \dots 17^18 where:
   Piece 1
        Diagnosis Code IEN
        Required for PCE
        Required for Scheduling
        Format: Pointer to ICD DIAGNOSIS file (#80)
   Piece 2
        Diagnosis Specification Code
        Required for PCE
        N/A for Problem List
        Format: Set of Codes
               ::= Primary
               ::= Secondary
   Piece 3
        Clinical Lexicon Term IEN
        Format: Pointer to EXPRESSIONS file (#757.01)
   Piece 4
        Problem IEN
        Required by Problem List for existing
        Format: Pointer to PROBLEM LIST file
(#9000011)
   Piece 5
        Add to Problem List
        N/A for PCE
        Required by Problem List for new problem
        Format: [1 | 0 | null]
   Piece 6
        Problem Active?
        Default is Active if not specified
        N/A for PCE
        Format: Set of Codes
             A ::= Active
```

```
I ::= Inactive
Piece 7
     Problem Onset Date
     N/A for PCE
     Format: Fileman Date/Time
Piece 8
     Problem Resolved Date
     N/A for PCE
     Format: Fileman Date/Time
Piece 9
     SC Condition
     Format: [1 | 0 | null]
Piece 10
     AO Condition
     Format: [1 | 0 | null]
Piece 11
     IR Condition
     Format: [1 | 0 | null]
Piece 12
     EC Condition
     Format: [1 | 0 | null]
Piece 13
     Provider Narrative
     Required for PCE
     Required by Problem List for new problem
     Format: free text, 2-80 Characters
Piece 14
     Category Header for Provider Narrative
     N/A for Problem List
     Format: free text, 2-80 Characters
Piece 15
     MST Condition
     Format: [ 1 | 0 | null ]
Piece 16
     HNC Condition
     Format: [ 1 | 0 | null ]
Piece 17
     CV Condition
```

```
Format: [ 1 | 0 | null ]
   Piece 18
        Order/Resulting
        Format: Set of Codes
             O ::= Ordering
             R ::= Resulting
               ::= Both Ordering and Resulting
   LOCAL ("DIAGNOSIS/PROBLEM", < PROVIDER IEN>, i, "NOTE")
= 1, where:
   Piece 1
        Provider N/A for PCE
        Format: 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.
   NOTE: 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
   LOCAL ("DIAGNOSIS", < PROVIDER IEN>, i) =
1^2^3^4^...^13^14 where:
   Piece 1
        Diagnosis code IEN
```

```
Required for PCE
        Required for Scheduling
        Format: Pointer to ICD DIAGNOSIS File (#80)
  Piece 2
        Diagnosis specification code
        Will default to "S" if blank
        Format: Set of Codes.
             P ::= Primary
             S ::= Secondary
  Piece 3
        SC Condition
        Format: [1 | 0 | null]
  Piece 4
        AO Condition
        Format: [1 | 0 | null]
  Piece 5
        IR Condition
        Format: [1 | 0 | null]
  Piece 6
        EC Condition
        Format: [1 | 0 | null]
  Piece 7
        Associated Problem IEN
        Format: Pointer to PROBLEM LIST file 9000011
  Piece 8
        Physician's term for Diagnosis
        Required for PCE
        Format: free text, 2-80 Characters
  Piece 9
        Physician's term for Category Header
        May have been used as a grouping for a set of
related Diagnosis
        which the provider selected from
        Format: free text, 2-80 Characters
  Piece 10
        Lexicon IEN
        Format: Pointer to EXPRESSIONS File (#757.01)
   Piece 11
        MST Condition
```

```
Format: [ 1 | 0 | null ]
   Piece 12
        HNC Condition
        Format: [ 1 | 0 | null ]
   Piece 13
        CV Condition
        Format: [ 1 | 0 | null ]
   Piece 14
        Order/Resulting
        Format: Set of Codes
             O ::= Ordering
             R ::= Resulting
               ::= Both Ordering and Resulting
   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) =
1^2^3^4^5^6^7^8^9^10^
        11^12^13^14, (pieces defined below)
   LOCAL ("PROCEDURE", < PROVIDER
IEN>,i,modifier[E;1/.01]) = ""
   Piece 1
        CPT4 Procedure code
        Required by PCE for V CPT file (Procedures)
             if this field is blank then will be
stored in V TREATMENT file
        Required for Scheduling
        Format: Pointer to CPT file (#81)
```

```
Piece 2
        Quantity Performed
        Required for PCE
        Required for Scheduling
        Format: number > 0
  Piece 3
        Procedure specification code
        For CPT only.
        Format: Set of Codes
             P ::= Primary
             S ::= Secondary
  Piece 4
        Date/Time Procedure performed
        Format: Fileman Date/Time
  Piece 5
        Primary Associated Diagnosis IEN For this CPT
only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
  Piece 6
        Physician's term for Procedure
        Required for PCE
        Format: free text, 2-80 Characters
  Piece 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
        Format: free text, 2-80 Characters
  Piece 8
        1st Secondary Associated Diagnosis IEN For
this CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
  Piece 9
        2nd Secondary Associated Diagnosis IEN For
this CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
  Piece 10
        3rd Secondary Associated Diagnosis IEN For
this CPT only.
```

```
Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 11
        4th Secondary Associated Diagnosis IEN For
this CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 12
        5th Secondary Associated Diagnosis IEN For
this CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 13
        6th Secondary Associated Diagnosis IEN For
this CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 14
        7th Secondary Associated Diagnosis IEN For
this CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   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^...^15 where:
   Piece 1
        Problem Name
        Required for new Problem List, i.e. if Pos. 10
is null
        Format: free text
   Piece 2
        Problem Onset Date
```

```
Format: Fileman Date/Time
Piece 3
     Problem Active?
     Default is ACTIVE if not specified
     Format: [1 | 0 | null]
Piece 4
     Problem Date Resolved
     Format: Fileman Date/Time
Piece 5
     SC Condition
     Format: [1 | 0 | null]
Piece 6
     AO Condition
     Format: [1 | 0 | null]
Piece 7
     IR Condition
     Format: [1 | 0 | null]
Piece 8
     EC Condition
     Format: [1 | 0 | null]
Piece 9
     ICD Code value {optional}
     Format: Pointer to ICD DIAGNOSIS File (#80)
Piece 10
     Problem IEN
     Must be null if new problem
     Required for editing existing Problem
     Format: Pointer to PROBLEM LIST file 9000011
Piece 11
     Physician's term for Problem
     Null if new problem
     Format: free text, 60 Characters Max
Piece 12
     Lexicon IEN
     Format: Pointer to EXPRESSIONS File (#757.01)
Piece 13
     MST Condition
     Format: [ 1 | 0 | null ]
```

```
Piece 14
        HNC Condition
        Format: [ 1 | 0 | null ]
   Piece 15
        CV Condition
        Format: [ 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
   Use this node to pass of additional providers which
do not have data
   associated with them.
   If no additional Providers, then
'$D(LOCAL("PROVIDER", < PROVIDER
   IEN>)) is true.
   LOCAL ("PROVIDER", < PROVIDER IEN>= 1^2 where:
   Piece 1
        Provider indicator
        Required for PCE
        Format: Set of Codes.
             P: = Primary
             S: = Secondary
```

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```
Piece 2
        Attending
        Format: [1|0| null]
  NOTE: If a provider is on the Encounter node and
also on this node
   then the data on this node will be used for
Primary/Secondary indicator.
   Immunization data list, specific to one provider
   If no immunization entries, then
'$D(LOCAL("IMMUNIZATION", < PROVIDER IEN>))
   is true.
  LOCAL ("IMMUNIZATION", < PROVIDER
IEN>, i) =1^2^3^4^5^6^7^8^9^10^11^12^13^14^15
  Piece 1
        Immunization
        Required for PCE
        Format: Pointer to IMMUNIZATION File
(9999999.14)
  Piece 2
        Series
        Format: Set of Codes.
             P::=Partially complete
             C::=Complete
             B::=Booster
             1::=Series1
             8::=Series8
   Piece 4
        Reaction
        REACTION Field (9000010.11,.06) SET
        Format: Set of Codes.
             '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;
   Piece 5
        Contraindicated
        Format: [1|0|null]
   Piece 6
        Event D/T
        Format: Fileman Date/Time
   Piece 7
        Remarks
        Format: Comment
   Piece 8
        Primary Associated Diagnosis IEN For this
mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80
   Piece 9
        1st Secondary Associated Diagnosis IEN For
this mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 10
        2nd Secondary Associated Diagnosis IEN For
this mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 11
        3rd Secondary Associated Diagnosis IEN For
this mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 12
        4th Secondary Associated Diagnosis IEN For
this mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
```

```
Piece 13
        5th Secondary Associated Diagnosis IEN For
this mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 14
        6th Secondary Associated Diagnosis IEN For
this mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   Piece 15
        7th Secondary Associated Diagnosis IEN For
this mapped CPT only.
        Format: Pointer to ICD DIAGNOSIS File (#80)
   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) = 1^2^3^4^5^6^7^8^9^10^11^12^13
   Piece 1
        SKIN TEST
        Required for PCE
        Format: Pointer to SKIN TEST File (9999999.28)
   Piece 2
        READING
        Format: Whole number between 0 and 40
inclusive
  Piece 3
        RESULT
        Format: Set of Codes.
             P::=Positive
             N::=Negative
             D::=Doubtful
             0::=No Take
   Piece 4
        Date Read
```

Format: Fileman Date/Time

Piece 5

Date of Injection

Format: Fileman Date/Time

Piece 6

Primary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80 Piece 7

1st Secondary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80)
Piece 8

2nd Secondary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80) Piece 9

3rd Secondary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80) Piece 10

4th Secondary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80)
Piece 11

5th Secondary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80) Piece 12

6th Secondary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80) Piece 13

7th Secondary Associated Diagnosis IEN For this mapped CPT only.

Format: Pointer to ICD DIAGNOSIS File (#80)

Examination data list, specific to one provider

```
If no examination entries, then
'$D(LOCAL("EXAM", < PROVIDER IEN>))
   is true.
   LOCAL ("EXAM", <PROVIDER.IEN>") =1^2
   Piece 1
        EXAM
        Required for PCE
        Format: Pointer to EXAM File (9999999.15)
   Piece 2
        RESULT
        Format: Set of Codes.
             A::=Abnormal
             N::=Normal
   Patient Education data list, specific to one
provider
   If no Patient Education entries, then
'$D(LOCAL("PATIENT ED", < PROVIDER
   IEN>)) is true. LOCAL ("PATIENT ED", <PROVIDER</pre>
IEN>, i) = 1^2
   Piece 1
        Topic
        Required for PCE
        Format: Pointer to EDUCATION TOPICS File
(9999999.09)
   Piece 2
        Level of Understanding
        Format: Set of Codes.
             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
    '$D(LOCAL("HEALTH FACTORS", < PROVIDER IEN>)) is
true. LOCAL ("HEALTH
   FACTORS", < PROVIDER IEN>, i) = 1^2
   Piece 1
        Health Factor
        Required for PCE
        Format: Pointer to HEALTH FACTORS File
(9999999.64)
  Piece 2
        Level/Severity
        Format: Set of Codes.
             M::=Minimal
             MO::=Moderate
             H::=Heavy/Severe
  Vitals data list, specific to one provider
   If no Vitals, then '$D(LOCAL("VITALS", < PROVIDER
IEN>)) is true.
  LOCAL ("VITALS", <PROVIDER IEN>, i) = 1^2^3^4, where:
   Piece 1
        Type
        Required for PCE
        Format: Set of Codes.
             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
   Piece 2
        Value
        Required for PCE
        Format: Numeric
   Piece 3
        Units
        Not stored; used for conversions
        Format: Set of Codes.
             C::=Centigrade (degrees)
             CM::=Centimeter
             F::= Fahrenheit (degrees)
             IN::=Inches
             KG::=Kilograms
             LB::=Pounds
   Piece 4
        Date/Time Measurement taken
        Format: Fileman Date/Time
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
        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
```

Pieces All

Site Specific data encoding

Not stored in PCE

Format: Site Specific

NOTE: LOCAL("LOCAL" where "LOCAL" is replaced by

locally namespaced

string.

13. Appendix B – PCE Security

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

13.1. 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.

13.2. 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	@			@	
920	Vaccine Information Statement	@		@	@	@
920.1	Immunization Info Source	@	@	@	@	@
920.2	Imm Administration Route	@		@	@	@
920.3	Imm Administration Site (Body)	@		@	@	@
920.4	Imm Contraindications	@	@	@	@	@
920.5	Imm Refusals	@	@	@	@	@
9000001	Patient/HIS	@				
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	@			
9999999.04	Imm Manufacturer	@	@	@	@
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	@		@	

13.3. 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/HIS	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

13.4. 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

14. Appendix C – Visit Tracking Technical Information

14.1. 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.

14.2. 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.

14.3. 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.

14.4. 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.

14.5. 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.)

14.6. Dependencies

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

14.7. 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.

14.7.1. 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.

14.8. 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.

14.9. 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.
- **14.10. 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.

14.11. 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
```

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.

14.12. Create and/or Match Visit Using Input Criteria

```
^VSTT
(See the Package-Wide Variables section)
          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</pre>
how the visit
          processor will function, see package-wide
          variables>
     [VSIT("<xxx>")] <array with mnemonic</pre>
subscript>
          (used in match logic if VSIT(0)["M")
          (for SVC, TYP, INS, CLN, ELG, LOC)
          Note: For multiple field values use [<field
          value>[^...]]
          i.e., VSIT("SVC")="H^D" (will find both)
     VSITPKG
               <package name space>
```

14.13. 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.
               Χ
                   Visit IEN
     INPUT
SUB^AUPNVSIT
Decrease the dependent entry count by one
                                             INPUT
         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
                         Package Name Space
               PKG
               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 $% \left(1\right) =\left(1\right) +\left(1\right) +$

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)< td=""><td>>) depending on</td></xxx)<>	>) depending on			
the value of WITHIEN					
	-	is all of the			
fields in the visit fil					
	internal a	and external format			
are returned the					
	format is	: internal^external			
SELECTED^VSIT(DFN,SDT,E	DT, HOSLOC, EN	NCTYPE, NENCTYPE, SERV			
CAT, NSERVCAT, LASTN)					
Returns selected visits	depending of	on screens passed			
in.					
INPUT DFN DFN		of Patient (only			
required input)					
SDT	ı	Start Date			
EDI	ı	End Date			
HOS	LOC	Hospital Location			
ENC	TYPE	Encounter types to			
include					
NEN	CTYPE	Encounter types to			
exclude					
SEF	VCAT	Service Categories			
to include					
NSE	RVCAT	Service Categories			
to exclude					
LAS	TN	How many starting			
with the Date and					
going backwards until have that many					
or all of them, whichever is first					

14.14. 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)

\$\$HISTORIC^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

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

14.15. 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.
               Indicates
Key
r
               indicated a required field
               matching/screening logic can/does apply
m
               system generated
               strongly encouraged
е
Key Variable Description
     .001 VSIT("IEN")
                         NUMBER (visit internal entry
number)
     .01 VSIT("VDT")
                         VISIT/ADMIT DATE&TIME (date)
rm
     .02
         VSIT("CDT")
                         DATE VISIT CREATED (date)
          VSIT("TYP")
     .03
                         TYPE (set)
     .05 VSIT("PAT")
                         PATIENT NAME (pointer PATIENT
rm
file
               #9000001) (IHS file DINUMed to PATIENT
               file #2)
     .06
         VSIT("INS")
                         LOC. OF ENCOUNTER (pointer
LOCATION
               file #9999999.06) (IHS file DINUMed to
               INSTITUTION file #4)
     .07
         VSIT("SVC")
                         SERVICE CATEGORY (set)
     .08 VSIT("DSS")
                         DSS ID (pointer to CLINIC
STOP file)
     .09
                         DEPENDENT ENTRY COUNTER
          VSIT("CTR")
(number)
     .11
         VSIT("DEL")
                         DELETE FLAG (set)
     .12
          VSIT("LNK")
                         PARENT VISIT LINK (pointer
VISIT file
               #9000010)
          VSIT("MDT")
     .13
                         DATE LAST MODIFIED (date)
```

	.18	VSIT	("COD")	;	CHECK O	UT DATE&TIME (date)
	.21	VSIT	("ELG"))	ELIGIBI	LITY (pointer
ELIG	IBILI	TY COI	DΕ			
			file #	ŧ8)		
Key	Vari	able	Descri	iptic	<u>on</u>	
mr	.22	VSIT	("LOC"))	HOSPITA	L LOCATION (pointer
HOSP	ITAL					
			LOCATI	ION :	file #44))
	.23	VSIT	("USR"))	CREATED	BY USER (pointer NEW
PERS	ON					
			file #	‡200 <u>)</u>)	
Ì	.24	VSIT	("OPT"))	OPTION U	USED TO CREATE
(poi	nter					
			OPTION	N fi	le #19)	
			("PRO"))	PROTOCO	L (pointer PROTOCOL
file	#101)				
		VSIT	("ACT"))	PFSS ACC	COUNT REFERENCE
(poi	nter					
			PFSS A	ACCO1	UNT file	#375)
			VSIT('	'OUT'	") OU:	ISIDE LOCATION (free
text)					
		1	7	SIT	("SC")	SERVICE CONNECTED
(set						
,		2	7	/SIT	("AO" AGI	ENT ORANGE EXPOSURE
(set)	2	_		(U== U)	
EVDO		3	7	/SIT	("IR")	IONIZING RADIATION
EXPO		(set)	-	70 T III	/ U.D.Q.U.)	ON TOTAL CONDITIONS
(set		4	\	/SIT	(EC)	SW ASIA CONDITIONS
(35)	8000	5	7	7Q T TT	(UMQTU)	MILITARY SEXUAL
TRAII	MA (s		\	/ OTI	(TOT)	MILLIANI SEAUAL
11410	8000	•	7	ISTT	("HNC")	HEAD AND/OR NECK
CANC	ER (s		`	, ОТТ	(11110)	TILLIAD / OIL INDCIL
0.11.0	8000		7	/STT	("CV")	COMBAT VETERAN
	8000					PROJ 112/SHAD (set)
	1500				,	VISIT ID (free
text		Τ.	\	/ OTI	(ATD)	AIDII ID (IIGE
00110	1500	2	7	/STT	("IO")	PATIENT STATUS
IN/O	UT (s		`	. ~	, == /	
· 	1500		7	/SIT	("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.
                    Force adding a new entry.
                    Interactive mode
                    Use patient's primary eligibility
               Ε
if not defined on call
                    with VSIT ("ELG").
                    Allow creation of new visit.
                    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.
                    Impose criteria on
matching/screening of visits. Uses the
                    VSIT(<xxx>) array: Matching
elements must equal their
                     corresponding field.
               Internal entry number of the patient
          DFN
file.
          VSIT The date (and time) of the visit.
          VSIT(<ien>
                         N^S[^1]
               where:
               N = <internal entry number of visit>
               S = \langle value \ of .01 \ field \ of \ visit \rangle
               1 = <indicates that a new visit was
added
          ^TMP("VSITDD",$J,<xxx><visit
subscript>;<field #>;<node>;<piece>;
               <error message>
          VSITPKG
                    Package Name Space
```