



# **AUTOMATED INFORMATION COLLECTION SYSTEM**

## **AICS**

# **TECHNICAL MANUAL**

Version 3.0

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Department of Veterans Affairs  
Health Systems Design & Development (HSD&D)



# Preface

This is the technical manual for the Automated Information Collection System (AICS) V. 3.0 software package. It is designed to assist IRM personnel in operation and maintenance of the package.

For information regarding use of this software, please refer to the AICS User Manual. For further information on installation and maintenance of this package, Release Notes and an Installation Guide are provided.



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# Introduction

The encounter form is a paper form designed specifically for outpatient visits. It is used both to display relevant patient data for use during the visit, such as demographics, allergies, and problems; and to collect data about the visit, such as procedures and tests performed. Its primary focus is clinical and to collect data for the Ambulatory Care Reporting Project. It also has other purposes such as collecting data necessary for billing.

The AICS package contains all the software necessary to design, edit, and assign encounter forms to clinics; print forms for appointments with patient data; and print with or without patient data for patients without an appointment. The software enables collection of outpatient clinical and administrative data and provides a more organized, less obtrusive method of data collection to the clinician and supporting clerical staff.

AICS V. 3.0 is a hybrid system designed to use commercial software for the scanning and image processing of forms.





# Orientation

The AICS V. 3.0 Technical Manual is divided into major sections for general clarity and simplification of the material being presented. This manual is intended for use as a reference document by technical computer personnel.

The Implementation and Maintenance Section provides information on any aspect of the package that is site configurable. Instructions on how to obtain information about the relationships between the AICS V. 3.0 files and files external to the package are provided in Files Section. This section also includes instructions on how to obtain information on any AICS V. 3.0 input, print, and sort templates. There are also sections on archiving and purging, how to generate on-line documentation, and package-wide variables.

## **Note to Users With QUME Terminals**

It is very important that you set up your QUME terminal properly for this release of AICS. After entering your access and verify codes, you will see

Select TERMINAL TYPE NAME: {type}//

Please make sure that <C-QUME> is entered here. This entry will become the default. You can then press <RET> at this prompt for all subsequent log-ins. If any other terminal type configuration is set, options using the List Manager utility (such as Clinic Setup/Edit Forms option under the Edit Encounter Forms Menu) will neither display nor function properly on your terminal.



# General Information

## Namespace Conventions

The namespace and file ranges assigned to the AICS package are IBD, files #357 through #359.94.

## Integrity Checker

The IBDNTEG routine checks integrity for other IBD\* or AICS routines. This was built using the KERNEL utility routine, XTSUMBLD.

## Resource Requirements

AICS V. 3.0 requires a small amount of additional capacity to edit and store the format of the encounter forms. Additional disk capacity is used to store a form definition each time a form is redesigned. In addition, approximately 1K is required for each 10 appointments printed. This data can be purged after 90 days. The printing of encounter forms will require at least one dedicated printer that most sites have already received. The printing will require additional CPU capacity; however, this job may be scheduled during non-peak workload hours.



## Implementation and Maintenance

There are steps that the local site should take before encounter forms can be used.

First, forms must be designed and assigned to the clinics. Forms can be shared between clinics, but it is important to control who has responsibility for editing the shared forms. One important aspect of designing encounter forms is determining what codes should go on the form. Many encounter forms will have lists of CPT codes, diagnosis codes, or problems. Because space on an encounter form is at a premium, careful analysis is required to determine the codes most commonly used by the clinic before entering codes on the form. For CPT codes, the option Most Commonly Used Outpatient CPT Codes can be used to determine a clinic's most commonly used codes.

Procedures for printing the encounter forms must be determined. Following are some of the questions that must be answered.

- What printers to use?
- Can the printers be loaded with enough paper?
- How many days in advance should the forms be printed?
- What time of day to run the print job?
- Should the printers be watched?
- What to do if there are printer problems?

It is expected that most printing of forms will be done in batch at night for entire divisions and that forms will be printed several days in advance with only the additions printed the night before.

Then there are questions concerning what to do with the encounter forms.

- How will the completed encounter forms be routed?
- Data entry vs. scanning.

The Print Manager is expected to be very useful to the local sites. Sites must decide which reports should be printed. The Print Manager allows these reports to be specified along with the encounter forms. The fastest way to define the reports is at the division level, rather than at the clinic level. Individual clinics can override reports defined to print at the division level.

## Setting Up Workstations

We are recommending the following steps in implementing the Scanning Workstation software.

1. Install the PC workstations in the area where they will be located complete with the scanners attached. This is a good time to let users become comfortable with the PC and in using a mouse, especially if they have no PC experience.
2. Install the RPC Broker on the workstations and make sure that it is working. This will require a TCP network connection.
3. Test the Paper Keyboard application and make sure it is loaded correctly and will run. Run a test of scanning with Paper Keyboard. There are several samples available.
4. Make any final changes to the forms that are needed. There is one new block for the MAS classification questions that presents only those classifications that are appropriate, and allows input of YES and NO. In addition, some sites will want to implement other new functionality such as CPT multipliers, multiple diagnosis codes, and a new practitioner block.
5. Test the scannability of the encounter forms using one of the Manual Data Entry options. These options mimic scanning and can be used to see how an encounter form will behave when scanned. **With functionality put in place by the Code Set Versioning project, this option is no longer in use.**
6. Plan to start small. Initially, bring up one small clinic using one of the HP single-sided scanners, and then add clinics as you become comfortable with the operation. During testing we found that implementing the single-sided HP scanners was simpler than the double-sided Bell and Howell scanners; however, the double-sided scanners are significantly faster.
7. Install the server software. This is a KIDS (Kernel Installation and Distribution System) build and installs in less than 30 minutes.
8. Install the client software on each workstation. Verify that the connect to the server is working by logging in. Follow the steps for calibrating the scanner. The directions for calibration can be found in the online help, and in the Installation Guide and Release Notes. Most users will need some IRM assistance to calibrate the scanner.

There are four short demonstrations/tutorials available through the help menu that can be used for user training.

# Routines

## Routines to Map

IBDF1*	IBDF5A
IBDF2*	IBDF9A1
IBDFU*	IBDFQSC1

## Obsolete Routines

IBX\*

## Callable Routines

The following routines are called by supported RPCs.

CLNLSTI^IBDFRPC(RESET,CLINIC)  
FRMLSTI^IBDFRPC(RESET,FRM,FTYP,KILL,ALLOBJ)  
OBJLST^IBDFRPC1(RESET,IBDF)  
IDPAT^IBDFRPC3(RESET,FORMID)  
SEND^IBDFRPC4(RESET,IBDF)

Other callable routines:

SEND(FORMID,PROVIDER,PROVTYPE,BUBBLES,HANDPRNT,  
CHECKOUT,PXCA,DYNAMIC)^IBDF18E ---  
(similar to SEND^IBDFRPC4)  
FSCND(ID,STAT,ERR)^IBDF18C  
FID(DFN,APPT,SOURCE,FORMTYPE,CLIN)^IBDF18C  
FORMTYPE(SOURCE)^IBDF18D  
GETPRO(CLINIC,ARY)^IBDF18B  
GETLST(CLINIC,INTERFACE,ARY,FILTER,COUNT)^IBDF18A ---  
(replaced by OBJLST^IBDFRPC1)  
EN1(PXCA,IBDF)^IBDFDEA

## **Routine List**

To obtain a list of AICS routines go to:

1. Programmer Options Menu
2. Routine Tools Menu
3. First Line Routine Print Option
4. Routine Selector: IBD\*



# Files

## Globals to Journal

The IBD and IBE globals must be journalled.

## File List

File #	File Name	Global
357	ENCOUNTER FORM	^IBE(357
357.08	AICS PURGE LOG	^1BD(357.08
357.09	ENCOUNTER FORM PARAMETERS	^IBD(357.09
357.1	ENCOUNTER FORM BLOCK	^IBE(357.1
357.2	SELECTION LIST	^IBE(357.2
357.3	SELECTION	^IBE(357.3
357.4	SELECTION GROUP	^IBE(357.4
357.5	DATA FIELD	^IBE(357.5,
357.6**	PACKAGE INTERFACE	^IBE(357.6
357.69**	TYPE OF VISIT	^IBE(357.69
357.7	FORM LINE	^IBE(357.7
357.8	TEXT AREA	^IBE(357.8
357.91*	MARKING AREA TYPE	^IBE(357.91
357.92*	PRINT CONDITIONS <b>This file must not be edited!</b>	^IBE(357.92
357.93	MULTIPLE CHOICE FIELD	^IBE(357.93
357.94	ENCOUNTER FORM PRINTERS	^IBE(357.94

Files

**File List, cont.**

File #	File Name	Global
357.95	FORM DEFINITION	^IBD(357.95
357.96	ENCOUNTER FORM TRACKING	^IBD(357.96
357.97	ENCOUNTER FORM COUNTERS	^IBD(357.97
357.98**	AICS DATA QUALIFIERS	^IBD(357.98
357.99	PRINT MANAGER CLINIC GROUPS	^IBD(357.99
358	IMP/EXP ENCOUNTER FORM	^IBE(358
358.1	IMP/EXP ENCOUNTER FORM BLOCK	^IBE(358.1
358.2	IMP/EXP SELECTION LIST	^IBE(358.2
358.3	IMP/EXP SELECTION	^IBE(358.3
358.4	IMP/EXP SELECTION GROUP	^IBE(358.4
358.5	IMP/EXP DATA FIELD	^IBE(358.5
358.6	IMP/EXP PACKAGE INTERFACE	^IBE(358.6
358.7	IMP/EXP FORM LINE	^IBE(358.7
358.8	IMP/EXP TEXT AREA	^IBE(358.8
358.91	IMP/EXP MARKING AREA	^IBE(358.91
358.93	IMP/EXP MULTIPLE CHOICE FIELD	^IBE(358.93
358.94	IMP/EXP HAND PRINT FIELD	^IBE(358.94
358.98	IMP/EXP AICS DATA QUALIFIERS	^IBD(358.98
358.99	IMP/EXP AICS DATA ELEMENTS	^IBE(358.99
359	CONVERTED FORMS	^IBD(359
359.1*	AICS DATA ELEMENTS	^IBE(359.1
359.2	FORM SPECS	^IBD(359.2
359.3	AICS ERROR AND WARNING LOG	^IBD(359.3
359.94	HAND PRINT FIELD	^IBE(359.94

**File List, cont.**

The following Scheduling files are exported with, and heavily used by, AICS V. 3.0.

File #	File Name	Global
409.95	PRINT MANAGER CLINIC SETUP	^SD(409.95)
409.96	PRINT MANAGER DIVISION SETUP	^SD(409.96)

\*File contains data which will overwrite existing data.

\*\*File contains data which will merge with existing data.

Following are the steps used to obtain information on AICS file relationships and templates.

**File Flow (Relationships between files)**

1. VA FileMan Menu
2. Data Dictionary Utilities Menu
3. List File Attributes Option
4. Enter File # or range of File #s
5. Select Listing Format: Standard
6. You will see what files point to the selected file. To see what files the selected file points to, look for fields that say "POINTER TO".

**Templates**

1. VA FileMan Menu
2. Print File Entries Option
3. Output from what File:
  - Print Template
  - Sort Template
  - Input Template
  - List template
4. Sort by: Name
5. Start with name: IBD to IBDZ
6. Within name, sort by: <RET>
7. First print field: Name



# Exported Options

Following are the steps needed to obtain information about AICS menus, exported protocols, exported options, and exported remote procedures.

## Menu Diagram

1. Menu Management Menu
2. Display Menus and Options Menu
3. Diagram Menus
4. Select User or Option Name: IBD

## Exported Protocols

1. VA FileMan Menu
2. Print File Entries Option
3. Output from what File: PROTOCOL
4. Sort by: Name
5. Start with name: IBD - IBDZ
6. Within name, sort by: <RET>
7. First print field: Name

## Exported Options

1. VA FileMan Menu
2. Print File Entries Option
3. Output from what File: OPTION
4. Sort by: Name
5. Start with name: IBD - IBDZ
6. Within name, sort by: <RET>
7. First print field: Name

## Exported Remote Procedures

1. VA FileMan Menu
2. Print File Entries Option
3. Output from what File: REMOTE PROCEDURE
4. Sort by: Name
5. Start with name: IBD - IBDZ
6. Within name, sort by: <RET>
7. First print field: Name

## Options without Parents

Tasked purge of Form Tracking files  
[IBDF AUTO PURGE FORM TRACKING]

This option should be queued to run at the sites' convenience. It will purge old data from the ENCOUNTER FORM TRACKING file (357.96), the ENCOUNTER FORM DEFINITION file (357.95) and the FORM SPECIFICATION file (359.2). Two parameters in the ENCOUNTER FORM PARAMETERS file (357.09) control how this option works.

The option needs no device and has no output. It is recommended that this be tasked to run at least once weekly during a weekend or other slow time.

Background EF Print  
[IBDF BACKGRD EF PRINT QUEUE]

This option prints Encounter Forms in the background. Jobs are run based on the queuing parameters set up using the Setup Automatic Print Queues option [IBDF SETUP AUTO CLINIC PRINT].

# Archiving and Purging

## Archiving

There are no archiving capabilities with the AICS package.

## Purging

File Purged	Option Name	Menu
ENCOUNTER FORM TRACKING file (357.96)	Purge Form Tracking files	Encounter Form IRM Options
ENCOUNTER FORM DEFINITION file (357.95)	Purge Form Tracking files	Encounter Form IRM Options
FORM SPECIFICATION file (359.2)	Purge Form Tracking files	Encounter Form IRM Options
	Conversion Utility For Scanning (Purge Conversion Log action)	Edit Encounter Forms
AICS ERROR AND WARNING LOG file (359.3)	Purge Form Tracking files	Encounter Form IRM Options
	Conversion Utility For Scanning (Purge Conversion Log action)	Edit Encounter Forms





## External Relations

Your site must have the following package versions installed prior to installing AICS V. 3.0.

- Kernel V. 8.0
- PCE V. 1.0
- PIMS V. 5.3
- Problem List V. 2.0 (including patch GMP\*2\*3)
- RPC Broker V. 1.0
- VA FileMan V. 21.0
- Visit Tracking V. 2.0
- Kernel Toolkit V. 7.3
- Clinical Lexicon Utility V. 1.0 or Lexicon Utility V. 2.0

### **Database Integration Agreements (DBIAs)**

Following are the steps taken to obtain the DBIA agreements for the AICS package.

#### ***Custodial Agreements***

1. FORUM
2. DBA Menu
3. Integration Agreements Menu
4. Custodial Package Menu
5. Active by Custodial Package Option
6. Select Package Name: Automated Info Collection Sys

#### ***Subscriber Agreements***

1. FORUM
2. DBA Menu
3. Integration Agreements Menu
4. Subscriber Package Menu
5. Print Active by Subscriber Package Option
6. Start with subscriber package: Automated Info - Automated Infoz



## Internal Relations

All of the AICS V. 3.0 options have been designed to stand alone.

## Package-wide Variables

There are no package-wide variables.



## How to Generate On-Line Documentation

This section describes some of the various methods by which users may secure AICS technical documentation. On-line technical documentation pertaining to the AICS software, in addition to that which is located in the help prompts and on the help screens which are found throughout the AICS package, may be generated through utilization of several Kernel options. These include but are not limited to XINDEX; Menu Management, Inquire to Option File and Print Option File; VA FileMan Data Dictionary Utilities, List File Attributes.

Entering question marks at the "Select ... Option:" prompt may also provide users with valuable technical information. For example, a single question mark (?) lists all options which can be accessed from the current option. Entering two question marks (??) lists all options accessible from the current one, showing the formal name and lock for each. Three question marks (???) displays a brief description for each option in a menu while an option name preceded by a question mark (?OPTION) shows extended help, if available, for that option.

For a more exhaustive option listing and further information about other utilities which supply on-line technical information, please consult the *VISTA* Kernel Reference Manual.

### **XINDEX**

This option analyzes the structure of a routine(s) to determine in part if the routine(s) adhere(s) to *VISTA* Programming Standards. The XINDEX output may include the following components: compiled list of Errors and Warnings, Routine Listing, Local Variables, Global Variables, Naked Globals, Label References, and External References. By running XINDEX for a specified set of routines, the user is afforded the opportunity to discover any deviations from *VISTA* Programming Standards which exist in the selected routine(s) and to see how routines interact with one another, that is, which routines call or are called by other routines.

To run XINDEX for the AICS package, specify the following namespace(s) at the "routine(s) ?>" prompt: IBD.

AICS initialization routines which reside in the UCI in which XINDEX is being run, as well as local routines found within the AICS namespace, should be omitted at the "routine(s) ?>" prompt. To omit routines from selection, preface the namespace with a minus sign (-).

### **Inquire to Option File**

This Menu Management option provides the following information about a specified option(s): option name, menu text, option description, type of option and lock, if any. In addition, all items on the menu are listed for each menu option.

To secure information about AICS options, the user must specify the name or namespace of the option(s) desired. The namespace associated with the AICS package is IBD.

### **Print Option File**

This utility generates a listing of options from the OPTION file. The user may choose to print all of the entries in this file or may elect to specify a single option or range of options. To obtain a list of AICS options, the following option namespace should be specified: IBD.

### **List File Attributes**

This VA FileMan option allows the user to generate documentation pertaining to files and file structure. Utilization of this option via the "Standard" format will yield the following data dictionary information for a specified file(s).

- File name and description
- Identifiers
- Cross-references
- Files pointed to by the file specified
- Files which point to the file specified
- Input, print, and sort templates

In addition, the following applicable data is supplied for each field in the file: field name, number, title, global location, description, help prompt, cross-reference(s), input transform, date last edited, and notes.

Using the "Global Map" format of this option generates an output which lists all cross-references for the file selected, global location of each field in the file, input templates, print templates, and sort templates. For a comprehensive listing of AICS files, please refer to the Files Section of this manual.

# Package Security

## General Security

AICS V. 3.0 files should only be updated through distributed options.

## Security Keys

IBDF IRM	This key is used to prevent access to Encounter Form Utility options that are for IRM staff only.
IBD SCAN MANAGER	This key is needed to use the AICS work station and to scan Encounter Form data to <i>VISTA</i> .
IBD MANAGER	This key is needed to perform functions in AICS that not all users are allowed access to, such as deleting Form Tracking entries.

## VA FileMan Access Codes

Following is a list of recommended VA FileMan access codes associated with each file contained in the AICS package.

<u>File Number</u>	<u>File Name</u>	<u>DD Access</u>	<u>RD Access</u>	<u>WR Access</u>	<u>DEL Access</u>	<u>LAYGO Access</u>
357	ENCOUNTER FORM	@	@	@	@	@
357.08	AICS PURGE LOG	@		@	@	@
357.09	ENCOUNTER FORM PARAM	@			@	@
357.1	ENCOUNTER FORM BLOCK	@	@	@	@	@
357.2	SELECTION LIST	@	@	@	@	@
357.3	SELECTION	@	@	@	@	@
357.4	SELECTION GROUP	@	@	@	@	@
357.5	DATA FIELD	@	@	@	@	@
357.6	PACKAGE INTERFACE	@	@	@	@	@
357.69	TYPE OF VISIT	@	@	@	@	@
357.7	FORM LINE	@	@	@	@	@
357.8	TEXT AREA	@	@	@	@	@
357.91	MARKING AREA TYPE	@	@	@	@	@
357.92	PRINT CONDITIONS	@	@	@	@	@

Package Security

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYG O Access
357.93	MULTIPLE CHOICE FIELD	@	@	@	@	@
357.94	ENCOUNTER FORM PRINTERS	@		#		
357.95	FORM DEFINITION	@	@	@	@	@
357.96	ENCOUNTER FORM TRACKING	@	@	@	@	@
357.97	ENCOUNTER FORM COUNTERS	@	@	@	@	@
357.98	AICS DATA QUALIFIERS	@	@	@	@	@
357.99	PRINT MANAGER CLINIC GROUPS	@	@	@	@	@
358	IMP/EXP ENCOUNTER FORM	@	@	@	@	@
358.1	IMP/EXP ENCOUNTER FORM BLOCK	@	@	@	@	@
358.2	IMP/EXP SELECTION LIST	@	@	@	@	@
358.3	IMP/EXP SELECTION	@	@	@	@	@
358.4	IMP/EXP SELECTION GROUP	@	@	@	@	@
358.5	IMP/EXP DATA FIELD	@	@	@	@	@
358.6	IMP/EXP PACKAGE INTERFACE	@	@	@	@	@
358.7	IMP/EXP FORM LINE	@	@	@	@	@
358.8	IMP/EXP TEXT AREA	@	@	@	@	@
358.91	IMP/EXP MARKING AREA	@	@	@	@	@
358.93	IMP/EXP MULTIPLE CHOICE FIELD	@	@	@	@	@
358.94	IMP/EXP HAND PRINT FIELD	@	@	@	@	@
358.98	IMP/EXP AICS DATA QUALIFIERS	@	@	@	@	@
358.99	IMP/EXP AICS DATA EL					
359	CONVERTED FORMS	@	@	@	@	@
359.1	AICS DATA ELEMENTS	@	@	@	@	@

The following Scheduling files are exported with, and heavily used by, AICS V. 3.0.

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
359.2	FORM SPECS	@	@	@	@	@
359.3	AICS ERROR AND WARNING LOG	@				@
359.94	HAND PRINT FIELD	@	@	@	@	@
409.95	PRINT MANAGER CLINIC SETUP	@	@	@	@	@
409.96	PRINT MANAGER DIVISION SETUP	@	@	@	@	@



# Glossary

anchor marks	Cross-hair or angle marks appearing on a scannable form. They are used by the commercial scanning engine to align the form.
block	A form is composed of blocks. Blocks are a rectangular region on the form. Attributes include position, size, outline type, and header. All other form components are contained within a particular block, and their position is relative to the block's position.
bubbles	Marking areas on a form. They are filled in to indicate a selection, and will be read by the scanner.
column	A selection list contains one or more columns, a column being a rectangular area that contains a portion of the entries on a selection list. Attributes include position and height.
comb	Marking areas on a form to guide a user into entering one character per box.
conversion	Refers to the conversion of forms designed using IB V. 2.0 to forms that can be scanned.
CSV	<b>Code Set Versioning.</b> This package is mandated under the Health Information Portability and Accountability Act (HIPAA). It contains routines, globals and data dictionary changes to recognize code sets for the International Classification of Diseases, Clinical Modification (ICD-9-CM), Current Procedural Terminology (CPT) and Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS). When implemented, certain applications will allow users of these three code systems to select codes based upon a date that an event occurred with the Standards Development Organization (SDO)-established specific code that existed on that event date.

data field	A block component that is the means by which data from <i>VISTA</i> is printed to the form, such as the patient's name. The data is obtained at the time the form is printed (i.e., it is not stored with the form) and can be particular to the patient. A data field can have subfields, which are conceptually a collection of related data fields. Attributes include label, label type (underline, bold, invisible), position, data area, data length and position (area on the form allocated to the data), item number, and package interface (the routine used to get the data).
data qualifiers	A selection list component. Example: with data qualifiers, a diagnosis can be designated as either primary or secondary.
dynamic selection lists	Lists used to print the patient's active problems, insurance policies, providers assigned to the clinic, etc. Dynamic lists provide the capability of scanning data such as patient's active problems. They also provide an easier method of printing lists of data such as SC disabilities, as compared to using data fields.
encounter form	A paper form used to display data pertaining to an outpatient visit and to collect additional data pertaining to that visit.
entry action	An attribute of a package interface. It is MUMPS code that is executed before the interface's entry point is executed.
exit action	An attribute of a package interface. It is MUMPS code that is executed after the interface's entry point is executed.
form line	A block component. A straight line that will be printed to the form. Attributes include orientation (horizontal, vertical), position, and length.

form tracking	Tracks the processing status of forms. Each printed form will be assigned an ID, allowing it to be tracked while it's being processed. The lists of forms printed, their status, and statistics can be obtained from the Form Tracking option.
hand print field	Allow input of hand printing.
intelligent character recognition	(ICR) The ability to read hand written characters (usually printed) in combs or boxes.
item number	An attribute that must be specified when defining a data field if the data field's package interface returns a list. The item number is used to specify which item on the list should be printed to the data field. For example, there is a package interface for returning service connected conditions. The first data field created for a form for displaying a service connected condition would specify item number one.
operator fill field	A field that is completed by an operator once it's scanned.
optical character recognition	(OCR) The ability for scanning software to read characters printed by a printer on a form.
package interface	A table that is the method by which the encounter form utilities interface with other packages. Presently there are three types of package interfaces: for printing reports via the print manager, printing data to data fields, and for entering data to selection lists. Attributes include entry point, routine, entry action, exit action, protected variables, required variables, data type, data description, and custodial package.
place holders	A component of a selection list. They can contain text and serve as subheaders for the selections that follow within a group.

print manager	The print manager is a utility used to define the reports and encounter forms that should be printed for clinics. It will then print the reports and forms in packets for each appointment specified.
scannable	A form or marking area that is designed to be scanned and formatted; and defined to the scanning software.
selection	A component of a selection list. It is a single entry on the list. It is stored with the form and usually consists of data taken from a file in <i>VISTA</i> such as a CPT code with its description.
selection group	A component of a selection list. It is a named group of selections on the list. Attributes include a header and the print order.
selection list	A block component whose purpose is to contain a list; for example, a list of CPT codes. The list contains subcolumns for marking areas, which are areas meant to be marked to indicate selections being made from the list. Attributes include headers, subcolumns, subcolumn width, subcolumn type, package interface (the routine used to fill the list), and many attributes for the appearance of the list.
selection rule	There are a set of rules on the number of items that can be accepted for each list. For example, exactly one primary diagnosis and any number of secondary diagnoses can be specified.
subcolumn	A component of a selection list. It can contain either text, such as a CPT code, or a marking area.

subfield	A component of a data field. It can display a single value, whereas a data field can be used to display a collection of related values. Attributes include those for the label and the area on the form to print the data. Also, for package interfaces that return records that have multiple values, the particular data must be specified.
text area	A rectangular area in a block that is used to display a word-processing field. The text is automatically formatted to fit within the block. Attributes include the word-processing field, the position and size of the text area. The text is stored with the form.



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