Patient Information Management System (PIMS) Technical Manual

Patient Registration, Admission, Discharge, Transfer, and Appointment Scheduling

Software Version 5.3

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Department of Veterans Affairs

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Enterprise Management Program Office

Revision History

Date	Revision	Description	Author
09/2020	0.49	DG*5.3*932 – Page 2: Added DG PTF ICD CODE NOTIFIER to the list of background jobs	T. Robinson, Technical Writer K. Condie, PM
09/2020	0.48	Updated for numerous VistA patches and releases, approved by HSP.	Liberty ITS
09/2020	0.47	DG*5.3*1015 – Added modified routines DGENA2, DGENACL2, and DGENDD to Section 3.5.18 (p. 25).	Liberty ITS
08/2020	0.46	DG*5.3*993: Added new routine Section 3.5.17 to Section 3.5 New and Modified Routines (p. 24 – 25); modified ZEN – VA Specific Enrollment Segment Table 62 to include SEQ 11 – 19 (p. 205-206).	Liberty ITS
08/2020	0.45	DG*5.3*997 – Added new routines DGRP11A and DGRP11B and modified routines DGRPE, DGRPH, DGRPP, DGRPP1, DGRPU, DGRPV, VAFHLFNC and VAFHLZCT to Section 3.5.16 (p. 23 - 24).	Liberty ITS
08/2020	0.44	Updates for numerous VistA patches and releases, as requested by HSP.	AbleVets
05/2020	0.43	DG*5.3*996 – Added modified routine VADPT to Section 3.5 New and Modified Routines (p. 23); Added PREFERRED NAME field to Table 32 Supported References (p. 87); Removed VADM(14) The PREFERRED NAME of the patient (e.g., "PREFERRED NAME") from Section 12.2.1 DEM^VADPT (p. 91); Added Section 12.2.2 DEMUPD^VADPT (pp. 91 - 93); Added DEMUPD^VADPT call to Table 34 Alpha Subscripts (page 125).	Liberty ITS
01/2020	0.42	DG*5.3*952 – Changes for Emergent OTHER THAN HONORABLE eligibility patients in Section 12.2.3 (p. 95). Added EXPANDED MH CARE NON-ENROLLEE code to the table in Section 15.9.18 (p. 214). Added new alpha subscript VAEL(“OTH”) to the table in Section 12.3 (p. 126).	Shavkat Shamukhamedov Yan Gurtovoy
01/2020	0.41	DG*5.3*985 – Added modified routines DGR111, DGRP1, DGRPD1, DGRPE, DGRPH, and DGRPV to Section 3.5 New and Modified Routines (p. 23).	Andrea Freeman
12/2019	0.40	DG*5.3*972 – Added modified routine DGRPDB to Section 3.5 New and Modified Routines (p. 23).	H. Murdock
10/2019	0.39	DG*5.3*982 – Added modified routines DGENACL2 and DGENA2 to Section 3.5 New and Modified Routines (p. 23).	Andrea Freeman

Date	Revision	Description	Author
06/2019	0.38	Reviewed proposed changes.	Jennifer Cote, JPM/PQAL
06/2019	0.37	SD*5.3*707 – Added section 3.5.11 Patch SD*5.3*707 Routines, Added Section 23 Updated Pages: 22, 256-265	Phil Burkhalter, Developer Susan Burke, Program Manager
05/2019	0.36	DG*5.3*941 – Reintroduced updates dated 12/2018 that were inadvertently removed from manual: Updated VADPT routine to include Residential Address: VAPA(30) – VAPA(39) added to Section 12.2.5 ADD^VADPT (p. 103 – 104) and Alpha Subscripts Table 31 (pp. 124 – 125).	J. Innis
03/2019	0.35	DG*5.3*951 – Added section 3.5.1 Patch DG*5.3*951 Routines. Added PRF HL7 REQUEST LOG file (#26.22) to sections 4.2 and 11.5. Added section 22 HL7 Interface, Specification for Patient Record Flags (PRF).	D. Kelly, Technical Writer L. Behuniak, PM
10/2018	0.34	DG*5.3*958 – Added Section 3.5.2 for a modified routine (p. 38).	T. Turowski
10/2018	0.33	Updated to reflect changes from patch SD*5.3*640, ACRP and APM HL7 Shutdown. This includes adding notations regarding the ACRP and APM transmissions and related menu options that are being disabled. See pages 2, 3, 172.	Lori Masucci
09/2018	0.32	DG*5.3*960 – Added section 3.5.3 Patch DG*5.3*960 Routines	D. Kelly, Technical Writer L. Behuniak, PM
2/2018	0.31	DG*5.3*933 - Demographics Native Domain Standardization. Added Section 22 Appendix A.	J. Asel – CTT DM NDS Team
11/2017	0.30	DG*5.3*935 – Added check in MSDS^VADPT4 to prevent returning a Military Service Episode (MSE) with a Future Discharge Date (FDD) to any downstream applications (p 92).	D. Sandusky
3/2017	0.29	DG*5.3*903 – Increase Engagement in My HealtheVet (IEMHV): Added Section 3.57 Updated Section 4.1 with ^DGMHV, global. Updated Section 4.2 with new files 390.01, 390.02, 390.03, 390.4.	S. Winterton

Date	Revision	Description	Author
9/2015	0.28	Updated for patch DG*5.3*884, ICD-10 PTF Modifications: Updated title page, footers, and made various formatting changes. Corrected headings in Section 2. Added new Input Templates to Section 3.3.1.	VA OIT PD, ICD-10 PTF Modifications Team
7/2015	0.27	Added Section 3.5.6 for Patch SD*5.3*622 Routines (released in December 2014) (p.19).	C.R., K.S.
6/2015	0.26	Removed HL7 instructions due to patch SD*5.3*624 (Table 1 and Sections 15.10-18).	R.S.
7/2014	0.25	SD*5.3*586 – ICD-10 Remediation: Updated Title Page and Revision History. Updated ICD9 reference to generic ICD (p.12). Updated the DG1 - Diagnosis Information Segment table (p.200).	B.T.
11/12/2013	0.24	Added Missing Patient, Patient Record Flag (PRF) - Patch Updates section (Section 2.4), Page 21 and Patch DG*5.3*869 Routines section 3.6, page 27. Added Patch DG*5.3*869 Features page 22. Added List of Tables.	VA OIT
04/23/2013	0.23	SD*5.3*588 – High Risk Mental Health Proactive Report patch exported the following: Updated the Implementation and Maintenance Section Eligibility/ID Maintenance Menu with current information and four new SD parameters. Updated Routines Section new and modified SD routines. Updated Exported Options Section with two new SD and two modified SD options. Updated Callable Routines/Entry Points/Application Program Interfaces Sections with SD routine information. Updated External Relationships Section with the Scheduling Reports required patch information. DG*5.3*849 – DGPF New Cat 1 Flag and Conversion & Supporting Reports patch Updated Implementation and Maintenance Section with PRF NATIONAL FLAG file (#26.15) new entry. Updated Routines Section with new DG routines. Updated Exported Options Section with new Convert Local option HRMH PRF to National Action [DGPF LOCAL TO NATIONAL CONVERT] option.	VA OIT

Date	Revision	Description	Author
		Updated Reference Material Section with SD and DG manual releases. Corrected existing reference manuals names.	
12/12/2012	0.22	SD*5.3*589 – Minor updates, Added 404.61: MH PCMM STOP CODES file to file list	VA OIT
05/18/2012	0.21	Updated API List	VA OIT
05/18/2012	0.20	Phase I - Patches included in the High Risk Mental Health (HRMH) Project: Patch DG*5.3*836 - HRMH-VISTA CHANGES FOR NATIONAL REMINDER & FLAG. This is a Registration patch containing Patient Record Flag APIs. DGPFAPIH and DGPFAPIU are new routines. Patch SD*5.3*578 – HIGH RISK MENTAL HEALTH NO SHOW REPORT. This is a Scheduling patch with a new nightly run and Ad-hoc Missed Appt Report option. Added two new Scheduling reports that identify no-show “high risk for suicide” patients that missed their MH appointments. SDMHAD, SDMHAD1, SDMHNS, and SDMHNS1 are new routine. SD MH NO SHOW NIGHTLY BGJ and No Show Nightly Background Job are being added to the Background Job Options. Glossary of Terms added.	VA OIT
01/04/2011	0.19	DG*5.3*754 – ESR 3.1 – removed the Confidential Address Phone Number from the HL7 PID Segment Tables.	VA OIT
05/18/2010	0.18	DG*5.3*754 – ESR 3.1 – Updated Alpha Subscripts section, added ADD^VADPT (29) & “CPN”, added OPD^VADPT (8) & “WP”.	VA OIT
11/05/2009	0.17	DG*5.3*754 – ESR 3.1 – Updated VADPT Variables section, added ADD^VADPT (Conf. Phone Number, OPD^VADPT (Patient’s Phone Number (Work), added SEQ 13 to the PID - Patient Identification Segment.	VA OIT
03/30/2009	0.16	DG*5.3*688 and SD*5.3*441 Enrollment VistA Changes Release 2 (EVC R2) Added additional Value of “O” for “Other” to Table VA0046 - Agent Orange Exposure Location. Removed Unknown value. Changed Environmental Contaminants to SW Asia Conditions.	VA OIT

Date	Revision	Description	Author
		Added entries to Part 5 of the CALLABLE ENTRY POINTS IN VADPT section. SVC^VADPT modified to add VASV (14) and VASV (14,1) to the VASV array for project SHAD. Added alpha subscripts to ADD^VADPT section. Added alpha subscripts to SVC^VADPT to reflect the alpha translation. Replaced HL7 Control Segment - 2.3.6 PID-Patient Identification Segment table - with referral to MPI site on VDL.	
01/29/2009	0.15	Name change update - Austin Automation Center (AAC) to Austin Information Technology Center (AITC)	VA OIT
07/23/2008	0.14	DG*5.3*763 – Hold Debt to DMC – Added ENROLLMENT RATED DISABILITY UPLOAD AUDIT file to the Files Section (File List) and Security Section (FileMan Access Codes). Added DGEN RD UPLOAD AUDIT PURGE background job option.	VA OIT
07/01/2008	0.13	DG*5.3*779 – Added DGEN NEACL MGT RPT1BK background job option	VA OIT
06/20/2008	0.12	DG*5.3*782 – updated Religion File	VA OIT
06/04/2008	0.11	DG*5.3*644 – Home Telehealth enhancements	VA OIT
01/16/2008	0.10	SD*5.3*253, SD*5.3*275, SD*5.3*283, SD*5.3*285, SD*5.3*301, SD*5.3*310, SD*5.3*316, SD*5.3*347, SD*5.3*508 – Added/updated Scheduling Application Programmer Interfaces (APIs) section	VA OIT
06/26/2007	0.9	DG*5.3*707 – added “HL7 Generic PID,EVN,PV1 Segment Builder established by MPI” to the HL7 Interface Specifications section	VA OIT
11/27/2006	0.8	DG*5.3*650 - added two new files - #26.19 and #26.21	VA OIT
10/20/2006	0.7	DG*5.3*689 OEF/OIF Enhancements - updated SVC^VADPT Variable segment section	VA OIT
04/28/2006	0.6	DG*5.3*692 Enhancement - updated HL7 Interface Spec for Transmission of Ambulatory Care Data	VA OIT
03/22/2006	0.5	DG*5.3*687 Maintenance – remove PTF Archive/Purge function	VA OIT
08/12/2005	0.4	DG*5.3*624 - (10-10EZ 3.0) Deleted DGRPT 10-10T REGISTRATION input template in the Compiled Template Routines section	VA OIT

Date	Revision	Description	Author
08/05/2005	0.3	DG*5.3*666 Enhancement - added Background Job Option	VA OIT
11/15/2004	0.2	Manual updated to comply with SOP 192-352 Displaying Sensitive Data	VA OIT
11/9/2004	0.1	DG*5.3*415-Race and Ethnicity Addition to VADPT variable section (patch released in 2003, change omitted in error)	VA OIT

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Online Help System

When the format of a response is specific, there usually is a HELP message provided for that prompt. HELP messages provide lists of acceptable responses or format requirements which provide instruction on how to respond.

A HELP message can be requested by typing a "?" or "??". The HELP message will appear under the prompt, then the prompt will be repeated. For example, at the following prompt

```
Sort by TREATING SPECIALTY:
enter "?" and the HELP message would appear.
Sort by TREATING SPECIALTY?
CHOOSE FROM:
SURGERY
CARDIOLOGY
12   PSYCHIATRY
Sort by TREATING SPECIALTY:
```

For some prompts, the system will list the possible answers from which to choose. Any time choices appear with numbers, the system will usually accept the number or the name.

A HELP message may not be available for every prompt. If a "?" or "??" is entered at a prompt that does not have a HELP message, the system will repeat the prompt.

Acronyms

Please refer to the National Acronym Directory.

Reference Materials

The following manuals are available from the VistA Documentation Library (VDL):

Table 1: Reference Materials Table

DOCUMENTATION NAME	FILE NAME	LOCATION
High Risk Mental Health Patient Project Installation and Setup Guide	PXRM_2_24_IG.PDF	VDL Anonymous Directories
PIMS Technical Manual	PIMSTM.PDF	VDL Anonymous Directories
PIMS Scheduling User Manual - Outputs Menu	PIMsSchOutput.PDF	VDL Anonymous Directories
PIMS Scheduling User Manual - Menus, Intro &Orientation, etc.	PIMsSchIntro.PDF	VDL Anonymous Directories
Patient Record Flag User Guide	PatRecFlagUG.PDF	VDL Anonymous Directories
Scheduling and Registration Installation and Setup Guide	SDDG_Install_Review.PDF	VDL Anonymous Directories

DOCUMENTATION NAME	FILE NAME	LOCATION
High Risk Mental Health Patient Project Installation and Setup Guide	PXRM_2_18_IG.PDF PXRM_2_18_IG.doc	VDL Clinical Reminders website Anonymous Directories
Scheduling Patch 578 Installation and Setup Guide	SD_5_3_578_IG.PDF	Anonymous Directories
Registration Patch 836 Installation and Setup Guide	DG_5_3_836_IG.PDF	Anonymous Directories

1 Introduction and Software Purpose

The VISTA PIMS package provides a comprehensive range of software supporting the administrative functions of patient registration, admission, discharge, transfer, and appointment scheduling.. Its functions apply throughout a patient's inpatient and/or outpatient stay from registration, eligibility and Means Testing through discharge with on-line transmission of PTF (Patient Treatment File) data and/or NPCDB (National Patient Care Database) data to the Austin Information Technology Center (AITC), (formerly the Austin Automation Center (AAC)). The ADT module aids in recovery of cost of care by supplying comprehensive PTF/RUG-II options and Means Test options.

The ADT and Scheduling modules of PIMS are fully integrated with the VA FileMan, thus allowing ad hoc reports to be extracted by non-programmer personnel. ADT is integrated with V. 2.1 of the Fee Basis software allowing Fee personnel to register patients through a select Fee option.

Related manuals include the PIMS User Manual, the PIMS Release Notes, which describe version specific changes to the PIMS package, and PIMS Installation Guide.

Several features have been designed into the PIMS package to maximize efficiency and maintain control over user access of specified sensitive patient records. The Consistency Checker reduces entry of inaccurate information by warning the user about incompatible or missing data. The Patient Sensitivity function allows a level of security to be assigned to certain records within a database in order to maintain control over unauthorized access. The Patient Lookup screens user access of these sensitive records, as well as providing for more efficient and faster retrieval of patient entries.

Tracking and calculation of data is performed transparently by the system to provide a variety of reports which assist in day-to-day operations as well as provide management with the necessary information to analyze workload and promote quality of care. Highlights include the following.

- Automation of the Daily Gains and Losses Sheet and Bed Status Report
- Inpatient Listings
- Seriously Ill Listings
- Bed Availability Reports
- AMIS Reporting
- Disposition Reporting
- Generic code sheets for reporting AMIS segments
- Automation of Appointment Status Update

Notifications for PIMS may be displayed for admissions, death discharges, deaths, and unscheduled (1010) visits. The notifications (ADMISSION, DECEASED, and UNSCHEDULED (1010) VISIT) will be displayed for patients who are defined as members of a list in the OE/RR LIST file (#100.21). The recipients of the notifications would need to be defined as users in the same OE/RR LIST entry. The notifications will appear as "alerts" when

the user is prompted to select an option from a menu. Please refer to the documentation for CPRS for more information concerning OR notifications.

1.1 Namespace Conventions

The namespaces assigned to the PIMS package are DG, DPT, SD, SC, and VA.

Table 2: Background Job Options

OPTION NAME	SUGGESTED RUN FREQUENCY	DEVICE REQUIRED	REMARKS
DG G&L RECALCULATION AUTO	Nightly	NO	Recommended to run @ 9PM
DG PRE-REGISTER NIGHT JOB	Nightly	NO	Run during off hours. Set to null device for MSM sites.
DG PTF BACKGROUND JOB	Nightly	NO	Run during off hours
DG PTF ICD CODE NOTIFIER	15 minutes	NO	-
DG RUG BACKGROUND JOB	Daily	YES	-
DG RUG SEMI ANNUAL - TASKED	*	YES	*Queued in advance to run on 10/1 and 4/1
DG SENSITIVE RCDS RPT-TASK	Nightly	NO	Run after midnight
DGEN NEACL MGT RPT1BK	Daily	YES	-
DGEN RD UPLOAD AUDIT PURGE	Daily or Weekly	NO	Purges entries from the ENROLLMENT RATED DISABILITY, UPLOAD AUDIT file (#390) after 365 days
DGPF BACKGROUND PROCESSING	Daily	NO	Run during off hours
DGQE BACKGROUND PROCESSING	Nightly	NO	Run during off hours
SCDX AMBCAR NIGHTLY XMIT Note: This option has been placed out of order with patch SD*5.3*640 since ACRP transmission has been discontinued.	Nightly	NO	Collects workload information and sends it to NPCDB in Austin via HL7messages
SCENI IEMM SUMMARY BULLETIN	Nightly	NO	Run after nightly transmission to Austin
SCRPW APM TASK JOB Note: This option has been placed out of order with patch SD*5.3*640 since APM transmission has been discontinued.	Monthly	NO	Runs on the 15th of the current month after hours. Generates info rolled up to AITC (formerly AAC) Additional Performance Monitors (TIU).

OPTION NAME	SUGGESTED RUN FREQUENCY	DEVICE REQUIRED	REMARKS
OPTION NAME	SUGGESTED RUN FREQUENCY	DEVICE REQUIRED	REMARKS
SDAM BACKGROUND JOB	Nightly	NO	-
SDEC IDX REFRESH	Daily	NO	This option prepares the ^XTMP("SDEC","IDX" global and should be scheduled to run daily at 2am.
SDOQM PM NIGHTLY JOB Note: This option has been placed out of order with patch SD*5.3*640 since APM transmission has been discontinued.	As directed	YES	Suggested run time @ 2 AM
VAFC BATCH UPDATE	30 minutes	NO	Transmits changes to key patient demographical data
VAFH PIVOT PURGE	Weekly	NO	Purges entries greater than 1.5 years old from ADT/HL7 PIVOT file (#391.71)

1.2 SACC Exemptions/Non-Standard Code

The following are the steps you may take to obtain the SACC exemptions for the PIMS package.

1. FORUM
2. DBA Menu
3. SACC Exemptions Menu
4. Display Exemptions for a Package Option
5. Select SACC Exemptions package: ADT SD

1.3 Primary Care Management Module (PCMM) Overview

The Primary Care Management Module was developed to assist VA facilities in implementing primary care. It will support both primary care teams and non-primary care teams. PCMM's functionality is divided into eight areas:

- Setup & Define Team
- Assign Staff to Positions in Teams
- Assign Patient to Team
- Assign Patient to Practitioner via Team Position and Enroll in a Clinic
- Reports/Outputs/Mail Messages

- Tools to Ease Startup Process of Primary Care
- Other Changes to Scheduling Package
- Application Program Interface (API) calls.

PCMM uses a Graphical User Interface (GUI) to control the startup, setup, and assignment functions. To use the functionality in the PCMM, a site will need a Microsoft Windows workstation which has a connection to VistA (either LAN or serial connection) for each location where a patient or staff member is assigned to a team. A typical site will want one workstation for each team, one for the PIMS ADPAC, plus one for the manager in charge of primary care. Existing Scheduling functionality will continue to be useable from "roll and scroll" terminals.

2 Implementation and Maintenance

This section of the PIMS Technical Manual provides information to assist technical support staff with the implementation and maintenance of the software. This section should include information regarding the entry of required site-specific data, including where applicable.

The PIMS package may be tailored specifically to meet the needs of the various sites. Instructions may be found in the User Manual under the ADT Module, Supervisor ADT and the Scheduling Module, Supervisor. A variety of options are included in these sections allowing each site to define its own configuration. The ADT portion of the PIMS package will function around the parameters defined through the MAS Parameter Entry/Edit option while the Scheduling portion parameters are defined through the Scheduling Parameters option.

A great many other options are included in these Supervisor sections which assist in site configuration and maintenance functions. Among them are options which allow for specification of mail groups to receive certain bulletins, definition of devices, designation of transmission routers, entry/edit of Means Test data, ward set-up, and clinic set-up. All configurations may be modified at any time as the site's needs change.

The SCHEDULING PARAMETERS file (#404.91) may be used to modify the behavior of PCMM. The USE USR CLASS FUNCTIONALITY? field (#801) can be used to turn on/off the user class functionality provided by the Authorizations/ Subscriptions software. This functionality allows certain staff members/users (especially clinicians) to be classified in a very specific manner (e.g., cardiologist), and yet the software can determine that the staff member is a member of a more general class (e.g., provider).

If a site has A/S installed prior to the PCMM installation, PCMM will default to use the user class functionality. Sites that have not populated the USR CLASS MEMBERSHIP file (#8930.3) for their potential team members should have this parameter set to NO. Sites that have fully populated this file should set this parameter to YES because the assignment of staff members to teams will be less error-prone and faster than the unscreened selection from the NEW PERSON file (#200).

The CHECK PC TEAM AT DISCHARGE? field (#802) can be used to turn off the PCMM functionality which, upon inpatient discharge, checks the patient's primary care assignments. If the patient has current primary care data, it is displayed. If the patient does not have a current primary care team assignment, the user will be prompted to assign the patient to a primary care team.

The ENABLE AUTOLINK FUNCTIONALITY? field (#803) should be turned off until OE/RR is installed. Although there is no harm in allowing users to add/edit auto link data, this will not be usable until OE/RR is installed. The auto link functionality was added for use by OE/RR teams.

2.1 Eligibility ID/Maintenance Menu

The Eligibility/ID Maintenance Menu provides the options needed to accommodate VA/DOD sharing agreement requirements with regard to Patient Identification Number. For most medical centers, the PT ID will be the social security number of the patient and the SHORT ID will be the last four digits of the patient's social security number. For those sites with DOD sharing

agreements using VA/DOD software developed by the Dallas CIOFO, the PT ID will be determined by the ID number given that patient by the military.

For most sites, each eligibility simply needs to be associated with the VA STANDARD format. This association was first accomplished during the post-init of MAS V. 5.0.

Other than The Primary Eligibility ID Reset (All Patients) option, the remaining six options would only be used by DOD sites using VA/DOD software developed by the Dallas CIOFO. They should not be run without Central Office and/or DOD approval/direction. Please contact your local CIOFO for guidance if you feel your site needs to utilize these options.

Below is a brief description of each option and its utilization:

PRIMARY ELIGIBILITY ID RESET (ALL PATIENTS) - This option will set/reset the IDs associated with each patient's primary eligibility code. This utility will be called when first installing the new eligibility data structure. It will run automatically as part of the PIMS clean-up routine process.

The option can be executed multiple times with no harmful effects. It should be run during non-peak hours, preferably over a weekend. A MailMan message will be sent to the user when the job is completed showing the start and completion date/time.

ELIGIBILITY CODE ENTER/EDIT - This option allows the user to enter/edit eligibility codes used by the site. It should be run for all ELIGIBILITY file entries to associate each entry with an MAS Eligibility code and an Identification Format.

Example: ELIGIBILITY CODE ENTER/EDIT option (user responses are shown in boldface type).

```
Select ELIGIBILITY CODE NAME: MARINE CORPS
   ARE YOU ADDING 'MARINE CORPS' AS A NEW ELIGIBILITY CODE (THE 5TH)? YES
   ELIGIBILITY CODE MAS ELIGIBILITY CODE: OTHER FEDERAL AGENCY    4
NAME: MARINE CORPS// <RET>
ABBREVIATION: MC
PRINT NAME: MARINE CORPS     (Enter abbreviated Eligibility Code name for
                               output in limited space)
INACTIVE: <RET>              (Null response for active; 1 - YES for inactive)
MAS ELIGIBILITY CODE: OTHER FEDERAL AGENCY// <RET>
ID FORMAT: DOD
AGENCY: ARMY Select SYNONYM: <RET>
```

ID FORMAT ENTER/EDIT - This option allows the user to enter/edit Identification formats with description.

RESET ALL IDS FOR A PATIENT - This option is used to reset the corresponding IDs for all eligibilities for a single patient. The patient's eligibilities will be listed as the ID is reset. This utility would be used if, for some reason, a patient's ID got corrupted.

RESET ALL IDS FOR ALL PATIENTS - This option resets all IDs corresponding to each of the patient's eligibilities. The option should be executed during non-peak hours. When the job is

completed, a MailMan message will be generated to the user showing the start and completion date/time.

SPECIFIC ELIGIBILITY ID RESET (ALL PATIENTS) - After prompting for an eligibility code and queue-to-run time, this option will update the IDs for all patients having the selected eligibility. This utility would allow a site to update their database with the new value if the ID FORMAT field in the ELIGIBILITY CODE file changed.

The option should be run during off hours. When the job is completed, a MailMan message will be generated to the user showing the start and completion date/time.

SPECIFIC ID FORMAT RESET - This option prompts for an ID format; then, all patients that have eligibility codes associated with that ID format will have their IDs reset. The utility allows sites to update their database if the DEFAULT LONG ID VALUE CODE field in the IDENTIFICATION FORMAT file was modified. This option should be executed during off hours. When the job is completed, a MailMan message will be sent to the user showing the start and completion date/time.

2.2 Station Number (Time Sensitive) Enter/Edit (D ^VASITE0)

The STATION NUMBER (TIME SENSITIVE) file (#389.9) is used to hold the time sensitive station number data. This file was initially populated by the post init routine for MAS V. 5.2. One entry was created for each medical center division with an effective date of Jan 1, 1980. It is not necessary to modify this data unless the station number for a division changes or a new division is added.

Entering a new medical center division name through the Supervisor ADT Menu of the ADT module of PIMS will automatically create a new entry in this file. New divisions may not be added through this routine entry point.

The Station Number (Time Sensitive) Enter/Edit routine entry point is used to change an existing station number or enter a new station number for a new division. If you are changing a station number for a division, you should enter a new effective date and the new station number for that division.

Once a new division has been added, you should select the new division and enter the effective date and new station number. The IS PRIMARY DIVISION field should be set to YES for the division where the station number has no suffix. Only one division may be primary at any given time.

2.3 New SD Parameters

New SD parameters were exported by patch SD*5.3*588 - High Risk Mental Health Proactive Report, and added to the following files:

Table 3: New SD Parameters

NEW SD PARAMETERS	FILES
SD MH PROACTIVE DAYS PARAMETERS - Stores the number of days to list future appointments for the High Risk MH Proactive	PARAMETER file (#8989.5)

NEW SD PARAMETERS	FILES
Nightly Report [SD MH NO SHOW NIGHTLY BGJ].	
SD MH NO SHOW DAYS PARAMETERS- Stores the number of days to list future appointments for the High Risk MH No-Show Nightly Report [SD MH NO SHOW NIGHTLY BGJ].	PARAMETER file (#8989.5)
SD MH PROACTIVE DAYS PARAMETER - The default value for is 30. This value can be changed, within the range of 1 to 30, by using the Edit Parameter Values [XPAR EDIT PARAMETER] option.	PARAMETER DEFINITION file (#8989.51)
SD MH NO SHOW DAYS PARAMETER - The default value for is 30. This value can be changed, within the range of 1 to 30, by using the Edit Parameter Values [XPAR EDIT PARAMETER] option.	PARAMETER DEFINITION file (#8989.51)

2.4 Patient Record Flag (PRF) NATIONAL FLAG file (#26.15)

The new national flag data entry (MISSING PATIENT) is placed in the PRF National Flag file (26.15) by the DG.5.3*869 DG NEW CAT 1 FLAG patch.

The new national flag data entry (HIGH RISK FOR SUICIDE) is placed in the PRF NATIONAL FLAG file (#26.15) by the DG*5.3*849 DGPF NEW CAT1 FLAG AND CONVERSION patch:

Table 4: Patient Record Flag files

FILE NUMBER	FILE NAME	NEW DATA ENTRY
26.15	PRF NATIONAL FLAG	HIGH RISK FOR SUICIDE
26.15	PRF NATIONAL FLAG	URGENT ADDRESS AS FEMALE (SEE NOTE)
26.15	PRF NATIONAL FLAG	MISSING PATIENT
26.15	PRF NATIONAL FLAG	BEHAVIORAL

NOTE: The URGENT ADDRESS AS FEMALE PRF updates are not included in the PIMS Manual updates. For information on this patch update, please refer to the VDL – ADT - USH LEGAL SOLUTION – CATEGORY I Patient Record Flag (PRF) Installation Guide.

2.5 Patch DG*5.3*869 - Missing Patient, Patient Record Flag Features

- Creates National Category I MISSING PATIENT, Patient Record Flag.
- Creates mail group, DGPF MISSING PT FLAG REVIEW.

- Updates file #.84 (field #4), Dialog Number 261132-Patient has local ICN, to change the message that is displayed when there is an attempt by a user to assign any National, CAT I PRF to the record of a patient that does not have a National ICN. This component updates the Text (field #4) to not reference any specific National, Category I PRF (i.e. BEHAVIORAL) to be assigned.
- Updates the following reports to reflect the new Missing Patient, Patient Record Flag (*Note: See the Record Flag Reports Menu section for more details on each report:
  - Assignment Action Not Linked Report
  - Flag Assignment Report
  - Patient Assignments Report
  - Assignments Due For Review Report
  - Assignments Approved by Report.

3 Routines

This section provides a list of routines or instruct the user how/where to find this information online.

3.1 Routines To Map

Routine mapping is not required with VMS/Cache systems.

3.2 Callable Routines

Table 5: Callable Routines

Callable Routine	Description
$$GETACT^DGPFAPI	Obtain active Patient Record Flag assignments
$$INSTPCTM^SCAPMC	Institution & team for pt's pc team
$$PRCL^SCAPMC	Practitioners for a Clinic
$$PRPT^SCAPMC	Practitioners for a Patient
$$PRTM^SCAPMC	Practitioners for a Team
$$PTTM^SCAPMC	Patients for a Team
$$SITE^VASITE	Obtain Station Number Information
$$TMPT^SCAPMC	Teams for a Patient
DGINPW	Obtain Inpatient Status
DGPMLOS	Obtain Length of Stay by Admission
$$GETALL^SCAPMCA	Return assignment information
$$OUTPTAP^SDUTL3	Return associate pc provider information
$$OUTPTRP^SDUTL3	Return primary care provider information
$$DATA2PTF^DGAPI	Send data to PTF
CPTINFO^DGAPI	Get CPTs from PTF
PTFINFOR^DGAPI	Delete CPTs from PTF
$$DELCPT^DGAPI	Get Prof Serv Dates from PTF
$$DELPOV^DGAPI	Delete POVs from PTF
ICDINFO^DGAPI	Get ICDs from PTF
$$SDAPI^SDAMA301	Get Appointments
GETAPPT^SDAMA201	Get Appointments for a Patient
NEXTAPPT^SDAMA201	Get Next Appointment (1 Appointment) for a Patient
GETPLIST^SDAMA202	Get Appointments for a Clinic

Callable Routine	Description
$$PATAPPT^SDAMA204	Does Patient Have Any Appointments?
$$SDIMO^SDAMA203	Scheduling API for IMO
SDOE	ACRP Interface Toolkit
SDQ	ACRP Interface Toolkit
SDUTL3	Utility to enter and view primary care fields
$$COMMANUM^VAFCADT2	Build a list of numbers separated by comma
VACPT	Display CPT Copyright Info
VADATE	Generic Date Routine
VADPT	Obtain Patient Information
VALM	List Manager
BLDPID^VAFCQRY	Builds the PID HL7 segment
$$EVN^VAFHLEVN	Builds the EVN HL7 segment
$$EN^VAFHLPD1	Builds the PD1 HL7 segment
$$SITE^VASITE	Returns the institution and station numbers
VAFMON	Obtain Income or Dependent Information
VATRAN	Establish VADATS Transmission Variables
VATREDIT	Enter/Edit TRANSMISSION ROUTERS File
VAUQWK	Quick Look up for Patient Data
VAUTOMA	Generic One, Many, All Routine
See the Package-Wide Variables section of this manual for entry points.	

3.3 Compiled Template Routines

It is recommended you recompile the following templates at 4000 bytes.

3.3.1 Input Templates

Table 6: Input Templates

FILE #	TEMPLATE NAME	ROUTINES
2	DG CONSISTENCY CHECKER	DGRPXC*
	DG LOAD EDIT SCREEN 7	DGRPXX7*
	DGRP COLLATERAL REGISTER	DGRPXCR*
	SDM1	SDM1T*

FILE #	TEMPLATE NAME	ROUTINES
40.8	DGTS	DGXTS
44	SDB	SDBT*
45	DG PTF CREATE PTF ENTRY	DGPTXC*
	DG PTF POST CREATE	DGPTXCA*
	DG 101	DGPTX1*
	DG 401	DGPTX4*
	DG401-10P	DGX4*
	DG 501	DGPTX5*
	DG501-10D	DGX5*
	DG 501F	DGX5F*
	DG501F-10D	DGX5FD*
	DG601-10P	DGX6*
	DG 701	DGPTX7*
	DG701-10D	DGX7*
45.5	DG PTF ADD MESSAGE	DGPTXMS*
46.1	DG801	DGPTX8*
405	DGPM ADMIT	DGPMX1*
	DGPM TRANSFER	DGPMX2*
	DGPM DISCHARGE	DGPMX3*
	DGPM CHECK-IN LODGER	DGPMX4*
	DGPM LODGER CHECK-OUT	DGPMX5*
	DGPM SPECIALTY TRANSFER	DGPMX6*
	DGPM ASIH ADMIT	DGPMXA*
408.21	DGMT ENTER/EDIT ANNUAL INCOME	DGMTXI
	DGMT ENTER/EDIT EXPENSES	DGMTXE
	DGRP ENTER/EDIT ANNUAL	
	INCOME	DGRPXIS
	DGRP ENTER/EDIT MON BENEFITS	DGRPXMB
408.22	DGMT ENTER/EDIT DEPENDENTS	DGMTXD
	DGMT ENTER/EDIT MARITAL STATUS	DGMTXM
408.31	DGMT ENTER/EDIT COMPLETION	DGMTXC

FILE #	TEMPLATE NAME	ROUTINES
409.5	SDAMBT	SDXA*
	SDXACSE	SDXACSE*
409.68	SD ENCOUNTER ENTRY	SDAMXOE*
	SD ENCOUNTER LOG	SDAMXLG
409.98	SDEC HELP PANE	SDECSTNG HELPLINK

3.3.2 Print Templates

Table 7: Print Templates

FILE #	TEMPLATE NAME	ROUTINES
45	DG PTF PT BRIEF LIST	DGPTXB*
45.86	DGPT QUICK PROFILE	DGPTXCP*
409.65	SDAMVLD	SDAMXLD
44	SDEC MISSING RESOURCE	SDEC MISSING RESOURCE
409.84	SDEC NULL RESOURCE	SDEC NULL RESOURCE
409.97	SDEC AUDIT DATE PRINT	SDEC PRINT AUDIT REPORT

3.3.3 Compiled Cross-Reference Routines

Table 8: Compiled Cross-Reference Routines

FILE #	TEMPLATE NAME	ROUTINES
45	PTF	DGPTXX*
405	PATIENT MOVEMENT	DGPMXX*
408.21	INDIVIDUAL ANNUAL INCOME	DGMTXX1*
408.22	INCOME RELATION	DGMTXX2*
408.31	ANNUAL MEANS TEST	DGMTXX3*

3.4 Routine List

The following are the steps you may take to obtain a listing of the routines contained in the PIMS package.

1. Programmer Options Menu
2. Routine Tools Menu
3. First Line Routine Print Option
4. Routine Selector: DG* (ADT) SD* SC* (Scheduling)

3.5 New and Modified Routines

3.5.1 Patch DG*5.3*951 Routines

The following new and modified routines were exported by patch DG*5.3*951 – SHRPE ENHANCEMENTS FOR PATIENT RECORD FLAGS. Not all routines can or should be used. Please refer to the outstanding Integration Agreement before attempting to use these routines:

Table 9 : Patch DG*5.3*951 Routines

NEW DG ROUTINES	MODIFIED DG ROUTINES
DGPFDBRS	DGPFAA
DGPFHLF	DGPFAA1
DGPFHLT	DGPFAA2
DGPFHLT1	DGPFAA3
DGPFHLT2	DGPFAAH
DGPFHLT3	DGPFAAH1
DGPFHLT4	DGPFAPI1
DGPFHLTM	DGPFHLQ
DGPFLMA5	DGPFHLQ4
DGPFRDB	DGPFHLR
DGPFRDB1	DGPFHLU
DGPFTR	DGPFHLU1
DGPFTR1	DGPFHLU2
DGPFUT6	DGPFHLU3
DGPFUT61	DGPFHLU4
DGPFUT62	DGPFHLUT
DGPFUT64	DGPFLMA2
	DGPFLMA3
	DGPFLMA4
	DGPFLMU1
	DGPFUT
	DGPFUT3
	DGPFUT4

3.5.2 Patch DG*5.3*958 Routines

The DGOREL1 routine was modified by patch DG*5.3*958. This patch changed the Religion List for Inpatients [DG RELIGION LIST] option in the Inpatient/Lodger Report Menu [DG INPATIENT REPORTS] to display only the last four digits of a patient's Social Security Number (SSN). Previously, the full SSN had displayed in this report.

Table 10: Patch DG*5.3*958 Routines

NEW DG ROUTINES	MODIFIED DG ROUTINES
There are no new routines in this patch.	DGOREL1

3.5.3 Patch DG*5.3*960 Routines

The following new and modified routines were exported by patch DG*5.3*960 – PATIENT RECORD FLAG REPORTS. Not all routines can or should be used. Please refer to the outstanding Integration Agreement before attempting to use these routines:

Table 11 : Patch DG*5.3*960 Routines

NEW DG ROUTINES	MODIFIED DG ROUTINES
DGPFAAH2	DGPFLMT
DGPFUT63	DGPFLMT1
DGPFUT7	DGPFRAL
	DGPFRAL1
	DGPFRFA
	DGPFRFA1

3.5.4 Patch DG*5.3*869 Routines

The following new and modified routines were exported by patch DG*5.3*869 – DGPF NEW PATIENT RECORD FLAG – MISSING PATIENT. Not all routines can or should be used. Please refer to the outstanding Integration Agreement before attempting to use these routines:

Table 12: Patch DG*5.3*869 Routines

NEW DG ROUTINES	MODIFIED DG ROUTINES
DG53869P	There are no conversions for this patch.

3.5.5 Patch SD*5.3*588 Routines

The following new and modified routines were exported by patch SD*5.3*588 - HIGH RISK MENTAL HEALTH PROACTIVE REPORT. Not all routines can or should be used. Please refer to the outstanding Integration Agreement before attempting to use these routines:

Table 13: Patch SD*5.3*588 Routines

NEW SD ROUTINES	MODIFIED SD ROUTINES
SDMHAP	SDAMQ
SDMHAP1	SDMHAD
SDMHPRO	SDMHAD1
SDMHPRO1	SDMHNS
	SDMHNS1

3.5.6 Patch DG*5.3*849 Routines

These new DG routines were exported by patch DG*5.3*849 - DGPF NEW CAT1 FLAG AND CONVERSION. Not all routines can or should be used. Please refer to the outstanding Integration Agreement before attempting to use these routines.

Table 14: Patch DG*5.3*849 Routines

NEW DG ROUTINES
DG53849P
DGPFCNR
DGPFCNV

3.5.7 Patch SD*5.3*578 Routines

SD*5.3*578 - These are the new and modified routines. Not all can or should be used. Please refer to the outstanding Integration Agreement before attempting to run these.

SDMHAD - This is the High Risk Mental Health AD Hoc No show Report entry point that the user can run to display the report. This report will display all patients that did not show up for their scheduled appointment for a Mental Health clinic. It will list patient contact information, Next of Kin, emergency contact, clinic default provider, future scheduled appointments and results of attempts to contact the no showed patients. The user is asked for various sort criteria , a date range, divisions to display (one, many, all), and sort by Clinic, Reminder Location or Stop Codes (one, many, all)

^SDMHAD1 - This is the print routine for the High Risk Mental Health AD HOC No Show Report. The report lists the patient that no showed for the mental health appointment, the date the of the appointment, the clinic and stop code. It also lists the contact information for the patient, the Next of Kin, emergency contacts, clinic provider, future scheduled appointments and results of efforts in contacting the patient.

^SDMHNS - This is the High Risk Mental Health No show Report entry point that is called by the scheduling background job. This report will display all patients that did not show up for their scheduled appointment for a Mental Health clinic. It will list patient contact information, Next of Kin, emergency contact, clinic default provider, future scheduled appointments and results of attempts to contact the no showed patients. The user will not be asked any sort criteria, the

report will list for the day before the background job run, for all the divisions in the facility and mental health clinics in the facility. The report will be sent via email to those persons that are in the SD MH NO SHOW NOTIFICATION mail group.

^SDMHNS1 - This is the print routine for the High Risk Mental Health No Show Report run from the scheduling nightly background job. The report lists the patient that no showed for the mental health appointment, the date the of the appointment, the clinic and stop code. It also lists the contact information for the patient, the Next of Kin, emergency contacts, clinic provider, future scheduled appointments and results of efforts in contacting the patient. The report will be sent via email to those persons that are in the SD MH NO SHOW NOTIFICATION mail group.

SDAMQ modified

^SDAMQ G STARTQ:'$$SWITCH

- N SDSTART,SDFIN
- K ^TMP("SDSTATS",$J)
- S SDSTART=$$NOW^SDAMU D ADD^SDAMQ1
- D EN^SDAMQ3(SDBEG,SDEND) ; appointments
- D EN^SDAMQ4(SDBEG,SDEND) ; add/edits
- D EN^SDAMQ5(SDBEG,SDEND) ; dispositions
- D EN^SDMHNS ;High Risk Mental Health NO Show report
- S SDFIN=$$NOW^SDAMU D UPD^SDAMQ1(SDBEG,SDEND,SDFIN,.05)
- D BULL^SDAMQ1

3.5.8 Patch DG*5.3*836 Routines

DG*5.3*836 - This Registration Patient Record Flag patch provides new interfaces used by the Scheduling and Reminder patches to determine the High Risk for Suicide flag status on a specified date.

GETINF^DGPFAPIH - DGPFAPIH is both a Routine and API Integration agreement. DGPFAPIH - This routine implements the two Application Programming Interface call points for retrieving Patient Record Flag information. One call point is for a specific patient and record and the second call point is for a list of patients with a specific, active, Patient Record Flag.

This API will obtain the Patient Record Flag assignment information and status for the specified patient, patient record flag and date range. The return data will be provided in an array using the target_root specified by the user or in the default array variable DGPFAPI1. The DATE/TIME field (#.02) of the PRF ASSIGNMENT HISTORY File (#26.14) entry will determine whether the entry falls within the specified date range. If no date range is specified, all entries will be returned

GETLST^DGPFAPIH - This API will retrieve a list of patients active at some point within a specified date range for a specified Patient Record Flag. The date range is required for this API, though the same date can be entered to specify a single date. The return data will be provided in an array using the target root specified by the user or in the default array variable DGPFAPI2.

The DATE/TIME field (#.02) of the PRF ASSIGNMENT HISTORY File (#26.14) entry will determine whether the entry falls within the specified date range.

BLDMAIN^DGPFAPIH - This API builds the main return array for the specified patient. The array contains the PRF assignment data retrieved from the appropriate Local or National assignment file

BLDHIST^DGPFAPIH - This API collects and builds the return array containing the PRF assignment history data.

ACTIVE^DGPFAPIU - DGPFAPIU - This routine provides support utilities and functions for the new Application Programming Interface calls.

This procedure will check if the Patient Record Flag was active at any point during the specified date range. The procedure accepts a date range parameter which specifies whether "All" dates or only a "S"pecified date range is to be checked.

The PRF Assignment History File (#26.14) was not designed for this type of date interaction so the algorithm in this procedure has to make a number of assumptions when interpreting the dates and PRF actions. While there can only be one "New Assignment" entry, it is possible to have multiple "Continue", "Inactivate" and "Reactivate" action entries. In addition, the "Entered In Error" action can pose additional issues with determining a status during a specific date range.

CHKDATE^DGPFAPIU - Check for valid start and end dates. Set up the DGRANGE parameter with the validated dates and set DGRANGE top element to "A" for all dates, or "S" for a specific range of dates

CHKDFN^DGPFAPIU - This function checks for a valid patient by checking the DFN in the Patient File (#2). If a valid patient is found, the patient name is returned, otherwise, the error text from the DIQ call is returned.

ASGNDATE^DGPFAPIU - Get the initial Assignment Date/Time of the Patient Record Flag by looking for the "NEW ASSIGNMENT" action in the PRF ASSIGNMENT HISTORY File (#26.14).

GETFLAG^DGPFAPIU - This function gets the variable pointer value for the Patient Record Flag passed in. The PRF is passed in as a text value. If the optional flag category is passed in, only that category will be checked for the PRF. If no category is passed in, then first the National category will be checked.

3.5.9 Patch SD*5.3*622 Routines

START^SDCP - This API initializes SDPRTTOF variable that is a Flag to indicate whether or not to print the Top of Form header or not. Telephone Extension has been added to the Clinic Profile and this variable helps to ensure that the Header prints one time per Clinic.

PRT^SDCP - This API prints the new TELEPHONE EXTENSION field from HOSPITAL LOCATION file on the Clinic Profile and also sets SDPRTTOF variable mentioned above back to 1 so that Header can print for next Clinic that gets output.

TOF^SDCP - This API checks if SDPRTTOF is flagged with a 1 and, if so, allows the printing of the Header. It also resets SDPRTTOF to 0 to prevent excessive printing of TOF.

WRAPP^SDLT - This API now has logic to re-format the Clinic Name so that it lines up with Telephone, Location, and Default Provider information.

FORM^SDLT - This API now prints new TELEPHONE EXTENSION field from HOSPITAL LOCATIOON file in addition to TELEPHONE, LOCATION & DEFAULT PROVIDER information from same File. It checks the PRINT DEFAULT PROVIDER? & PRINT CLINIC LOCATION? Fields from LETTER File before printing the LOCATION & DEFAULT PROVIDER.

TST^SDLT - This API does some new formatting of the other TESTS that have been scheduled for the patient.

M^SDM0 - This API displays the Desired Date for the appointment that has been entered by the user when an appointment is scheduled. A 3 second delay occurs during the display.

D^SDM0 - This API now displays the Clinic Name with the Scheduling Grid.

LET^SDM1A - This API prints the Pre-Appointment Letter after a single appointment is scheduled if the user chooses to do so AND there is a Pre-Appointment letter assigned to the Clinic.

S1^SDMM1 - This API will file the Desired Date entered by the user in the 1st Appointment when multi-booking occurs and for subsequent appointments that recur either Daily or Weekly it stores Desired Date as the Appointment Date.

OVR^SDNACT - This API saves off the Inactivation Date for the Clinic for use in Mail Delivery (see below).

MAIL^SDNACT - This API sends mail to all members of the new SD CLINIC INACTIVATE REMINDER Mail Group that gets created with the post install routine SD53622P for this patch.

3.5.10 Patch DG*5.3*903 Routines

This patch addresses NSR # 20150314 - Increase Engagement in My HealtheVet (IEMHV). The Preregister a Patient [DGPRE PRE-REGISTER OPTION] option, in the VistA Registration V.5.3 package, was enhanced to display a message alerting the registration clerk to engage with the selected patient regarding the patient’s registration status for My HealtheVet. The clerk should document that status, any registration assistance rendered, or the Veteran’s desire to be excluded from My HealtheVet registration. Recent assistance with the patient's My HealtheVet registration is displayed within the alert/reminder.

There is no interface with My HealtheVet. This is only a mechanism to engage directly with the patient to encourage him/her to register for My HealtheVet.

The MAS PARAMETERS (#43) file and the MAS Parameter Entry/Edit [DG PARAMETER ENTRY] option were enhanced to allow for this new functionality to be disabled/enabled. This functionality will be turned off automatically during the post install for this patch.

The following new routines are being added to support this patch:

- DG903PST – Post install routine which does the following:
    - Adds entry 315 in INCONSISTENT DATA ELEMENTS file (#38.6)

    - Disables Increase Veteran Engagement in My HealtheVet Prompts in the MAS PARAMETERS (#43) file.
- DGMHV:
    - EN API – Entry Point for Alert, Socialization, and My HealtheVet Engagement field editing screen. This functionality will only be executed if the ENABLE MY HEALTHEVET PROMPTS? (#1100.07) field in the MAS PARAMETERS (#43) file is set to YES (internal value 1).
    - MAIN API – Main Entry Point for My HealtheVet socialization text/action.
    - SOCIAL API – My HealtheVet Engagement talking point/socialization text action. Display My HealtheVet socialization canned text, prompt for patient response, display and prompt for clerk action.
- DGMHVAC:
    - EN API – Entry point for My HealtheVet Engagement screen.
    - MAIN API – Main Driver for My HealtheVet Engagement screen.
    - ENROLLQ API – Prompt for "My HealtheVet Registered"
    - AUTHENQ API – Prompt for "My HealtheVet Authenticated"
    - OPTINQ API – Prompt for "Opted in for My HealtheVet Secure Messaging"
    - ENROLL API – My HealtheVet Register processing
    - AUTHENT API – Authenticated My HealtheVet account status processing
    - SECMSG API – Secure Messaging processing
    - MHVOK API – Check patient's MHV registration information to determine if the alert should be activated or deactivated.
- DGMVUTL – Contains numerous APIs utilized by the other listed routines.

The following existing routines are being updated to support this patch:

- DGPAR - PREREG subroutine – Updated to display value of the ENABLE MY HEALTHEVET PROMPTS?" (#1100.07) field in the MAS PARAMETERS (#43) file.
- DGPAR1 – Updated to allow the edit of the ENABLE MY HEALTHEVET PROMPTS? (#1100.07) field in the MAS PARAMETERS (#43) file.
- DGPREP1 - DIREDT API – Updated to include the new "Increase Engagement in My HealtheVet" prompts to display and prompt for updates from the clerk.
- DGRPC - EN API – Updated to include the new 315 Consistency Check for "Increase Engagement in My HealtheVet"
- DGRPC3 – Added 315 subroutine to include the new 315 Consistency Check Editing functionality.
- DGRPCE1– Updated to include 315 Consistency Check Editing functionality when necessary "Increase Engagement in My HealtheVet" data fields have not been updated.

3.5.11 Patch SD*5.3*707 Routines

This patch adds functionality to schedule, cancel or update appointments for Community Care Consults using the HealthShare Referral Manager (HSRM) software. HSRM sends the appointment action as an HL7 message. The appointment action is filed in VistA using the VistA Scheduling Enhancement APIs.

The following are new routines as part of this patch:

- SDCCRCOR – Contains utilities used to parse the data in the HL7 message.
- SDCCRGAP – Contains utilities to lookup the appointment data in the VistA appointment files.
- SDCCRSCU – Contains utilities to lookup appointment data in the VistA appointment files.
- SDCCRSEN – Main routine called to process the appointment message from HSRM.
- SDPRE707 – Pre-Install routine to check for the HL Logical link and create the link if it doesn't exist on the VistA system.

3.5.12 Patch DG*5.3*982 Routines

This patch includes modifications and updates to VistA Registration, Eligibility & Enrollment (REE) related to keeping patients on the New Enrollee Appointment Request (NEAR) Call List option [DGEN NEACL MGT RPT1] for appointments, unless the patient has a Primary Care Appointment. It also includes adding a display message to the Management Edit option [DGEN NEACL REQUEST MGT EDIT] in the New Enrollee Appointment Request (NEAR) Management Menu [DGEN NEACL REQUEST MGT MENU].

The following modified routines are exported by patch DG*5.3*982:

DGENACL2

DGENA2

3.5.13 Patch DG*5.3*972 Routine

This patch addresses NSR #20120809 regarding Public Law 112-154. Users shall be able to view a patient's current Camp Lejeune eligibility from the *Eligibility Inquiry for Patient Billing* option on the Admissions/Discharges/Transfers (ADT) Manager menu and/or the Registration sub-menu.

The following modified routine is exported by patch DG*5.3*972:

DGRPDB

3.5.14 Patch DG*5.3*985 Routines

This patch includes modifications and updates to VistA REE related to adding the PREFERRED NAME field (#.2405) to the PATIENT DEMOGRAPHIC DATA SCREEN <1> screen.

The following modified routines are exported by patch DG*5.3*985:

DGR111

DGRP1

DGRPD1

DGRPE

DGRPH

DGRPV

3.5.15 Patch DG*5.3*996 Routines

This patch includes modifications and updates to VistA REE related to adding the PREFERRED NAME to a demographic API. A new demographics API, DEMUPD VADPT, is included in Integration Control Registration (ICR) 7109. A new tag, DEMUPD, which adds the patient's PREFERRED NAME to the patient's basic demographic information and stores this data in the VADEMO array, has been added to the VADPT routine. ICR 7109 is in addition to, and does not replace, ICR 10061.

3.5.16 Patch DG*5.3*997 Routines

This patch includes new routines DGRP11A and DGRP11B and modifications to routines DGRPE, DGRPH, DGRPP, DGRPP1, DGRPU, and DGRPV to accommodate the newly added Caregiver data screens. This includes creating and modifying routines for the newly created <11.5> and <11.5.1> screens, plus the need to accommodate the new screen ^jump flow controls, and lastly to adjust the text in the HELP and INVALID ENTRY…VALID SCREEN #s message in response to the end of page prompts.

This patch also includes modifications to routines VAFHLFNC and VAFHLZCT to send foreign address fields in the ZCT segment when sending the Z07 message.

3.5.17 Patch DG*5.3*993 Routines

This patch contains modifications to VistA REE to separate patient registration from enrollment of Veterans for VHA healthcare. The questions beginning with DO YOU WANT TO ENROLL? have been moved from the end of the patient registration screens to the beginning of registration after a new patient has been added to the patient file. The answer to DO YOU WANT TO ENROLL? is kept in a variable (DGENRYN) that is now used in several routines downstream from DGREG.

DGREG - This routine is called when the DG REGISTER PATIENT option is selected. It now asks the DO YOU WANT TO ENROLL? questions.

DPTLK - This is the patient lookup program. It has been changed to disallow the creation of a new patient for the following:

- The use of double-quotes (“)
- The use of DG LOAD PATIENT DATA
- The use of DG ADMIT PATIENT

EN1^DGEN - This existing API has been changed to use the variable DGENRYN to determine whether the patient should be enrolled.

ENRPAT^DGEN - This API now passes the DGENRYN variable to ENROLL^DGEN

ENROLL^DGEN - Is now passed the DGENRYN variable, and passes it on to CREATE^DGENA6

CREATE^DGENA6 - Is now passed the DGENRYN variable, and passes it on to PRIORITY^DGENELA4. Also, the variable is stored in the PT APPLIED FOR ENROLLMENT field (#.14), which is a new field that this patch introduced in the PATIENT ENROLLMENT file (#27.11)

PRIORITY^DGENELA4 - Is now passed the DGENRYN variable, and passes it on to PRI^DGENELA4

PRI^DGENELA4 - Is now passed the DGENRYN variable, and uses it to return a priority group of null if the patient is not being enrolled.

AUTOUPD^DGENA2 - This API is called from cross-references in many fields in the PATIENT File (#2). This patch changes the API to retrieve the new PT APPLIED FOR ENROLLMENT field, and passes it to CREATE^DGENA6 as specified above.

EDIT^DGENA1A - This API updates the new enrollment record. It has been changed to add the new PT APPLIED FOR ENROLLMENT field (#.14)

EN^DG993BO - This routine will be used if there is a need to back out the patch.

DGENUPL2 – This routine is modified to include ZEN segment fields 16 to 19 in DGENR array.

DGENUPL8 – This routine is modified to include “REGISTRATION ONLY” status in current and previous enrollments.

VAFHLZEN – Creation of ZEN segment is enhanced to populate new sequence numbers 16, 17, 18 and 19 with values of PT APPPLIED FOR ENROLLMENT?, REGISTRATION ONLY REASON, REGISTRATION ONLY DATE, SOURCE OF REGISTRATION. The fields listed are located in the PATIENT ENROLLMENT File (#27.11).

DGENA1 – This routine is modified to retrieve fields 16 to 19 from ZEN segment and store them in the PATIENT File (#2).

DGENA – This routine is modified to enhance the DGENR array to include PT APPLIED FOR ENROLLMENT?, REGISTRATION ONLY REASON, REGISTRATION ONLY DATE and SOURCE OF REGISTRATION. The fields listed are located in the PATIENT ENROLLMENT File (#27.11).

3.5.18 Patch DG*5.3*1015 Routines

This patch includes modifications to DGENA2 and DGENACL2 to reverse the Primary Care Appointment change to the NEAR Call List [DGEN NEACL MGT RPT1] option and NEAR Tracking Report [DGEN NEACL MGT RPT2] option introduced in DG*5.3*982. The requirement to only remove and update a patient on these reports if the patient has a Primary Care Appointment has been removed.

In addition, DGENDD was modified to fix a defect in the VERIFY FIELDS option of the UTILITY FUNCTIONS in FileMan.

3.5.19 Patch SD*5.3*722 Routines

This patch addresses a problem where a large background job can be created that takes several hours to complete and consumes gigabytes of TMP global storage. If enough TMP global space is consumed, a MUMPS FILEFULL error will result which will stop VistA from working.

The following modified routines are exported by patch SD*5.3*722:

SDEC01B

SDEC02

SDEC26

SDEC50

SDEC55A

The following new routine is exported by patch SD*5.3*722:

SD722PST

3.5.20 Patch SD*5.3*723 Routines

This patch addresses a problem where the code that populated the Pending Appointments list could encounter a SUBSCRIPT error in a certain inconsistent data scenario and caused the VistA Scheduling Graphical User Interface (VS GUI) to crash.

The following modified routines are exported by patch SD*5.3*723:

SDEC50

SDVSIT2

The following new routine is exported by patch SD*5.3*723:

SDECDATA

3.5.21 Patch SD*5.3*731 Routines

This patch enhances the appointment correcting routine used by the options Manually Fix Appointments with No Resource [SDEC NO RES APPT FIX] and Automatically Fix Appointments with No Resource [SDEC NO RES APPT AUTOFIX]. It also addresses an issue with the SDEC EP WAIT LIST Remote Procedure Call (RPC) to strip time from the Clinically Indicated Date (CID) if it is present. This patch also adds a new option Appointments with no resource report [SDEC NO RES APPT REPORT

The following modified routines are exported by patch SD*5.3*731:

SDECDATA

SDECEPT

3.5.22 Patch SD*5.3*734 Routines

This patch addresses an issue that was occurring when the VA Online Scheduling (VAOS) Attempted to send future date/time to the DESIRED DATE OF APPOINTMENT (.2) field. This fix allows schedulers to cancel VAOS appointments from the VistA Scheduling Enhancement (VSE) calendar without error.

3.5.23 Patch SD*5.3*686 Routines

This patch contains the VistA components necessary to support the 1.6.0 release of VistA Scheduling Enhancements (VSE).

The following modified routines are exported by patch SD*5.3*686:

SDAM2

SDCNSLT

SDEC

SDEC07

SDEC07A

SDEC51

SDEC57

SDECAR1

SDECAR1A

SDECAR2

SDECCON

SDECLK

SDECAR1A

The following new routines are exported by patch SD*5.3*686:

SD686PST

SDEC01C

SDEC07C

SDECAUD

3.5.24 Patch SD*5.3*740 Routines

This patch addresses issues within Scheduling Remote Procedure Calls (RPCs) where the Massachusetts General Hospital Utility Multi-Programming System (MUMPS or M) Standard Programming Commands TSTART, TCOMMIT, and TROLLBACK are currently being used. It also addresses an argumentless LOCK command.

The following modified routines are exported by patch SD*5.3*740:

SDEC07

SDEC08

SDEC29

SDEC31

3.5.25 Patch SD*5.3*744 Routines

This patch addresses an issue encountered after patch SD*5.3*722. This patch corrects the problem of appointment processing in VistA Scheduling (VS) Graphical User Interface (GUI) not invoking the event driver protocol (SDAM APPOINTMENT EVENTS) that legacy VistA does.

The following modified routines are exported by patch SD*5.3*744:

SDEC07B

SDEC08

3.5.26 Patch SD*5.3*737 Routines

This patch addresses issues that VistA Scheduling (VS) Graphical User Interface (GUI) experiences due to software incompatibilities with Veterans Point of Service (VPS) Kiosks, Cancel Clinic Availability (SDCANCEL option) and with missing data from appointments made by applications other than VS GUI.

The following modified routines are exported by patch SD*5.3*737:

SDCNSLT

SDEC50

3.5.27 Patch SD*5.3*694 Routines

This patch contains the VistA components necessary to support the 1.7.0 release of VistA Scheduling Enhancements (VSE).

The following modified routines are exported by patch SD*5.3*694:

SDEC01

SDEC02

SDEC05

SDEC06

SDEC07

SDEC07A

SDEC07B

SDEC07C

SDEC08

SDEC12

SDEC25
SDEC25B
SDEC27
SDEC31
SDEC33
SDEC34
SDEC38
SDEC40
SDEC47
SDEC48
SDEC49
SDEC50
SDEC52A
SDEC55A
SDEC57
SDECAPI
SDECAR
SDECAR1
SDECAR2
SDECCAP
SDECEP
SDECEPT
SDECIDX
SDECWL
SDECWL2
SDM1A
SDROUT0

The following new routines are exported by patch SD*5.3*694:

SD694PO
SDECDATE
SDECSTNG

3.5.28 Patch SD*5.3*762 Routines:

VS GUI Release 1.7.0 has been incremented to VS GUI Release 1.7.0.1. This patch updates the version number in the SDEC SETTINGS File (#409.98) to match the GUI version.

The following new routine is exported by patch SD*5.3*762: SDEC762P

3.5.29 Patch SD*5.3*745 Routines

This patch supports VSE GUI Release 1.7.1. The patch addresses multiple enhancements including: to accept a flag to not reopen appointment request when flag is '2', to view the CPRS Consult tab details via VSE GUI, display contact information on the Request Management Grid on VSE GUI, new background job to Disposition Open CPRS Return to Clinic (RTC) Orders Scheduled in VistA, and Update Patient Indicated Date (PID) when rescheduling an appointment that was cancelled by the patient or no-showed. This patch also corrected a SACC compliance issue of using '…' structure during parameter passing.

The following modified routines are exported by patch SD*5.3*745:

SDEC

SDEC08

SDEC50

SDEC51

SDEC52

SDEC52A

SDEC53

SDECAR

SDECAR1

SDECAR1A

SDECAR2

SDECWL

SDECWL1

SDECWL2

The following new routines are exported by SD*5.3*745:

SDEC08A

SDECRTCF

4 Files

This section provides a list of the software files. For each file, include the file number, file name, a list of any special templates (print, sort, input, edit) that come with the file, and brief description of the data or instruct the user how/where to find this information online. Indicate what data comes with the files and whether that data overwrites existing data. Optionally include information about file pointer relationships.

4.1 Globals and Files

The main globals used in the PIMS package are ^DG, ^DPT, ^DGPM, ^SC, and ^SCE.

The main files are PATIENT, PATIENT MOVEMENT, MAS MOVEMENT TYPE, PTF, CENSUS, WARD LOCATION, and HOSPITAL LOCATION.

The PIMS Package also uses globals ^DGSL, ^DGIN, ^DGS, ^DGAM, ^DGCPT, ^DGICD9, ^DGWAIT, ^DGPR, ^DGMT, ^DGPT, ^DGM, ^DGMHV,^DGNT, ^DGP, ^DGPF, ^DGQE, ^ICPT, ^VA, ^VAS, ^VAT, ^DIC, ^SCPT, ^SCTM, ^SDASF, ^SDASE, ^SDV, ^SD, ^SDD.^SDEC,^SDAUDIT

Journaling of the following globals is mandatory: ^DPT, ^DGEN, ^DGPT, ^DGPM, ^SDV, ^SC, ^SCE, ^SCTM, ^SDD.

Journaling of the following globals is optional: ^DGS, ^DG.

Journaling of the following global is recommended: ^DGPF.

4.2 File List

Table 15: File List

FILE NUMBER	FILE NAME	GLOBAL
2	PATIENT	^DPT(
5	STATE	^DIC(5,
8	ELIGIBILITY CODE	^DIC(8,
8.1**	MAS ELIGIBILITY CODE	^DIC(8.1,
8.2*	IDENTIFICATION FORMAT	^DIC(8.2,
10*	RACE	^DIC(10,
11**	MARITAL STATUS	^DIC(11,
13*	RELIGION	^DIC(13,
21**	PERIOD OF SERVICE	^DIC(21,
22**	POW PERIOD	^DIC(22,
23*	BRANCH OF SERVICE	^DIC(23,
25*	TYPE OF DISCHARGE	^DIC(25,

FILE NUMBER	FILE NAME	GLOBAL
26.11	PRF LOCAL FLAG	^DGPF(26.11,
26.12	PRF LOCAL FLAG HISTORY	^DGPF(26.12,
26.13	PRF ASSIGNMENT	^DGPF(26.13,
26.14	PRF ASSIGNMENT HISTORY	^DGPF(26.14,
26.15	PRF NATIONAL FLAG	^DGPF(26.15,
26.16	PRF TYPE	^DGPF(26.16,
26.17	PRF HL7 TRANSMISSION LOG	^DGPF(26.17,
26.18	PRF PARAMETERS	^DGPF(26.18,
26.19	PRF HL7 QUERY LOG	^DGPF(26.19,
26.21	PRF HL7 EVENT	^DGPF(26.21,
26.22	PRF HL7 REQUEST LOG	^DGPF(26.22,
27.11	PATIENT ENROLLMENT	^DGEN(27.11,
27.12	ENROLLMENT QUERY	^DGEN(27.12,
27.14	ENROLLMENT / ELIGIBILITY UPLOAD AUDIT	^DGENA(27.14,
27.15	ENROLLMENT STATUS	^DGEN(27.15,
27.16	ENROLLMENT GROUP THRESHOLD	^DGEN(27.16,
27.17*	CATASTROPHIC DISABILITY REASONS	^DGEN(27.17,
28.11	NOSE AND THROAT RADIUM HISTORY	^DGNT(28.11,
29.11	MST HISTORY	^DGMS(29.11,
30**	DISPOSITION LATE REASON	^DIC(30,
35*	OTHER FEDERAL AGENCY	^DIC(35,
35.1	SHARING AGREEMENT CATEGORY	^DG(35.1,
35.2	SHARING AGREEMENT SUB-CATEGORY	^DG(35.2)
37**	DISPOSITION	^DIC(37,
38.1	DG SECURITY LOG	^DGSL(38.1,
38.5	INCONSISTENT DATA	^DGIN(38.5,
38.6**	INCONSISTENT DATA ELEMENTS	^DGIN(38.6,
39.1*	EMBOSSED CARD TYPE	^DIC(39.1,
39.2*	EMBOSSING DATA	^DIC(39.2,
39.3	EMBOSSER EQUIPMENT FILE	^DIC(39.3,
39.4	ADT / HL7 TRANSMISSION	^DIC(39.4,

FILE NUMBER	FILE NAME	GLOBAL
39.6	VIC REQUEST	^DGQE(39.6,
39.7	VIC HL7 TRANSMISSION LOG	^DGQE(39.7,
40.7*	CLINIC STOP	^DIC(40.7,
40.8	MEDICAL CENTER DIVISION	^DG(40.8,
40.9**	LOCATION TYPE	^DIC(40.9
41.1	SCHEDULED ADMISSION	^DGS(41.1,
41.41	PRE-REGISTRATION AUDIT	^DGS(41.41,
41.42	PRE-REGISTRATION CALL LIST	^DGS(41.42,
41.43	PRE-REGISTRATION CALL LOG	^DGS(41.43,
41.9	CENSUS	^DG(41.9,
42	WARD LOCATION	^DIC(42,
42.4*	SPECIALTY	^DIC(42.4,
42.5	WAIT LIST	^DGWAIT(
42.55**	PRIORITY GROUPING	^DIC(42.55,
42.6	AMIS 334-341	^DGAM(334,
42.7	AMIS 345&346	^DGAM(345,
43	MAS PARAMETERS	^DG(43,
43.1	MAS EVENT RATES	^DG(43.1,
43.11**	MAS AWARD	^DG(43.11,
43.4**	VA ADMITTING REGULATION	^DIC(43.4,
43.5	G&L CORRECTIONS	^DGS(43.5,
43.61	G&L TYPE OF CHANGE	^DG(43.61,
43.7**	ADT TEMPLATE	^DG(43.7,
44	HOSPITAL LOCATION	^SC(
45	PTF	^DGPT(
45.1**	SOURCE OF ADMISSION	^DIC(45.1,
45.2	PTF TRANSFERRING FACILITY	^DGTF(
45.3*	SURGICAL SPECIALTY	^DIC(45.3,
45.4*	PTF DIALYSIS TYPE	^DG(45.4,
45.5	PTF MESSAGE	^DGM(
45.6*	PLACE OF DISPOSITION	^DIC(45.6,

FILE NUMBER	FILE NAME	GLOBAL
45.61*	PTF ABUSED SUBSTANCE	^DIC(45.61,
45.64*	PTF AUSTIN ERROR CODES	^DGP(45.64,
45.68	FACILITY SUFFIX	^DIC(45.68,
45.7	FACILITY TREATING SPECIALTY	^DIC(45.7,
45.81*	STATION TYPE	^DIC(45.81,
45.82*	CATEGORY OF BENEFICIARY	^DIC(45.82,
45.83	PTF RELEASE	^DGP(45.83,
45.84	PTF CLOSE OUT	^DGP(45.84,
45.85	CENSUS WORKFILE	^DG(45.85,
45.86*	PTF CENSUS DATE	^DG(45.86,
45.87	PTF TRANSACTION REQUEST LOG	^DGP(45.87,
45.88*	PTF EXPANDED CODE CATEGORY	^DIC(45.88,
45.89*	PTF EXPANDED CODE	^DIC(45.89,
45.9	PAF	^DG(45.9,
45.91	RUG-II	^DG(45.91,
46	INPATIENT CPT CODE	^DGCPT(46
46.1	INPATIENT POV	^DGICT9(46.1,
47**	MAS FORMS AND SCREENS	^DIC(47,
48**	MAS RELEASE NOTES	^DG(48,
48.5**	MAS MODULE	^DG(48.5,
389.9	STATION NUMBER (TIME SENSITIVE)	^VA(389.9,
390	ENROLLMENT RATED DISABILITY UPLOAD AUDIT	^DGRDUA(390,
390.01	MHV SOCIALIZATION	^DGMHV(390.01,
390.02	MHV SOCIALIZATION ACTIONS	^DGMHV(390.02,
390.03	MHV DECLINED REASONS	^DGMHV(390.03,
390.04	MHV ACTION SELECTION	^DGMHV(390.04,
391**	TYPE OF PATIENT	^DG(391,
391.1	AMIS SEGMENT	^DG(391.1,
391.31	HOME TELEHEALTH PATIENT	^DGHT(391.31,
403.35	SCHEDULING USER PREFERENCE	^SCRS(403.35,
403.43*	SCHEDULING EVENT	^SD(403.43,

FILE NUMBER	FILE NAME	GLOBAL
403.44*	SCHEDULING REASON	^SD(403.44,
403.46*	STANDARD POSITION	^SD(403.46,
403.47*	TEAM PURPOSE	^SD(403.47,
404.41	OUTPATIENT PROFILE	^SCPT(404.41,
404.42	PATIENT TEAM ASSIGNMENT	^SCPT(404.42,
404.43	PATIENT TEAM POSITION ASSIGNMENT	^SCPT(404.43,
404.44	PCMM PARAMETER	^SCTM(404.44,
404.45	PCMM SERVER PATCH	^SCTM(404.45,
404.46	PCMM CLIENT PATCH	^SCTM(404.46,
404.471	PCMM HL7 TRANSMISSION LOG	^SCPT(404.471,
404.472	PCMM HL7 ERROR LOG	^SCPT(404.472,
404.48	PCMM HL7 EVENT	^SCPT(404.48,
404.49	PCMM HL7 ID	^SCPT(404.49,
404.51	TEAM	^SCTM(404.51,
404.52	POSITION ASSIGNMENT HISTORY	^SCTM(404.52,
404.53	PRECEPTOR ASSIGNMENT HISTORY	^SCTM(404.53,
404.56	TEAM AUTOLINK	^SCTM(404.56,
404.57	TEAM POSITION	^SCTM(404.57,
404.58	TEAM HISTORY	^SCTM(404.58,
404.59	TEAM POSITION HISTORY	^SCTM(404.59,
404.61	MH PCMM STOP CODES	^SCTM(404.61,
404.91	SCHEDULING PARAMETER	^SD(404.91,
404.92*	SCHEDULING REPORT DEFINTION	^SD(404.92,
404.93*	SCHEDULING REPORT FIELDS DEFINITION	^SD(404.93,
404.94*	SCHEDULING REPORT GROUP	^SD(404.94,
404.95*	SCHEDULING REPORT QUERY TEMPLATE	^SD(404.95,
404.98	SCHEDULING CONVERSION SPECIFICATION	^SD(404.98,
405	PATIENT MOVEMENT	^DGPM(
405.1	FACILITY MOVEMENT TYPE	^DG(405.1,
405.2**	MAS MOVEMENT TYPE	^DG(405.2,
405.3**	MAS MOVEMENT TRANSACTION TYPE	^DG(405.3,

FILE NUMBER	FILE NAME	GLOBAL
405.4	ROOM-BED	^DG(405.4,
405.5**	MAS OUT-OF-SERVICE	^DG(405.5,
405.6	ROOM-BED DESCRIPTION	^DG(405.6,
406.41**	LODGING REASON	^DG(406.41,
407.5	LETTER	^VA(407.5,
407.6**	LETTER TYPE	^VA(407.6,
407.7**	TRANSMISSION ROUTERS	^VAT(407.7,
408	DISCRETIONARY WORKLOAD	^VAT(408,
408.11*	RELATIONSHIP	^DG(408.11,
408.12	PATIENT RELATION	^DGPR(408.12,
408.13	INCOME PERSON	^DGPR(408.13,
408.21	INDIVIDUAL ANNUAL INCOME	^DGMT(408.21,
408.22	INCOME RELATION	^DGMT(408.22,
408.31	ANNUAL MEANS TEST	^DGMT(408.31,
408.32**	MEANS TEST STATUS	^DG(408.32,
408.33**	TYPE OF TEST	^DG(408.33,
408.34**	SOURCE OF INCOME TEST	^DG(408.34,
408.41	MEANS TEST CHANGES	^DG(408.41,
408.42**	MEANS TEST CHANGES TYPE	^DG(408.42,
409.1**	APPOINTMENT TYPE	^SD(409.1,
409.2**	CANCELLATION REASONS	^SD(409.2,
409.41**	OUTPATIENT CLASSIFICATION TYPE	^SD(409.41,
409.42	OUTPATIENT CLASSIFICATION	^SDD(409.42,
409.45**	OUTPATIENT CLASSIFICATION	^SD(409.45,
STOP CODE EXCEPTION		
409.62**	APPOINTMENT GROUP	^SD(409.62,
409.63**	APPOINTMENT STATUS	^SD(409.63,
409.64	QUERY OBJECT	^SD(409.64,
409.65	APPOINTMENT STATUS UPDATE LOG	^SDD(409.65,
409.66**	APPOINTMENT TRANSACTION TYPE	^SD(409.66
409.67	CLINIC GROUP	^SD(409.67,

FILE NUMBER	FILE NAME	GLOBAL
409.68	OUTPATIENT ENCOUNTER	^SCE(
409.73	TRANSMITTED OUTPATIENT ENCOUNTER	^SD(409.73,
409.74	DELETED OUTPATIENT ENCOUNTER	^SD(409.74,
409.75	TRANSMITTED OUTPATIENT ENCOUNTER ERROR	^SD(409.75,
409.76**	TRANSMITTED OUTPATIENT ENCOUNTER	^SD(409.76,
ERROR CODE		
409.77	ACRP TRANSMISSION HISTORY	^SD(409.77,
409.81	SDEC APPLICATION	^SDEC(409.81,
409.822	SDEC ACCESS GROUP	^SDEC(409.822,
409.823	SDEC ACCESS TYPE	^SDEC(409.823,
409.824	SDEC ACCESS GROUP TYPE	^SDEC(409.824,
409.831	SDEC RESOURCE	^SDEC(409.831,
409.832	SDEC RESOURCE GROUP	^SDEC(409.832,
409.833	SDEC RESOURCE USER	^SDEC(409.833,
409.834	SDEC ADDITIONAL RESOURCE	^SDEC(409.834,
409.84	SDEC APPOINTMENT	^SDEC(409.84,
409.845	SDEC PREFERENCES AND SPECIAL NEEDS	^SDEC(409.845,
409.85	SDEC APPT REQUEST	^SDEC(409.85,
409.86	SDEC CONTACT	^SDEC(409.86,
409.91	ACRP REPORT TEMPLATE	^SDD(409.91,
409.92	ACRP REPORT TEMPLATE PARAMETER	^SD(409.92,
409.95	PRINT MANAGER CLINIC SETUP	^SD(409.95,
409.96	PRINT MANAGER DIVISION SETUP	^SD(409.96,
409.97	SD AUDIT STATISTICS	^SDAUDIT(
409.98*	SDEC SETTINGS	^SDEC(409.98

*File comes with data.

** File comes with data which will overwrite existing data, if specified.

5 Files and Templates in the PIMS Package

The following are the steps you may take to obtain information concerning the files and templates contained in the PIMS package.

5.1 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".

5.2 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: DG to DGZ, VA to VAZ, (ADT) SD to SDZ, SC to SCZ (scheduling)
6. Within name, sort by: <RET>
7. First print field: Name

5.3 VA FileMan Functions

Included with the ACRP Reports Menu is the FileMan function, SCRPWDATA. This function can be used from within the OUTPATIENT ENCOUNTER file to provide any of the following data elements as data within FileMan output. It may be used to sort or print data.

This function has one argument which is the name (or acronym) of the data element you wish to return. For example, if you wish to sort or print a patient's current GAF score, the function could be used as follows.

```
THEN PRINT FIELD: SCRPWDATA("GAF SCORE (CURRENT)");"CURRENT GAF SCORE";L8
(OR)
THEN PRINT FIELD: SCRPWDATA("DXGC");"CURRENT GAF SCORE";L8
```

VA FileMan Function Data elements that have multiple values (like procedure codes, diagnoses, etc.) are returned as a single semicolon delimited string which may be as long as 245 characters. Some data of these elements may be omitted due to truncation to stay within this limit.

The following is a list of data elements and associated acronyms that may be specified as arguments to the SCRPWDATA function.

Table 16: VA Fileman Functions

DATA ELEMENT	ACRONYM
CATEGORY: AMBULATORY PROCEDURE	
EVALUATION & MANAGEMENT CODES	APEM
AMBULATORY PROCEDURE (NO E&M CODES)	APAP
ALL AMBULATORY PROCEDURE CODES	APAC
CATEGORY: CLINIC	
CLINIC NAME	CLCN
CLINIC GROUP	CLCG
CLINIC SERVICE	CLCS
CATEGORY: DIAGNOSIS	
PRIMARY DIAGNOSIS	DXPD
SECONDARY DIAGNOSIS	DXSD
ALL DIAGNOSES	DXAD
GAF SCORE (HISTORICAL)	DXGH
GAF SCORE (CURRENT)	DXGC
CATEGORY: ENROLLMENT (CURRENT)	
ENROLLMENT DATE (CURRENT)	ECED
SOURCE OF ENROLLMENT (CURRENT)	ECSE
ENROLLMENT STATUS (CURRENT)	ECES
ENROLLMENT FACILITY RECEIVED (CURRENT)	ECFR
ENROLLMENT PRIORITY (CURRENT)	ECEP
ENROLLMENT EFFECTIVE DATE (CURRENT)	ECEF
CATEGORY: ENROLLMENT (HISTORICAL)	
ENROLLMENT DATE (HISTORICAL)	EHED
SOURCE OF ENROLLMENT (HISTORICAL)	EHSE
ENROLLMENT STATUS (HISTORICAL)	EHES
ENROLLMENT FACILITY RECEIVED (HISTORICAL)	EHFR

DATA ELEMENT	ACRONYM
ENROLLMENT PRIORITY (HISTORICAL)	EHEP
ENROLLMENT EFFECTIVE DATE (HISTORICAL)	EHEF
CATEGORY: OUTPATIENT ENCOUNTER	
PATIENT	OEPA
ORIGINATING PROCESS TYPE	OEOP
APPT. TYPE	OEAT
STATUS	OEST
ELIG. OF ENCOUNTER	PEPW
MEANS TEST (HISTORICAL)	PEMH
MEANS TEST (CURRENT)	PEMC
SC PERCENTAGE	PESP
AGENT ORANGE EXPOSURE	PEAO
IONIZING RADIATION EXPOSURE	PEIR
SW ASIA CONDITIONS EXPOSURE	PEEC
CATEGORY: PRIMARY CARE	
PC PROVIDER (HISTORICAL)	PCPH
PC TEAM (HISTORICAL)	PCTH
PC PROVIDER (CURRENT)	PCPC
PC TEAM (CURRENT)	PCTC
CATEGORY: PROVIDER	
PRIMARY PROVIDER	PRPP
SECONDARY PROVIDER	PRSP
ALL PROVIDERS	PRAP
PRIMARY PROVIDER PERSON CLASS	PRPC
SECONDARY PROVIDER PERSON CLASS	PRSC
ALL PROVIDERS PERSON CLASS	PRAC
CATEGORY: STOP CODE	
PRIMARY STOP CODE	SCPC
SECONDARY STOP CODE	SCSC
BOTH STOP CODES	SCBC
CREDIT PAIR	SCCP

DATA ELEMENT	ACRONYM
CATEGORY: V FILE ELEMENT	
EXAMINATION	VFEX
HEALTH FACTOR	VFHF
IMMUNIZATION	VFIM
PATIENT EDUCATION	VFPE
TREATMENTS	VFTR
SKIN TEST	VFST

6 Exported Options

This section provides a list of the options exported with the **software**, indicating distribution of menus to users. Any restrictions on menu distribution are noted. When the option's availability is based on the level of system access requiring permissions the name of the type of access (e.g., security keys and/or roles) and authorization is included.

The following are the steps you may take to obtain information about menus, exported protocols, exported options, exported remote procedures, and exported HL7 applications concerning the PIMS package.

6.1 Menu Diagrams

- Programmers Options
- Menu Management Menu
- Display Menus and Options Menu
- Diagram Menus
- Select User or Option Name: O.DG Manager Menu (ADT) O.SDMGR (Scheduling)

6.2 Exported Protocols

- VA FileMan Menu
- Print File Entries Option
- Output from what File: PROTOCOL
- Sort by: Name
- Start with name: DG to DGZ, VA to VAZ (ADT) SD to SDZ, SC to SCZ (Scheduling)
- Within name, sort by: <RET>
- First print field: Name

6.3 Exported Options

- VA FileMan Menu
- Print File Entries Option
- Output from what File: OPTION
- Sort by: Name
- Start with name: DG to DGZ, VA to VAZ (ADT)
- SD to SDZ, SC to SCZ (Scheduling)
- Within name, sort by: <RET>
- First print field: Name

6.4 Exported Remote Procedures

- VA FileMan Menu
- Print File Entries Option
- Output from what File: REMOTE PROCEDURE
- Sort by: Name
- Start with name: DG to DGZ, VA to VAZ (ADT) SD to SDZ, SC to SCZ (Scheduling)
- Within name, sort by: <RET>
- First print field: Name

6.5 Exported HL7 Applications for Ambulatory Care Reporting

- HL7 Main Menu
- V1.6 Options Menu
- Interface Workload Option
- Look for AMBCARE-DHCP and NPCD-AAC*

6.6 Exported HL7 Applications For Inpatient Reporting To National Patient Care Database

- HL7 Main Menu
- V1.6 Options Menu
- Interface Workload Option
- Look for VAFC PIMS and NPTF

6.7 Exported HL7 Applications for Home Telehealth Care Database

- DG HOME TELEHEALTH

*AAC stands for Austin Automation Center. The name of that facility has been changed to Austin Information Technology Center.

6.8 Exported Scheduling Options

6.8.1 Patch SD*5.3*588 Options

The following new and modified Scheduling options were exported by the SD*5.3*588 HIGH RISK MENTAL HEALTH PROACTIVE REPORT patch:

Table 17: Exported Scheduling Options

NEW SCHEDULING OPTIONS	MENU ASSIGNMENTs
High Risk MH Proactive Ad Hoc Report [SD MH PROACTIVE AD HOC REPORT] Option	Stand-Alone Option
High Risk MH Proactive Nightly Report [SD MH PROACTIVE BGJ REPORT] Run Routine	Stand-Alone Option

Table 18: Modified Scheduling Options

MODIFIED SCHEDULING OPTIONS	MENU ASSIGNMENTs
High Risk MH No-Show Ad Hoc Report [SD MH NO SHOW AD HOC REPORT] option	Stand-Alone Option
High Risk MH No-Show Nightly Report [SD MH NO SHOW NIGHTLY BGJ] Run Routine	Stand-Alone Option

6.8.2 Exported DG Option

The new Convert Local HRMH PRF to National Action [DGPF LOCAL TO NATIONAL CONVERT] option is exported by the DG*5.3*849 DGPF NEW CAT1 FLAG AND CONVERSION patch.

Table 19: New DG Option

NEW DG OPTION	MENU ASSIGNMENT
Convert Local HRMH PRF to National Action [DGPF LOCAL TO NATIONAL CONVERT] option	Stand-Alone Option

6.8.3 Patch SD*5.3*723 Options

Patch SD*5.3*723 includes several new options intended to allow users to identify files with missing pointers to the SDEC RESOURCE file. These options are all assigned to the SD Supervisor menu.

Table 20: Exported VistA Scheduling (VS) Options - SD*5.3*723

OPTION	Description
SDEC NO RES APPT AUTO FIX	This option automatically processes entries in the SDEC APPOINTMENT file (#409.84) that do not have a pointer to an SDEC RESOURCE (#409.831) and fixes the link in most cases.
SDEC NO RES APPT FIX	This option allows the user to examine entries in the SDEC APPOINTMENT file (#409.84) that do not have a pointer to an SDEC RESOURCE (#409.831) and find the correct resource for the link.

OPTION	Description
SDEC NULL RESOURCE	This option scans the SDEC Appointment file (#409.84) and identifies appointments that do not have the resource (#409.831) field populated. This condition occurs when an appointment is made in legacy VistA for a clinic (#44) that does not have a resource of the same name assigned to it.
SDEC MISSING RESOURCE	This option lists all hospital locations (#44) and the associated resources (#409.831). Locations are flagged if they do not have a resource of the same name.
SDEC APPOINTMENT EDIT	Use this option to assign a resource to an appointment that does not have one.
SDEC APPOINTMENT INQUIRY	Option performs FileMan inquiry in the Appointment file (#409.84).
SDEC ENCOUNTER INQUIRY	FileMan encounter inquiry for users without access to FileMan.
SDEC RESOURCE CREATE	Use this option to create a resource and assign it to a hospital location.
SDEC RESOURCE EDIT	Use this option to edit a resource to match with a clinic.
SDEC RESOURCE INQUIRY	Performs FileMan inquiry into the Resource file (#409.831).

6.8.4 Patch SD*5.3*731 Option

Table 21: Exported VistA Scheduling (VS) Options - SD*5.3*731

OPTION	Description
SDEC NO RES APPT REPORT	Identifies appointments that do not have the resource (#409.831) field populated.

6.8.5 Patch SD*5.3* 737 Option

Table 22: Exported VistA Scheduling (VS) Options - SD*5.3*737

OPTION	Description
SDEC APPT-ENC STATUS LIST	Lists all patient appointment-encounter-appointment file triples that match user selected status values for each file.

6.8.6 Patch SD*5.3*686 Options

Table 23: Exported VistA Scheduling (VS) Options - SD*5.3*686

OPTION	Description
SDEC NO RES APPT AUTO FIX	Compile audit report for a selected date
SDEC NO RES APPT FIX	Compile yesterday's audit report
SDEC NULL RESOURCE	Print VistA Scheduling Audit Report
SDEC MISSING RESOURCE	This option allows the user to release all appointment request locks held by a selected user.

6.8.7 Patch SD*5.3*694 Options

Table 24: Exported VistA Scheduling (VS) Options - SD*5.3*694

OPTION	Description
SDEC HELP PANE EDIT (LOCAL)	Use this option to enter/edit hyperlinks displayed in the VS GUI Help Pane.
SDEC SETTINGS REM0TE UPDATE	Used to process changes to the SDEC SETTINGS file (#409.98).

7 Archiving and Purging

This section describes the archiving capabilities of the software and any necessary instructions or guidelines.

7.1 Archiving

With the release of PIMS V. 5.3, a new archive / purge option has been created for PTF-related records. Please refer to the Release Notes for details.

7.2 Purging

The PIMS package allows for purging of data associated with log of user access to sensitive records, consistency checker, scheduled admissions, local breakeven data for DRGs, special transaction requests, and scheduling data. Following is a list of the purge options and where the documentation may be found in the user manual.

7.3 ADT Module

Table 25: ADT and Scheduling Module Options

OPTION NAME	MENU NAME
ADT MODULE	
Purge Breakeven Data for a Fiscal Year	PTF
Purge Special Transaction Request Log	PTF
Purge Non-Sensitive Patients from Security Log	Security Officer
Purge Record of User Access from Security Log	Security Officer
Purge Inconsistent Data Elements	Supervisor ADT
Purge Scheduled Admissions	Supervisor ADT
SCHEDULING MODULE	
Purge Ambulatory Care Reporting files	Ambulatory Care Reporting
Purge Appointment Status Update Log File	Supervisor
Purge rejections that are past database close-out	Ambulatory Care Reporting
Purge Scheduling Data	Supervisor

7.4 ACRP Database Conversion Option

The purpose of the database conversion is to convert old Scheduling encounter information into the Visit Tracking / Patient Care Encounter (PCE) database. Once you have converted all the data, you may wish to delete the old Scheduling files. A list of the files which may be deleted will be displayed when selecting the *Delete Old Files* action in this option. It is recommended you back up these files before deletion.

7.5 HL7 Purger

It is recommended that the option Purge Message Text File Entries [HL PURGE TRANSMISSIONS] be scheduled to run every day or every other day.

8 Callable Routines/Entry Points/Application Program Interfaces

This section lists the callable routines, entry points, and Application Program Interfaces (APIs) that can be called by other software. Included is a brief description of the functions, required variables, and any restrictions.

8.1 ^SDMHAD

This is the High Risk Mental Health AD Hoc No show Report entry point that the user can run to display the report. This report will display all patients that did not show up for their scheduled appointment for a Mental Health clinic. It will list patient contact information, Next of Kin, emergency contact, clinic default provider, future scheduled appointments, Mental Health Treatment Coordinator and care team and results of attempts to contact the no showed patients. The user is asked for various sort criteria , a date range, divisions to display (one, many, all), and sort by Clinic, Reminder Location or Stop Codes (one, many, all).

Table 26: ^SDMHAD Routine

Routine Name	**^SDMHAD**			
Enhancement Category	☒ New	☐ Modify	☐ Delete	☐ No Change
SRS Traceability				
Related Options	High Risk MH No-Show Ad Hoc Report [SD MH NO SHOW AD HOC REPORT] option			
Related Routines	**Routines "Called By"**	**Routines "Called"**		
	^SDMHNS	NOW^%DTC $$GETINF^DGPFAPIH CLOSE^DGUTQ WAIT^DICD LOCLIST^PXRMLOCF $$RANGE^SDAMQ ASK2^SDDIV ^SDMHAD1 ^SDMHNS1 ^VADATE PID^VADPT6 FIRST^VAUTOMA PATIENT^VAUTOMA		

Routine Name	**^SDMHAD**				
Data Dictionary References	^DG(40.8 DIVISION ^DIC(40.7 CLINIC STOP ^DPT(PATIENT ^PXRMD(810.9 REMINDER LOCATION ^SC(HOSPITAL LOCATION ^TMP(^TMP($J				
Related Protocols	N/A				
Related Integration Agreements	TBD				
Data Passing	☐ Input	☐ Output Reference	☒ Both	☐ Global Reference	☐ Local
Input Attribute Name and Definition	Name: Definition:				
Output Attribute Name and Definition	Name: Definition:				
Current Logic					
N/A					
Modified Logic (Changes are in bold)					
User is asked to choose the date range. User is asked to choose the Divisions in the facility (one, many, `all) User is asked to choose the sort criteria, by clinic, by Mental Health Clinic Quick List, by stop code (one, many, all) If the sort is by the by Mental Health Clinic Quick List (by one, or many) Check API (LOCKLIST^PXRMLOCF) to find the clinics that are associated with the reminder list(s) that were chosen. Check to see if the division/clinic/stop have been selected and if the clinic and stop code are a valid mental health pair. -Set ^TMP(“SDNSHOW”,$J with the valid choices Find the patients in the date range that had a no show, no show auto rebook or no action taken appointment for a mental health clinic -Loop through the ^TMP(“SDNSHOW”,$J global Within that loop, check the Hospital Location “S” X-ref to see if the patient has an appointment In the date range.. ^SC(clinic,”S”,date - If there is a match, set up the global ^TMP(“SDNS”, SORT (clinic, reminder location or stop code) Call ^SDMHAD1 routine to print the report.					

8.2 ^SDMHAD1

This is the print routine for the High Risk Mental Health AD HOC No Show Report. The report lists the patient that no showed for the mental health appointment, the date the of the appointment, the clinic and stop code. It also lists the contact information for the patient, the Next of Kin, emergency contacts, clinic provider, future scheduled appointments, Mental Health Treatment Coordinator and care team and results of efforts in contacting the patient.

Table 27: ^SDMHAD1 Routine

Routine Name	**^SDMHAD1**	
Enhancement Category	☒ New ☐ Modify ☐ Delete ☐ No Change	
SRS Traceability		
Related Options	N/A	
Related Routines	**Routines "Called By"**	**Routines "Called"**
	^SDMHAD	C^%DTC $$GET1^DIQ ^DIR $$HLPHONE^HLFNC $$SDAPI^SDAMA301 HEAD^SDMHAD ^VADATE KVAR^VADPT OAD^VADPT PID^VADPT6
Data Dictionary References	^DIC(40.7 CLINIC STOP ^DPT(PATIENT ^SC(HOSPITAL LOCATION ^TMP(^TMP($J ^VA(200 NEW PERSON	
Related Protocols	N/A	
Related Integration Agreements	N/A	
Data Passing	☐ Input ☐ Output ☒ Both ☐ Global Reference ☐ Local Reference	
Input Attribute Name and Definition	Name: Definition:	
Output Attribute Name and Definition	Name:	

Routine Name	^SDMHAD1
	Definition:
Current Logic	
N/A	
Modified Logic (Changes are in bold)	

The code will loop through the ^TMP("SDNS", SORT (clinic, reminder location or stop code) global

- A header will print for each division (alphabetical) which will include the following information: the

**The second line will designate how the report will be sorted and printed. This example, sorts by clinic.

```
          MENTAL HEALTH NO SHOW REPORT              NOV 10,2010@09:34   PAGE 1
          BY CLINIC

          PATIENT           PT ID     EVENT D/T       CLINIC       STOP CODE

********************************************************************************
       DIVISION: ALBANY
```

If the sort is by the reminder location the following will print:

```
          MENTAL HEALTH NO SHOW REPORT              NOV 10,2010@09:34   PAGE 1
          BY REMINDER LOCATION LIST

          PATIENT         PT ID     EVENT D/T         CLINIC        STOP CODE
********************************************************************************
                     DIVISION/REM LOC LIST: ALBANY/VA-MH QUERI PC CLINIC STOPS
```

- The patient name , ID, date of no showed appointment, clinic and the stop code will print

For each patient listed, the following information if available will print:

Patient phone numbers for home, office, cell

Next of Kin information, contact, relationship to patient and address and phone numbers

Emergency contact information, contact, relationship to patient, address and phone numbers

Default provider for the clinic they no showed for

Mental Health Treatment Coordinator and Care team (in Parenthesis)

Future scheduled appointments, clinic, date and location of the clinic

The results of efforts to contact the patient. (information from clinical reminder API)

If there are no patients the heading will print with no records available.

```
                       MENTAL HEALTH NO SHOW REPORT                        NOV
10,2010@09:54  PAGE 1
         BY CLINIC

         PATIENT             PT ID     EVENT D/T         CLINIC      STOP CODE

********************************************************************************

                              >>>>>>  NO RECORDS FOUND <<<<<<
```

8.3 ^SDMHNS

This is the High Risk Mental Health No show Report entry point that is called by the scheduling background job. This report will display all patients that did not show up for their scheduled appointment for a Mental Health clinic. It will list patient contact information, Next of Kin, emergency contact, clinic default provider, future scheduled appointments Mental Health Treatment Coordinator and care team and results of attempts to contact the no showed patients. The user will not be asked any sort criteria, the report will list for the day before the background job run, for all the divisions in the facility and mental health clinics in the facility. The report will be sent to members of the SD MH NO SHOW NOTIFICATION mail group.

Table 28: ^SDMHNS Routine

Routine Name	**^SDMHNS**	
Enhancement Category	☒ New ☐ Modify ☐ Delete ☐ No Change	
SRS Traceability		
Related Options	N/A	
Related Routines	**Routines "Called By"**	**Routines "Called"**
	^SDAMQ	C^%DTC NOW^%DTC HOME^%ZIS XMY^DGMTUTL $$LINE^SDMHAD $$LINE1^SDMHAD START^SDMHAD $$SETSTR^SDMHNS1 SET1^SDMHNS1 ^VADATE ^XMD EN^XUTMDEVQ
Data Dictionary References	^TMP("SDNS" ^XMB(3.8 MAIL GROUP	
Related Protocols	N/A	
Related Integration Agreements	N/A	
Data Passing	☐ Input ☐ Output ☒ Both ☐ Global Reference ☐ Local Reference	
Input Attribute Name and Definition	Name: Definition:	

Routine Name	^SDMHNS
Output Attribute Name and Definition	Name: Definition:
Current Logic	
N/A	
Modified Logic (Changes are in bold)	
The variable SDXFLG is set to 1 ; This flag is set to 1 when running from the background Job The date range is set to T-1 from the date the SD Nightly Background Job is run. The Division is set to ALL the divisions in the facility. The sort criteria, is set All Clinics. Call is made to START ^SDMHAD Check to see if the division/clinic/stop have been selected and if the clinic and stop code are a valid mental health pair. -Set ^TMP("SDNSHOW",$J with the valid choices Find the patients in the date range that had a no show appointment, no show auto rebook or no action taken for a mental health clinic -Loop through the ^TMP("SDNSHOW",$J global Within that loop, check the Hospital Location "S" X-ref to see if the patient has an appointment In the date range.. ^SC(clinic,"S",date - If there is a match, set up the global ^TMP("SDNS", SORT (clinic, reminder location or stop code) Call to ^SDMHNS1 routine to set up the global ^TMP("SDNS",$J, LINE NUMBER,0) that hold the data for sending an email message to all persons in the email group SD MH NO SHOW NOTIFICATION. Variables are set up to send the data in a mail message. SDGRP is set to the mail group number for SD MH NO SHOW NOTIFICATION XMSUB the subject of the email is set to MN NO SHOW REPORT MESSAGE XMTEXT is set to the global containing the data ^TMP("SDNS",$J, LINE #,0) Call is made to set up and send the mail message D ^XMD the user will be able to print out the email message to a printer for a hard copy through mailman. The report will be almost identical to the AD HOC report except it will have mailman designation in the heading.	

8.4 ^SDMHNS1

This is the print routine for the High Risk Mental Health No Show Report run from the scheduling nightly background job. The report lists the patient that no showed for the mental health appointment, the date the of the appointment, the clinic and stop code. It also lists the, clinic provider and future scheduled appointments for the patient up to 30 days out. The report will be sent to members of the SD MH NO SHOW NOTIFICATION mail group.

Table 29: ^SDMHNS1 Routine

Routine Name	**^SDMHNS1**	
Enhancement Category	☒ New ☐ Modify ☐ Delete ☐ No Change	
SRS Traceability		
Related Options	N/A	
Related Routines	**Routines "Called By"**	**Routines "Called"**
	^SDMHNS	C^%DTC $$GET1^DIQ $$HLPHONE^HLFNC $$SDAPI^SDAMA301 HEAD^SDMHNS $$SETSTR^SDUL1 ^VADATE KVAR^VADPT OAD^VADPT PID^VADPT6
Data Dictionary References	^DIC(40.7 CLINIC STOP ^DPT(PATIENT ^SC(HOSPITAL LOCATION ^TMP(^TMP("SDNS" ^TMP($J ^VA(200 NEW PERSON	
Related Protocols	N/A	
Related Integration Agreements	N/A	
Data Passing	☐ Input ☐ Output ☒ Both ☐ Global Reference ☐ Local Reference	
Input Attribute Name and Definition	Name: Definition:	
Output Attribute Name and Definition	Name: Definition:	
Current Logic		
N/A		
Modified Logic (Changes are in bold)		

Routine Name	^SDMHNS1

The code will loop through the ^TMP("SDNS", Clinic, global

- A header will be set into the ^TMP("SDNS",$J,LINE #,0) global for each division (alphabetical)

which will include the following information:

**The second line will designate how the report will be sorted and printed. The background job will

only print the report by Clinic.

```
         MENTAL HEALTH NO SHOW REPORT                NOV 10,2010@09:34   PAGE 1
          BY CLINIC

          PATIENT              PT ID     EVENT D/T           CLINIC     STOP CODE
********************************************************************************
       DIVISION: ALBANY
```

For each patient listed, the following information if available will be set into the ^TMP("SDNS",$J,LINE #,0) global:

Patient phone numbers for home, office, cell

Next of Kin information, contact, relationship to patient and address and phone numbers

Emergency contact information, contact, relationship to patient, address and phone numbers

Default provider for the clinic they no showed for

Mental Health Treatment Coordinator MHTC and care team (in parenthesis)

Future scheduled appointments, clinic, date and location of the clinic

The results of efforts to contact the patient. (information from clinical reminder API)

If there are no patients the heading will print with no records available.

```
           MENTAL HEALTH NO SHOW REPORT       NOV 10,2010@09:54   PAGE 1
          BY CLINIC

          PATIENT              PT ID     EVENT D/T           CLINIC
STOP CODE
********************************************************************************
                                >>>>>>  NO RECORDS FOUND <<<<<<
```

8.5 ^SDAMQ

Table 30: ^SDAMQ Routine

Routine Name	^SDAMQ	
Enhancement Category	☐ New ☒ Modify ☐ Delete ☐ No Change	
SRS Traceability		
Related Options	Nightly job for PM data extract [**SDOQM PM NIGHTLY JOB**]	
Related Routines	**Routines "Called By"**	**Routines "Called"**

Routine Name	^SDAMQ
Data Dictionary References	N/A
Related Protocols	N/A
Related Integration Agreements	N/A
Data Passing	☐ Input ☐ Output ☒ Both ☐ Global Reference ☐ Local Reference
Input Attribute Name and Definition	Name: Definition:
Output Attribute Name and Definition	Name: Definition:

Current Logic

```
START    ;
         G STARTQ:'$$SWITCH
         N SDSTART,SDFIN
         K ^TMP("SDSTATS",$J)
         S SDSTART=$$NOW^SDAMU D ADD^SDAMQ1
         D EN^SDAMQ3(SDBEG,SDEND)  ; appointments
         D EN^SDAMQ4(SDBEG,SDEND)  ; add/edits
         D EN^SDAMQ5(SDBEG,SDEND)  ; dispositions
         S SDFIN=$$NOW^SDAMU D UPD^SDAMQ1(SDBEG,SDEND,SDFIN,.05)
         D BULL^SDAMQ1
STARTQ   K SDBEG,SDEND,SDAMETH,^TMP("SDSTATS",$J) Q
```

Modified Logic (Changes are in bold)

```
START    ;
         G STARTQ:'$$SWITCH
         N SDSTART,SDFIN
         ;N SDMHNOSH ; set for no show report
         K ^TMP("SDSTATS",$J)
         S SDSTART=$$NOW^SDAMU D ADD^SDAMQ1
         D EN^SDAMQ3(SDBEG,SDEND)  ; appointments
         D EN^SDAMQ4(SDBEG,SDEND)  ; add/edits
         D EN^SDAMQ5(SDBEG,SDEND)  ; dispositions
         S SDFIN=$$NOW^SDAMU D UPD^SDAMQ1(SDBEG,SDEND,SDFIN,.05)
         D BULL^SDAMQ1
STARTQ   K SDBEG,SDEND,SDAMETH,^TMP("SDSTATS",$J) Q
         ;
AUTO     ; -- nightly job entry point
```

Routine Name	^SDAMQ
G:'$$SWITCH AUTOQ ; -- do yesterday's first S X1=DT,X2=-1 D C^%DTC S (SDOPCDT,SDBEG)=X,SDEND=X+.24,SDAMETH=1 D START D EN^SDMHNS D EN^SDMHPRO	

8.6 EN^SDMHPRO

This routine is the front end of the Proactive background job report and sets up the data to be printed.

Table 31: EN^SDMHPRO Routine

Routine Name	EN^SDMHPRO	
Enhancement Category	☒ New ☐ Modify ☐ Delete ☐ No Change	
Requirement Traceability Matrix	N/A	
Related Options	High Risk MH Proactive Nightly Report [SD MH PROACTIVE BGJ REPORT] option	
Related Routines	**Routines "Called By"**	**Routines "Called"**
	^SDAMQ	NOW^%DTC $$LINE^SDMHAP $$LINE1^SDMHAP START^SDMHAP RET^SDMHAP1 $$SETSTR^SDMHPRO1 SET1^SDMHPRO1 XMY^SDUTL2 $$FMTE^XLFDT ^XMD
Data Dictionary (DD) References	^TMP(^TMP("SDMHP" ^XMB(3.8	
Related Protocols	N/A	
Related Integration Control Registrations (ICRs)	N/A	
Data Passing	☐ Input ☐ Output Reference ☐ Both ☐ Global Reference ☒ Local	

Routine Name	EN^SDMHPRO
Input Attribute Name and Definition	Name: None Definition:
Output Attribute Name and Definition	Name: None Definition:
Current Logic	
None	
Modified Logic (Changes are in bold)	
The variable SDXFLG is set to 1 ; This flag is set to 1 when running from the background Job The date range is set to T from the date the SD Nightly Background Job is run. The Division is set to ALL the divisions in the facility. The sort criteria, is set All Clinics. Call is made to START ^SDMHPRO Check to see if the clinics are mental health clinics in the Reminder location file -Set ^TMP("SDPRO",$J with the valid choices Find the patients in the date range that had an appointment for a mental health clinic -Loop through the ^TMP("SDPRO",$J global Within that loop, check the Hospital Location "S" X-ref to see if the patient has an appointment In the date range.. ^SC(clinic,"S",date - If there is a match, set up the global ^TMP("SDPRO1", SORT (clinic, reminder location or stop code) Call to ^SDMHPRO1 routine to set up the global ^TMP("SDMHP",$J, LINE NUMBER,0) that hold the data for sending an email message to all persons in the email group SD MH NO SHOW NOTIFICATION. Variables are set up to send the data in a mail message. SDGRP is set to the mail group number for SD MH NO SHOW NOTIFICATION XMSUB the subject of the email is set to MN NO SHOW REPORT MESSAGE # XMTEXT is set to the global containing the data ^TMP("SDNS",$J, LINE #,0) Call is made to set up and send the mail message D ^XMD the user will be able to print out the email message to a printer for a hard copy through mailman. The report will be identical to the AD HOC report except it will have mailman designation in the heading.	

8.7 ^SDMHPRO1

This routine is called by routine SDMHPRO and is the routine that prints out the Proactive Background Job report.

Table 32: EN^SDMHPRO1 Routine

Routine Name	**EN^SDMHPRO1**	
Enhancement Category	☒ New ☐ Modify ☐ Delete ☐ No Change	
Requirement Traceability Matrix	N/A	
Related Options	High Risk MH Proactive Nightly Report [SD MH PROACTIVE BGJ REPORT] option	
Related Routines	**Routines "Called By"**	**Routines "Called"**
	^SDMHPRO	C^%DTC $$SDAPI^SDAMA301 COUNT^SDMHPRO HEAD^SDMHPRO HEAD1^SDMHPRO TOTAL^SDMHPRO $$SETSTR^SDUL1 PID^VADPT6 $$FMTE^XLFDT
Data Dictionary (DD) References	^DG(40.8 ^DIC(40.7 ^DPT(^DPT("B" ^SC(^TMP(^TMP("SDMHP" ^TMP("SDPRO1" ^TMP($J ^VA(200	
Related Protocols	N/A	
Related Integration Control Registrations (ICRs)	N/A	
Data Passing	☐ Input ☐ Output Reference ☐ Both ☐ Global Reference ☒ Local	
Input Attribute Name and Definition	Name: None Definition:	
Output Attribute Name and Definition	Name: None Definition:	
Current Logic		

Routine Name	EN^SDMHPRO1
None	
Modified Logic (Changes are in bold)	

The code will loop through the ^TMP("SDPRO1" global

- A totals page will print out of the unique patients at the beginning of the report.

- A header will print for each division (alphabetical) which will include the following information: the

- The second line will designate how the report will be sorted and printed. This example, sorts by clinic.

- The patient name , ID, date of appointment, clinic

```
PROACTIVE HIGH RISK REPORT                                    PAGE 1
by CLINIC for Appointments 9/24/11-10/14/11          Run: 10/14/2011@12:39
PATIENT                  PT ID   APPT D/T          CLINIC
********************************************************************************
DIVISION: ALBANY
1  Schedulingpatient, One    0000     10/3/2011 9:00 am   D-PSYCHXXXXXXXXX
PROACTIVE HIGH RISK REPORT                                    PAGE 2
by CLINIC for Appointments 9/24/11-10/14/11          Run: 10/4/2011@12:39
PATIENT                  PT ID  APPT D/T          CLINIC
********************************************************************************
DIVISION: ON THE HUDSON IN HISTORIC TROY
1  Schedulingpatient, One  0000  9/29/2011 11:00 am  LIZ'S MENTAL HEALTH CLI
                          10/3/2011  3:00 pm  LIZ'S MENTAL HEALTH CLI
2  Schedulingpatient, TWO  6666  10/4/2011 10:00 am  LIZ'S MENTAL HEALTH CLI
PROACTIVE HIGH RISK REPORT                                    PAGE 3
by CLINIC for Appointments 9/24/11-10/14/11          Run: 10/4/2011@12:39
PATIENT                   PT ID      APPT D/T          CLINIC
********************************************************************************
DIVISION: TROY1
1  Schedulingpatient, One     0000      9/30/2011 11:00 am  MENTAL HEALTH
2  Schedulingpatient, TWO     6666      10/5/2011 10:00 am  MENTAL HEALTH
PROACTIVE HIGH RISK REPORT                                    PAGE 4
by CLINIC for Appointments 9/24/11-10/14/11          Run: 10/4/2011@12:39
Totals Page
********************************************************************************
                    Division/Clinic Appointment Totals
Division/CLinic                          Unique
                                       Patients
ALBANY                                    1
ON THE HUDSON IN HISTORIC TROY            2
TROY1                                     2
```

Routine Name	EN^SDMHPRO1
If there are no patients the heading will print with no records available. PROACTIVE HIGH RISK REPORT PAGE 3 by CLINIC for Appointments 9/24/11-10/14/11 Run: 10/4/2011@12:39 PATIENT PT ID APPT D/T CLINIC ********** >>>>>> NO RECORDS FOUND <<<<<<	

8.8 EN^SDMHAP

This routine is the front end of the Proactive Ad Hoc report and sets up the data to be printed.

Table 33: EN^SDMHAP Routine

Routine Name	EN^SDMHAP	
Enhancement Category	☒ New ☐ Modify ☐ Delete ☐ No Change	
Requirement Traceability 3333Matrix	N/A	
Related Options	High Risk MH No-Show Ad Hoc Report [SD MH NO SHOW AD HOC REPORT] option	
Related Routines	**Routines "Called By"**	**Routines "Called"**
		C^%DTC NOW^%DTC ^%ZIS ^%ZTLOAD $$GETINF^DGPFAPIH $$GETFLAG^DGPFAPIU CLOSE^DGUTQ WAIT^DICD D^DIR SWITCH^SDAMU ASK2^SDDIV ^SDMHAP1 HEAD^SDMHPRO ^SDMHPRO1 $$SETSTR^SDMHPRO1 SET1^SDMHPRO1 PID^VADPT6 $$FDATE^VALM1

Routine Name	EN^SDMHAP	
		FIRST^VAUTOMA $$FMTE^XLFDT
Data Dictionary (DD) References	^%ZOSF("TEST" ^DG(40.8 ^DIC(40.7 ^DPT(^PXRMD(810.9 ^SC(^SC("AST" ^TMP(^TMP("SDPRO" ^TMP("SDPRO1"	
Related Protocols	N/A	
Related Integration Control Registrations (ICRs)	N/A	
Data Passing	☐ Input ☐ Output Reference ☐ Both ☐ Global Reference ☒ Local	
Input Attribute Name and Definition	Name: None Definition:	
Output Attribute Name and Definition	Name: None Definition:	
Current Logic		
None		
Modified Logic (Changes are in bold)		
User is asked to choose the date range. User is asked to choose the Divisions in the facility (one, many, `all) Report will sort by clinic. User will be asked to list report by All clinics (mental health and not mental health) or Mental Health clinics only If All clinics the user can choose all the clinics in the facility If Mental Health clinics only, the user will choose only clinics that have stop codes located in the Reminder Location List VA-MH NO SHOW APPT CLINICS LL Set ^TMP(“SDPRO”,$J with the valid choices Find the patients in the date range with High Risk for Mental Health patient record flag that have an appointment. -Loop through the ^TMP(“SDPRO”,$J global		

Routine Name	EN^SDMHAP
Within that loop, check the Hospital Location “S” X-ref to see if the patient has an appointment In the date range.. ^SC(clinic,”S”,date - If there is a match, set up the global ^TMP(“SDPRO1”, SORT by clinic Call ^SDMHAP1 routine to print the report.	

8.9 EN^SDMHAP1

This routine is called by routine SDMHAP and is the routine that prints out the Proactive Ad Hoc report.

Table 34: EN^SDMHAP1 Routine

Routine Name	EN^SDMHAP1	
Enhancement Category	☒ New ☐ Modify ☐ Delete ☐ No Change	
Requirement Traceability Matrix	N/A	
Related Options	High Risk MH Proactive Ad Hoc Report [SD MH PROACTIVE AD HOC REPORT] option	
Related Routines	**Routines “Called By”**	**Routines “Called”**
	^SDMHAP	C^%DTC ^DIR $$SDAPI^SDAMA301 HEAD^SDMHAP HEAD1^SDMHAP COUNT^SDMHPRO TOTAL1^SDMHPRO PID^VADPT6 $$FMTE^XLFDT
Data Dictionary (DD) References	^DIC(40.7 ^DPT(^TMP(^TMP($J ^VA(200	
Related Protocols	N/A	
Related Integration Control Registrations (ICRs)	N/A	
Data Passing	☐ Input ☐ Output Reference ☐ Both ☐ Global Reference ☒ Local	

Routine Name	EN^SDMHAP1
Input Attribute Name and Definition	Name: None Definition:
Output Attribute Name and Definition	Name: None Definition:
Current Logic	
None	
Modified Logic (Changes are in bold)	

The code will loop through the ^TMP("SDPRO1" global

- A header will print for each division (alphabetical) which will include the following information: the

- The second line will designate how the report will be sorted and printed. This example, sorts by clinic.

- The patient name , ID, date of appointment, clinic

- A totals page will print out of the unique patients.

```
HIGH RISK MENTAL HEALTH PROACTIVE ADHOC REPORT BY                PAGE 1
CLINIC for Appointments 4/4/13-4/14/13          Run: 4/4/2013@15:58
#   PATIENT          PT ID  APPT D/T        CLINIC
********************************************************************************
DIVISION: ALBANY
1   TESTPATIENT,ONEXXXXX T1111  4/4/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXX
                        4/5/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXX
                        4/8/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXX
                        4/9/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXX
                        4/10/2013@08:00  D-PSYCHXXXXXXXXXXXXXXXXXXXXX
                        4/11/2013@08:00  D-PSYCHXXXXXXXXXXXXXXXXXXXXX
                        4/12/2013@08:00  D-PSYCHXXXXXXXXXXXXXXXXXXXXX
HIGH RISK MENTAL HEALTH PROACTIVE ADHOC REPORT BY                PAGE 2
CLINIC for Appointments 4/4/13-4/14/13          Run: 4/4/2013@15:58
#   PATIENT          PT ID  APPT D/T        CLINIC
********************************************************************************
DIVISION: ON THE HUDSON IN HISTORIC TROY
1   TESTPATIENT,TWOXXXX  T0000  4/4/2013@08:00   LIZ'S MENTAL HEALTH CLINICXXX
                        4/5/2013@08:00   LIZ'S MENTAL HEALTH CLINICXXX
                        4/7/2013@08:00   LIZ'S MENTAL HEALTH CLINICXXX
                        4/8/2013@08:00   LIZ'S MENTAL HEALTH CLINICXXX
                        4/9/2013@08:00   LIZ'S MENTAL HEALTH CLINICXXX
                        4/10/2013@08:00  LIZ'S MENTAL HEALTH CLINICXXX
                        4/11/2013@08:00  LIZ'S MENTAL HEALTH CLINICXXX
                        4/12/2013@08:00  LIZ'S MENTAL HEALTH CLINICXXX
```

Routine Name	EN^SDMHAP1

```
                    4/14/2013@08:00  LIZ'S MENTAL HEALTH CLINICXXX
HIGH RISK MENTAL HEALTH PROACTIVE ADHOC REPORT BY                PAGE 3
CLINIC for Appointments 4/4/13-4/14/13          Run: 4/4/2013@15:58
#   PATIENT          PT ID  APPT D/T       CLINIC
*******************************************************************************
DIVISION: TROY1
1   TESTPATIENT,ONEXXXX  T1111  4/4/2013@09:00   MENTAL HEALTH
                    4/5/2013@09:00   MENTAL HEALTH
                    4/8/2013@09:00   MENTAL HEALTH
                    4/9/2013@09:00   MENTAL HEALTH
                    4/10/2013@09:00  MENTAL HEALTH
                    4/11/2013@09:00  MENTAL HEALTH
                    4/12/2013@09:00  MENTAL HEALTH
HIGH RISK MENTAL HEALTH PROACTIVE ADHOC REPORT BY                PAGE 4
CLINIC for Appointments 4/4/13-4/14/13          Run: 4/4/2013@15:58
Totals Page
*******************************************************************************
                Division/Clinic Appointment Totals
Division/CLinic                         Unique
                                      Patients
ALBANY                                   1
ON THE HUDSON IN HISTORIC TROY                 1
TROY1                                    1
If there are no patients the heading will print with no records available.
HIGH RISK MENTAL HEALTH PROACTIVE ADHOC REPORT BY                PAGE 4
CLINIC for Appointments 4/4/13-4/14/13          Run: 4/4/2013@15:58
PATIENT          PT ID     APPT D/T         CLINIC
*******************************************************************************
                    >>>>>>  NO RECORDS FOUND <<<<<<
```

8.10 VistA Scheduling (VS) Remote Procedure Calls (RPCs)

Please refer to the VS GUI Technical Manual for any release to see a list of the RPCs used by the VS product. VS Technical Manuals can be found on the VistA Documentation Library (VDL).

- OR -

Search using the term *SDEC* within the Remote Procedure file (#8994) of any VistA environment to see a list of RPCs used by the VS product.

9 External/Internal Relations

This section explains any special relationships and agreements between the routines and/or files/fields in this software and dependencies. List any routines essential to the software functions, for example:

Provide information on whether an outpatient facility could function without programs relating to inpatient activity and avoid system failure.

Specify the version of VA FileMan, Kernel, and other software required to run this software.

Include a list of Integration Agreements (IA) with instructions for obtaining detailed information for each or instruct the user how/where to find this information online.

9.1 External Relations

The following minimum package versions are required: VA FileMan V. 21.0, Kernel V. 8.0, Kernel Toolkit V. 7.3, VA MailMan V. 7.1, CPRS V. 28, PXRM V. 2.0.18, PCE V. 1.0, IB V. 2.0, IFCAP V. 3.0, DRG Grouper V. 13.0, HL7 V. 1.6, and Generic Code Sheet V. 1.5. Sites should verify that all patches to these packages have been installed.

NOTE: For Scheduling Reports to run correctly, patch DG*5.3*836 and DG*5.3*849 need to be installed and reminder location list 'VA-MH NO SHOW APPT CLINICS LL' in File (#810.9) must be current.

If your site is running any of the following packages, you MUST be running the listed version or higher.

Table 35: Minimum Version Baseline

Package	Minimum Version
AMIE	None
CPRS (OR V. 3.0*280)	V. 1.0
Dental	V. 1.2
Dietetics	V. 4.33
Inpatient Meds	None
IVM	V. 2.0
Laboratory	V. 5.2
Mental Health	V. 5.0
Nursing	V. 2.2
Occurrence Screening	V. 2.0
Outpatient Pharmacy	V. 7.0
Patient Funds	V. 3.0
Radiology/Nuclear Medicine	V. 4.5

Package	Minimum Version
Record Tracking	V. 2.0
Social Work	V. 3.0
Utilization Review	V. 1.06

NOTE: If you are not running one of the above packages, you do NOT need to install it.

You must have all current Kernel V. 8.0, Kernel Toolkit V. 7.3, VA FileMan V. 21.0, RPC Broker V. 1.0, and PIMS V. 5.3 patches installed prior to the installation of PCMM (SD*5.3*41, DG*5.3*84).

You must have KIDS patch 44 (XU*8*44) installed prior to loading the VIC software.

CPRS will be using the PCMM files and GUI interface.

The following is a list of all elements that are checked for installation of Ambulatory Care Reporting Project.

Table 36: Ambulatory Care Reporting Project Elements

ELEMENT CHECKED	CHECK PERFORMED	REQUIRED FOR INSTALL
PCE V. 1.0	Installed	Yes
HL7 V. 1.6	Installed	Yes
XU*8.0*27	Installed	Yes
HL*1.6*8	Installed	Yes
IB*2.0*60	Installed	Yes
Q-ACS.MED.VA.GOV in DOMAIN file (#4.2)	Entry exists	Yes
SD*5.3*41	Installed	No
RA*4.5*4	Installed	No
LR*5.2*127	Installed	No
SOW*3*42	Installed	No
OPC GENERATION MAIL GROUP field (#216) of the MAS PARAMETER file (#43)	Contains valid Mail Group	No
This domain was distributed by patch XM*DBA*99. Not installing this patch will result in the loss of workload credit. Not installing this patch will result in the loss of workload credit.		

10 DBIA Agreements

The following steps are used to obtain the database integration agreements for the PIMS package.

10.1 DBIA AGREEMENTS - CUSTODIAL PACKAGE

1. FORUM
2. DBA Menu
3. Integration Agreements Menu
4. Custodial Package Menu
5. Active by Custodial Package Option
6. Select Package Name: Registration or Scheduling

10.2 DBIA AGREEMENTS - SUBSCRIBER PACKAGE

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:
    - DG to DGZ, VA to VAZ (ADT)
    - SD to SDZ, SC to SCZ (scheduling)

10.3 Internal Relations

Any PIMS option in File 19 which is a menu option should be able to run independently provided the user has the appropriate keys and FileMan access.

In order to use the PCMM client software, the user must be assigned the SC PCMM GUI WORKSTATION option as either a primary or secondary menu option - unless the user has been assigned the XUPROGMODE security key.

This key, usually given to IRM staff, allows use of the client software without the SC PCMM GUI WORKSTATION option being assigned.

10.4 Package-Wide Variables

There are no package-wide variables associated with the PIMS package.

10.5 VADPT Variables

See the VADPT Variables section of this file.

10.5.1 Scheduling Variables

SDUTL3 contains utilities used to display and retrieve data from the CURRENT PC TEAM and CURRENT PC PRACTITIONER fields in the PATIENT file.

Documentation can also be found in the routine.

```
$$OUTPTPR^SDUTL3(PARM 1) - displays data from CURRENT PC
PRACTITIONER field
Input  PARM 1 The internal entry of the PATIENT file.
Output              CURRENT PC PRACTIONER in Internal^External format.
                           If look-up is unsuccessful, 0 will be returned.
$$OUTPTTM^SDUTL3(PARM 1) - displays data from CURRENT PC TEAM field.
Input  PARM 1 The internal entry of the PATIENT file.
Output              CURRENT PC TEAM in Internal^External format.  If
                           look-up is unsuccessful, 0 will be returned.
$$OUTPTAP^SDUTL3(PARM 1, PARM 2)
Input  PARM 1 The internal entry of the PATIENT file.
Input  PARM 2 The relevant data.
Output              Pointer to File 200^external value of the name.
$$GETALL^SCAPMCA(PARM 1, PARM 2, PARM 3)
```

This tag returns all information on a patient's assignment. Please review the documentation in the SCAPMCA routine.

```
INPTPR^SDUTL3(PARM 1, PARM 2) - stores data in CURRENT PC
PRACTITIONER field.
Input  PARM 1 The internal entry of the PATIENT file.
PARM 2        Pointer to the NEW PERSON file indicating the
                           practitioner associated with the patient's care.
Output SDOKS  1 if data is stored successfully; 0 otherwise
INPTTM^SDUTL3(PARM 1, PARM 2) - stores data in CURRENT PC TEAM field.
Input  PARM 1 The internal entry of the PATIENT file.
              PARM 2 Pointer to the TEAM file indicating the team associated
                           with the patient's care.
Output SDOKS  1 if data is stored successfully; 0 otherwise
```

10.5.2 Patient Record Flag Variables

Integration Agreement Applicable

Example: How to access Integration Agreements

```
      4903     NAME: PATIENT RECORD FLAG DATA RETRIEVAL
  CUSTODIAL PACKAGE: REGISTRATION
SUBSCRIBING PACKAGE: SCHEDULING
                        Scheduling requires Patient Record Flag information
                        as part of a new missed appointment report supporting
```

```
                    the High Risk Mental Health Initiative.  This report
                    needs to be able to determine which patients  missing
                    a recent appointment have a specified Patient Record
                    Flag assigned.
                 CLINICAL REMINDERS
                    Retrieval of High Risk Mental Health Patient Flag
                    information.
                 HEALTH SUMMARY
                    ADDED 7/19/2011
          USAGE: Controlled Subscri  ENTERED: JAN  6,2011
         STATUS: Active              EXPIRES:
       DURATION: Till Otherwise Agr  VERSION:
    DESCRIPTION:                        TYPE: Routine
These API's provide a means to retrieve detailed Patient Record Flag
information by patient and patient record flag, and, to retrieve a list of
patients with a specific assigned patient record flag during a specified
date range.

  ROUTINE: DGPFAPIH
COMPONENT:  GETINF
            This function will return detailed information from the
            Patient Record Flag files for the specified patient and PRF
            flag.  A date range for active PR Flags is optional.  Data
            array output example:

            DGARR("ASSIGNDT") - Date of initial assignment.
                   i.e. 3110131.093248^Jan 31, 2011@09:32:48)
            DGARR("CATEGORY") - National or Local flag category.
                   i.e. II (LOCAL)^II (LOCAL) DGARR("FLAG") - Variable
            pointer to Local/National flag files and flag name.
                   i.e. 1;DGPF(26.11,^HIGH RISK FOR SUICIDE
            DGARR("FLAGTYPE") - Type of flag usage.
                   i.e. 1^BEHAVIORAL DGARR("HIST",n,"ACTION") - Type of
            action for history entry
                   i.e. 1^NEW ASSIGNMENT DGARR("HIST",n,"APPRVBY") -
            Person approving the flag assignment
                   i.e. 112345^PERSON,STEVE DGARR("HIST",1,"COMMENT",1,0)
            - Comment for record assignment action
                   i.e. "New record flag assignment."
            DGARR("HIST",n,"DATETIME") - Date/Time of Action
                   i.e. 3110131.093248^JAN 31, 2011@09:32:48
            DGARR("HIST",n,"TIULINK") - Pointer to the TIU Document file
            (#8925)
                   i.e. "^" DGARR("NARR",n,0) - Describes the purpose and
            instructions for the application of the flag.
                   i.e. "TEST ENTRY" DGARR("ORIGSITE") - Site that
            initially assigned this flag (Relevant to National flags only)
                   i.e. 500^ALBANY.VA.GOV DGARR("OWNER") - Site which
            currently "Owns" this flag (Relevant to National flags only)
```

```
                    i.e. 500^ALBANY.VA.GOV DGARR("REVIEWDT") - Date for
              next review of record flag assignment
                    i.e. 3110501^MAY 01, 2011 DGARR("TIUTITLE") - Pointer
              to the TIU Document Definition file (#8925.1)
                    i.e. 1309^PATIENT RECORD FLAG CATEGORY II - RESEARCH
              STUDY
VARIABLES:    Input     DGDFN
                        This is the DFN (IEN) for the patient in the
                        PATIENT File (#2).  This is a required variable.
VARIABLES:    Input     DGPRF
                        Variable pointer to either the PRF LOCAL FLAG File
                        (#26.11) or to the PRF NATIONAL FLAG file
                        (#26.15).  This is a required variable.

                        For National Flags:  IEN;DGPF(26.15,
                           For Local Flags:  IEN;DGPF(26.11,
VARIABLES:    Input     DGSTART
                        Start date for when to begin search for active PRF
                        flags.  This date must be in FM format, i.e.
                        3110106.  This variable is optional, if null,
                        searches will begin with the earliest assigned
                        entry in the PRF ASSIGNMENT HISTORY file (#26.14)
VARIABLES:    Input     DGEND
                        End date for the search for active PRF entries.
                        This date must be in FM format, i.e. 3110107.
                        This variable is optional, if null or not passed
                        in, all entries to the end of the PRF ASSIGNMENT
                        HISTORY file (#26.14) will be searched.
VARIABLES:    Both      DGARR
                        This variable contains the array name for the
                        return data.  This is optional.  If an array name
                        is not specified, the return data is returned in
                        local array "DGPFAPI1".
VARIABLES:    Output    DGRSLT
                        Return value from the API call.  Returns "1" if
                        the API was successful in returning PRF data,
                        returns "0" if the API was unsuccessful in
                        returning PRF data.
COMPONENT:    GETLST
              This function call returns a list of patients with a specified
              Patient Record Flag assigned for a specified date range.

                DGARR(DFN,n) - Patient Name^VPID^Date of initial
              assignment^National or Local flag category^flag name

              Example:
                 DGARR(9999955648,0)="EASPATIENT,ONE
              A^5000000295V790537^3100201.103713^II (LOCAL)^HIGH RISK FOR
              SUICIDE"
```

```
   VARIABLES:  Input     DGPRF
                          Variable pointer to either the PRF LOCAL FLAG File
                          (#26.11) or the PRF NATIONAL FLAG File (#26.15).
                          This variable is required.

                             National:  IEN;DGPF(26.15,
                                Local:  IEN;DGPF(26.11,
   VARIABLES:  Input     DGSTART
                          This is the start date to begin searching for
                          patients with the assigned Patient Record Flag.
                          This date must be in FM format, i.e. 3100110. This
                          variable is optional.
   VARIABLES:  Input     DGEND
                          This is end date for the search range for patients
                          with the assigned Patient Record Flag.  This date
                          must be in FM format, i.e. 3100112. This variable
                          is optional.
   VARIABLES:  Both      DGARR
                          This variable contains the array name where the
                          returned patient information will be placed.  This
                          is optional, if an array name is not specified,
                          the data will be returned in a TMP Global,
                          ^TMP("PRFLST")
   VARIABLES:  Output    DGRSLT
                          This variable returns a count of the patients
                          placed in the return list.
          KEYWORDS: PATIENT RECORD FLAGS

                     ********************
```

Example: Inquire to an Integration Control Registration

```
Select INTEGRATION CONTROL REGISTRATIONS Option: inq  Inquire to an Integration
Control Registration
Select INTEGRATION REFERENCES: dgpfapiu  5491     REGISTRATION     Controlled
Subscription     PATIENT RECORD FLAG VARIABLE POINTER     DGPFAPIU
DEVICE: ;;999  SSH VIRTUAL TERMINAL
INTEGRATION REFERENCE INQUIRY #5491            MAY  3,2012  10:27    PAGE 1
-------------------------------------------------------------------------------

      5491     NAME: PATIENT RECORD FLAG VARIABLE POINTER
  CUSTODIAL PACKAGE: REGISTRATION
SUBSCRIBING PACKAGE: SCHEDULING
                     CLINICAL REMINDERS
                     HEALTH SUMMARY
                        ADDED 7/19/2011
              USAGE: Controlled Subscri  ENTERED: JAN 31,2011
             STATUS: Active              EXPIRES:
           DURATION: Till Otherwise Agr  VERSION:
```

```
      DESCRIPTION:                          TYPE: Routine
Builds and returns a variable pointer to the Patient Record Flag National
or Local files based on the textual flag name.

  ROUTINE: DGPFAPIU
COMPONENT:  GETFLAG
            Get the variable pointer value for the flag text passed in.
VARIABLES:  Input     DGPRF
                        Name of the Patient Record Flag in the PRF
                        NATIONAL FLAG file, #26.15, or in the PRF LOCAL
                        FLAG file, #26.11.  The value passed in must match
                        the NAME field, #.01, and is a free text value.
VARIABLES:  Input     DGCAT
                        Optional File category value.  This value is either
                        "N" to lookup the pointer value in the National
                        file, or "L" to lookup the pointer value in the
                        PRF Local file.  If null, both the National and
                        Local files will be checked for the pointer value.
VARIABLES:  Output    DGRSLT
                        Returns one of the following values:
                           IEN;DGPF(National or Local File number,  i.e.
                        1;DGPF(26.11,

                        Will return "-1;NOT FOUND"  If no flag is found
                        matching the test
                                    "-1;NOT ACTIVE" If the flag is not
                        currently active.
        KEYWORDS:
```

10.5.2.1 DGPFAPIH

GETINF^DGPFAPIH (Increment 1) DGPFAPIH is both a Routine and API / Integration agreement (# 4903)	DGPFAPIH - This routine implements the two Application Programming Interface call points for retrieving Patient Record Flag information. One call point is for a specific patient and record and the second call point is for a list of patients with a specific, active, Patient Record Flag. This API will obtain the Patient Record Flag assignment information and status for the specified patient, patient record flag and date range. The return data will be provided in an array using the target_root specified by the user or in the default array variable DGPFAPI1. The DATE/TIME field (#.02) of the PRF ASSIGNMENT HISTORY File (#26.14) entry will determine whether the entry falls within the specified date range. If no date range is specified, all entries will be returned
GETLST^DGPFAPIH (Increment 1)	This API will retrieve a list of patients active at some point within a specified date range for a specified Patient Record Flag. The date range is required for this API, though the same date can be entered to specify a single date. The return data will be provided in an array using the target_root specified by the user or in the

	default array variable DGPFAPI2. The DATE/TIME field (#.02) of the PRF ASSIGNMENT HISTORY File (#26.14) entry will determine whether the entry falls within the specified date range.

10.5.2.2 DGPFAPIU

DGPFAPIU (Increment 1)	This routine provides support utilities and functions for the new Application Programming Interface calls. This procedure will check if the Patient Record Flag was active at any point during the specified date range. The procedure accepts a date range parameter which specifies whether “A”ll dates or only a “S”pecified date range is to be checked. The PRF Assignment History File (#26.14) was not designed for this type of date interaction so the algorithm in this procedure has to make a number of assumptions when interpreting the dates and PRF actions. While there can only be one “New Assignment” entry, it is possible to have multiple “Continue”, “Inactivate” and “Reactivate” action entries. In addition, the “Entered In Error” action can pose additional issues with determining a status during a specific date range. See Appendix B for examples of date range and PRF History status entries.
GETFLAG^DGPFAPIU (Increment 1)	This function gets the variable pointer value for the Patient Record Flag passed in. The PRF is passed in as a text value. If the optional flag category is passed in, only that category will be checked for the PRF. If no category is passed in, then first the National category will be checked, In the integration Agreement # 5491

10.6 VAUTOMA

VAUTOMA is a routine which will do a one/many/all prompt - returning the chosen values in a subscripted variable specified by the calling programmer.

INPUT VARIABLES:

- VAUTSTR: string which describes what is to be entered.
- VAUTNI: defines if array is sorted alphabetically or numerically.
- VAUTVB: name of the subscripted variable to be returned.
- VAUTNALL: define this variable if you do not want the user to be given the ALL option.
- Other variables as required by a call to ^DIC (see VA FileMan Programmers Manual).

OUTPUT VARIABLES:

- As defined in VAUTVB

10.7 VAFMON

VAFMON is a routine which will return income or dependent information on a patient.

$$INCOME^VAFMON(PARM 1,PARM 2)

- PARM 1: The internal entry of the PATIENT file.
- PARM 2: The date the income is calculated for.

$$DEP^VAFMON(PARM 1,PARM 2)

- PARM 1: The internal entry of the PATIENT file.
- PARM 2: The date the income is calculated for.

10.8 AIT

See the Ambulatory Care Reporting Project Interface Toolkit. The AIT is a set of programmer tools that provide access to outpatient encounter data.

11 How To Generate Online Documentation

This section describes some of the various methods by which users may secure PIMS technical documentation.

On-line technical documentation pertaining to the PIMS software, in addition to that which is located in the help prompts and on the help screens which are found throughout the PIMS package, may be generated through utilization of several KERNEL options.

These include but are not limited to: XINDEX, Menu Management Inquire Option File, Print Option File, and FileMan 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.

11.1 XINDEX

This option analyzes the structure of a routine(s) to determine in part if the routine(s) adheres 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 PIMS package, specify the following namespaces at the "routine(s) ?>" prompt: DG*, DPT*, SD*, VA*, SC*.

PIMS initialization routines which reside in the UCI in which XINDEX is being run, compiled template routines, and local routines found within the PIMS namespaces should be omitted at the "routine(s) ?>" prompt.

To omit routines from selection, preface the namespace with a minus sign (-).

11.2 INQUIRE TO OPTION FILE

This Menu Manager 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 PIMS options, the user must specify the name or namespace of the option(s) desired. Below is a list of namespaces associated with the PIMS package.

- DG - Registration, ADT, Means Test, PTF/RUG

- DPT - Patient File Look-up, Patient Sensitivity
- SD and SC - Scheduling
- VA - Generic utility processing

PRINT OPTIONS 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 PIMS options, the following option namespaces should be specified: DG to DGZ, SD to SDZ.

11.3 LIST FILE ATTRIBUTES

This 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 templates, print templates, 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.

11.4 Security

11.4.1 General Security

Routines that generate statistics for AMIS or NPCDB workload should NOT be locally modified.

11.4.2 Security Keys

The following are the steps to obtain information about the security keys contained in the PIMS package.

1. VA FileMan Menu
2. Print File Entries Option
3. Output from what File: SECURITY KEY
4. Sort by: Name
5. Start with name:
    - DG to DGZ, VA to VAZ (ADT)
    - SD to SDZ, SC to SCZ (Scheduling)

- VistA Scheduling keys: (SDEC)
  - SDECZMGR
  - SDECZMENU
  - SDECZ REQUEST
  - SDOB
  - SDMOB
  - PROVIDER
  - PSORPH
  - ORES

6. Within name, sort by: <RET>
7. First print field: Name
8. Then print field: Description

11.4.3 Legal Requirements

The PIMS software package makes use of Current Procedural Terminology (CPT) codes that is an American Medical Association (AMA) copyrighted product. Its use is governed by the terms of the agreement between the Department of Veterans Affairs and the AMA. The CPT copyright notice is displayed for various PIMS users and should not be turned off.

11.5 FileMan Access Codes

Below is a list of recommended FileMan Access Codes associated with each file contained in the PIMS package. This list may be used to assist in assigning users appropriate FileMan Access Codes.

Table 37: Fileman Access Codes

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
2	PATIENT	@	d	D	@	D
5	STATE	@	d	@	@	@
8	ELIGIBILITY CODE	@	d	@	@	@
8.1	MAS ELIGIBILITY CODE	@	d	@	@	@
8.2	IDENTIFICATION FORMAT	@	d	@	@	@
10	RACE	@	d	@	@	@
11	MARITAL STATUS	@	d	@	@	@

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
13	RELIGION	@	d	@	@	@
21	PERIOD OF SERVICE	@	d	@	@	@
22	POW PERIOD	@	d	@	@	@
23	BRANCH OF SERVICE	@	d	@	@	@
25	TYPE OF DISCHARGE	@	d	@	@	@
26.11	PRF LOCAL FLAG	@	@	@	@	@
26.12	PRF LOCAL FLAG HISTORY	@	@	@	@	@
26.13	PRF ASSIGNMENT	@	d	@	@	@
26.14	PRF ASSIGNMENT HISTORY	@	@	@	@	@
26.15	PRF NATIONAL FLAG	@	@	@	@	@
26.16	PRF TYPE	@	@	@	@	@
26.17	PRF HL7 TRANSMISSION LOG	@	@	@	@	@
26.18	PRF PARAMETERS	@	@	@	@	@
26.19	PRF HL7 QUERY LOG	@	@	@	@	@
26.21	PRF HL7 EVENT	@	@	@	@	@
26.22	PRF HL7 REQUEST LOG FILE	@	@	@	@	@
27.11	PATIENT ENROLLMENT	@	d	@	@	@
27.12	ENROLLMENT QUERY LOG	@		@	@	@
27.14	ENROLLMENT/ELIGIBILITY UPLOAD AUDIT					
27.15	ENROLLMENT STATUS	@	d	@	@	@
27.16	ENROLLMENT GROUP THRESHOLD	@	@	@	@	@
27.17	CATASTROPHIC DISABILITY REASONS	@	@	@	@	@
28.11	NOSE AND THROAT RADIUM HISTORY	@	d	@	@	@

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
29.11	MST HISTORY					
30	DISPOSITION LATE REASON	@	d	@	@	@
35	OTHER FEDERAL AGENCY	@	d	@	@	@
35.1	SHARING AGREEMENT CATEGORY	@	@	@	@	@
35.2	SHARING AGREEMENT SUB-CATEGORY	@	@	@	@	@
37	DISPOSITION	@	d	@	@	@
38.1	DG SECURITY LOG	@	d	D	@	D
38.5	INCONSISTENT DATA	@	d	@	@	@
38.6	INCONSISTENT DATA ELEMENTS	@	d	@	@	@
39.1	EMBOSSED CARD TYPE	@	d	@	@	@
39.2	EMBOSSING DATA	@	d	@	@	@
39.3	EMBOSSER EQUIPMENT FILE	@	d	@	@	@
39.4	ADT/HL7 TRANSMISSION	@	@	@	@	@
39.6	VIC REQUEST	@	@	@	@	@
39.7	VIC HL7 TRANSMISSION LOG	@	@	@	@	@
40.7	CLINIC STOP	@	d	@	@	@
40.8	MEDICAL CENTER DIVISION	@	d	@	@	@
40.9	LOCATION TYPE	@	d	@	@	@
41.1	SCHEDULED ADMISSION	@	d	D	D	D
41.41	PRE-REGISTRATION AUDIT	@	d	D	D	D
41.42	PRE-REGISTRATION CALL LIST	@	d	D	D	D

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
41.43	PRE-REGISTRATION CALL LOG	@	d	D	D	D
41.9	CENSUS	@	d	@	@	@
42	WARD LOCATION	@	d	D	@	D
42.4	SPECIALTY	@	d	@	@	@
42.5	WAIT LIST	@	d	D	D	D
42.55	PRIORITY GROUPING	@	d	@	@	@
42.6	AMIS 334-341	@	d	D	D	D
42.7	AMIS 345&346	@	d	D	D	D
43	MAS PARAMETERS	@	d	D	@	@
43.1	MAS EVENT RATES	@	d	D	D	D
43.11	MAS AWARD	@	d	D	D	D
43.4	VA ADMITTING REGULATION	@	d	@	@	@
43.5	G&L CORRECTIONS	@	d	D	D	D
43.61	G&L TYPE OF CHANGE	@	d	@	@	@
43.7	ADT TEMPLATE	@	d	@	@	@
44	HOSPITAL LOCATION	@	d	D	@	D
45	PTF	@	d	D	@	@
45.1	SOURCE OF ADMISSION	@	d	@	@	@
45.2	PTF TRANSFERRING FACILITY	@	d	D	@	D
45.3	SURGICAL SPECIALTY	@	d	@	@	@
45.4	PTF DIALYSIS TYPE	@	d	@	@	@
45.5	PTF MESSAGE	@	d	@	@	@
45.6	PLACE OF DISPOSITION	@	d	@	@	@
45.61	PTF ABUSED SUBSTANCE	@	d	@	@	@
45.64	PTF AUSTIN ERROR CODES	@	d	@	@	@

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
45.68	FACILITY SUFFIX	@	d	@	@	@
45.7	FACILITY TREATING SPECIALTY	@	d	D	@	D
45.81	STATION TYPE	@	d	@	@	@
45.82	CATEGORY OF BENEFICIARY	@	d	@	@	@
45.83	PTF RELEASE	@	d	@	@	@
45.84	PTF CLOSE OUT	@	d	@	@	@
45.85	CENSUS WORKFILE	@	d	D	@	@
45.86	PTF CENSUS DATE	@	d	@	@	@
45.87	PTF TRANSACTION REQUEST LOG	@	d	@	@	@
45.88	PTF EXPANDED CODE CATEGORY	@	d	@	@	@
45.89	PTF EXPANDED CODE	@	d	@	@	@
45.9	PAF	@	d	D	D	D
45.91	RUG-II	@	d	@	@	@
46	INPATIENT CPT	@	d	D	#	@
46.1	INPATIENT POV	@	d	D	#	@
47	MAS FORMS AND SCREENS	@	d	D	#	@
48	MAS RELEASE NOTES	@	d	D	@	@
48.5	MAS MODULE	@	d	@	@	@
389.9	STATION NUMBER (TIME SENSITIVE)	@	d	@	@	@
390	ENROLLMENT RATED DISABILITY UPLOAD AUDIT	@	@	@	@	@
391	TYPE OF PATIENT	@	d	@	@	@
391.1	AMIS SEGMENT	@	d	@	@	@
391.31	HOME TELEHEALTH PATIENT	@	@	@	@	@

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
403.35	SCHEDULING USER PREFERENCE	@	d	@	@	@
403.43	SCHEDULING EVENT	@	d	@	@	@
403.44	SCHEDULING REASON	@	d	@	@	@
403.46	STANDARD POSITION	@	d	@	@	@
403.47	TEAM PURPOSE	@	d	@	@	@
404.41	OUTPATIENT PROFILE	@	d	@	@	@
404.42	PATIENT TEAM ASSIGNMENT	@	d	@	@	@
404.43	PATIENT TEAM POSITION ASSIGNMENT	@	d	@	@	@
404.44	PCMM PARAMETER	@	@	@	@	@
404.45	PCMM SERVER PATCH	@	@	@	@	@
404.46	PCMM CLIENT PATCH	@	@	@	@	@
404.471	PCMM HL7 TRANSMISSION LOG	@	@	@	@	@
404.472	PCMM HL7 ERROR LOG	@	@	@	@	@
404.48	PCMM HL7 EVENT	@	@	@	@	@
404.49	PCMM HL7 ID	@	@	@	@	@
404.51	TEAM	@	d	@	@	@
404.52	POSITION ASSIGNMENT HISTORY	@	d	@	@	@
404.53	PRECEPTOR ASSIGNMENT HISTORY	@	d	@	@	@
404.56	TEAM AUTOLINK	@	d	@	@	@
404.57	TEAM POSITION	@	d	@	@	@
404.58	TEAM HISTORY	@	d	@	@	@
404.59	TEAM POSITION HISTORY	@	d	@	@	@

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
404.61	MH PCMM STOP CODES	@	d	@	@	@
404.91	SCHEDULING PARAMETER	@	d	@	@	@
404.92	SCHEDULING REPORT DEFINITION	@	d	@	@	@
404.93	SCHEDULING REPORT FIELDS DEFINITION	@	d	@	@	@
404.94	SCHEDULING REPORT GROUP	@	d	@	@	@
404.95	SCHEDULING REPORT QUERY TEMPLATE	@	d	@	@	@
404.98	SCHEDULING CONVERSATION SPECIFICATON TEMPLATE	@	d	@	@	@
405	PATIENT MOVEMENT	@	d	@	@	@
405.1	FACILITY MOVEMENT TYPE	@	d	D	@	D
405.2	MAS MOVEMENT TYPE	@	d	@	@	@
405.3	MAS MOVEMENT TRANSACTION TYPE	@	d	@	@	@
405.4	ROOM-BED	@	d	D	@	D
405.5	MAS OUT-OF-SERVICE	@	d	@	@	@
405.6	ROOM-BED DESCRIPTION	@	d	D	@	D
406.41	LODGING REASON	@	d	D	@	D
407.5	LETTER	@	d	D	D	D
407.6	LETTER TYPE	@	d	@	@	@
407.7	TRANSMISSION ROUTERS	@	d	@	@	@
408	DISCRETIONARY WORKLOAD	@	d	@	@	@
408.11	RELATIONSHIP	@	d	@	@	@

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
408.12	PATIENT RELATION	@	d	@	@	@
408.13	INCOME PERSON	@	d	@	@	@
408.21	INDIVIDUAL ANNUAL INCOME	@	d	@	@	@
408.22	INCOME RELATION	@	d	@	@	@
408.31	ANNUAL MEANS TEST	@	d	@	@	@
408.32	MEANS TEST STATUS	@	d	@	@	@
408.33	TYPE OF TEST	@	d	@	@	@
408.34	SOURCE OF INCOME TEST	@	d	@	@	@
408.41	MEANS TEST CHANGES	@	d	@	@	@
408.42	MEANS TEST CHANGES TYPE	@	d	@	@	@
409.1	APPOINTMENT TYPE	@	d	@	@	@
409.2	CANCELLATION REASONS	@	d	@	@	@
409.41	OUTPATIENT CLASSIFICATION TYPE	@	d	@	@	@
409.42	OUTPATIENT CLASSIFICATION	@	d	D	D	D
409.45	OUTPATIENT CLASSIFICATION STOP CODE EXCEPTION	@	d	@	@	@
409.62	APPOINTMENT GROUP	@	d	@	@	@
409.63	APPOINTMENT STATUS	@	d	@	@	@
409.64	QUERY OBJECT	@	d	@	@	@
409.65	APPOINTMENT STATUS UPDATE LOG	@	d	@	@	@
409.66	APPOINTMENT TRANSACTION TYPE	@	d	@	@	@

FILE NUMBER	FILE NAME	DD ACCESS	RD ACCESS	WR ACCESS	DEL ACCESS	LAYGO ACCESS
409.67	CLINIC GROUP	@		D	@	D
409.68	OUTPATIENT ENCOUNTER	@	d	@	@	@
409.73	TRANSMITTED OUTPATIENT ENCOUNTER	@	d	@	@	@
409.74	DELETED OUTPATIENT ENCOUNTER	@	d	@	@	@
409.75	TRANSMITTED OUTPATIENT ENCOUNTER ERROR	@	d	@	@	@
409.76	TRANSMITTED OUTPATIENT ENCOUNTER ERROR CODE	@	d	@	@	@
409.77	ACRP TRANSMISSION HISTORY	@	d	@	@	@
409.86	SDEC CONTACT	@	@	@	@	@
409.91	ACRP REPORT TEMPLATE	@		@	@	@
409.92	ACRP REPORT TEMPLATE PARAMETER	@		@	@	@
409.97	SD Audit Statistics	@	@	@	@	@
409.98*	SDEC SETTINGS	@	@	@	@	@

12 VADPT Variables

VADPT is a utility routine designed to provide a central point where a programmer can obtain information concerning a patient's record. Supported entry points are provided which will return demographics, inpatient status, eligibility information, etc.

Access to patient information is not limited to using the supported entry points in VADPT. Integration agreements can be established through the DBA between PIMS and other packages to reference information. Additionally, several data elements are supported without an integration agreement.

12.1 Supported References

The following references to patient information (PATIENT file #2) are supported without an integration agreement. All nationally distributed cross-references on these fields are also supported.

Table 38: Supported References

FIELD NAME	FIELD #	GLOBAL LOCATION	TYPE OF ACCESS
NAME	(#.01)	0;1	Read
PREFERRED NAME	(#.2405)	.24;5	Read
SEX	(#.02)	0;2	Read
DATE OF BIRTH	(#.03)	0;3	Read
AGE	(#.033)	N/A	Read
MARITAL STATUS	(#.05)	0;5	Read
RACE	(#.06)	0;6	Read
OCCUPATION	(#.07)	0;7	Read
RELIGIOUS PREFERENCE	(#.08)	0;8	Read
DUPLICATE STATUS	(#.081)	0;18	
PATIENT MERGED TO	(#.082)	0;19	
CHECK FOR DUPLICATE	(#.083)	0;20	
SOCIAL SECURITY NUMBER	(#.09)	0;9	Read
REMARKS	(#.091)	0;10	Read
PLACE OF BIRTH [CITY]	(#.092)	0;11	Read
PLACE OF BIRTH [STATE]	(#.093)	0;12	Read

FIELD NAME	FIELD #	GLOBAL LOCATION	TYPE OF ACCESS
WHO ENTERED PATIENT	(#.096)	0;15	Read
DATE ENTERED INTO FILE	(#.097)	0;16	Read
WARD LOCATION	(#.1)	.1;1	Read
ROOM-BED	(#.101)	.101;1	Read
CURRENT MOVEMENT	(#.102)	.102;1	Read
TREATING SPECIALTY	(#.103)	.103;1	Read
PROVIDER	(#.104)	.104;1	Read
ATTENDING PHYSICIAN	(#.1041)	.1041;1	Read
CURRENT ADMISSION	(#.105)	.105;1	Read
LAST DMMS EPISODE NUMBER	(#.106)	.106;1	Read
LODGER WARD LOCATION	(#.107)	.107;1	Read
CURRENT ROOM	(#.108)	.108;1	Read
CONFIDENTIAL PHONE NUMBER	(#.1315)	.1315	Read
CURRENT MEANS TEST STATUS	(#.14)	0;14	Read
DATE OF DEATH	(#.351)	.35;1	Read
DEATH ENTERED BY	(#.352)	.35;2	Read
PRIMARY LONG ID	(#.363)	.36;3	
PRIMARY SHORT ID	(#.364)	.36;4	
CURRENT PC PRACTITIONER	(#404.01)	PC;1	Read
CURRENT PC TEAM	(#404.02)	PC;2	Read
LAST MEANS TEST	(#999.2)	N/A	Read

12.2 Callable Entry Points in VADPT

12.2.1 DEM^VADPT

This entry point returns demographic information for a patient.

Table 39: DEM^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAPTYP	This optional variable can be set to the internal number of a patient eligibility. The variable can be used to indicate the patient's type such as VA, DOD, or IHS through the eligibility. If this variable is not defined or the eligibility does not exist, the VA patient IDs will be returned.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 - return the output array with alpha subscripts - see alpha subscripts section (e.g., VADM(1) would be VADM("NM")) 2 - return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VADM",$J,1)) 12 - return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VADM",$J,"NM"))
VAROOT	This optional variable can be set to a local variable or global name in which to return the output. (e.g., VAROOT="DGDEM")

Table 40: DEM^VADPT Output

OUTPUT	DESCRIPTION
VADM(1)	The NAME of the patient. (e.g., ADTPATIENT,ONE)
VADM(2)	The SOCIAL SECURITY NUMBER of the patient in internal^external format. (e.g., 000456789^000-45-6789)
VADM(3)	The DATE OF BIRTH of the patient in internal^external format. (e.g., 2551025^OCT 25,1955)
VADM(4)	The AGE of the patient as of today, unless a date of death exists, in which case the age returned will be as of that date. (e.g., 36)
VADM(5)	The SEX of the patient in internal^external format. (e.g., M^MALE)
VADM(6)	The DATE OF DEATH of the patient, should one exist, in internal^external format. (e.g., 2881101.08^NOV 1,1988@08:00)
VADM(7)	Any REMARKS concerning this patient which may be on file. (e.g., Need to obtain dependent info.)
VADM(8)	The RACE of the patient in internal^external format. (e.g., 1^WHITE,NON-HISPANIC) NOTE: This has been left for historical purposes only as the RACE field has been replaced by the RACE INFORMATION multiple.
VADM(9)	The RELIGION of the patient in internal^external format. (e.g., 99^CATHOLIC)
VADM(10)	The MARITAL STATUS of the patient in internal^external format. (e.g., 1^MARRIED)
VADM(11)	Number of entries found in the ETHNICITY INFORMATION multiple. (e.g., 1)

OUTPUT	DESCRIPTION
VADM(11,1..n)	Nth repetition of ETHNICITY INFORMATION for the patient in internal^external format. (e.g., 1^HISPANIC OR LATINO)
VADM(11,1..n,1)	METHOD OF COLLECTION for the Nth repetition of ETHNICITY INFORMATION for the patient in internal^external format. (e.g., 2^PROXY))
VADM(12)	Number of entries found in the RACE INFORMATION multiple. (e.g., 1)
VADM(12,1..n)	Nth repetition of RACE INFORMATION for the patient in internal^external format. (e.g., 11^WHITE)
VADM(12,1..n,1)	METHOD OF COLLECTION for the Nth repetition of RACE INFORMATION for the patient in internal^external format. (e.g., 2^PROXY))
VA("PID")	The PRIMARY LONG ID for a patient. The format of this variable will depend on the type of patient if VAPTYP is set. (e.g., 000-45-6789)
VA("BID")	The PRIMARY SHORT ID for a patient. The format of this variable will depend on the type of patient if VAPTYP is set. (e.g., 6789)
VAERR	The error flag will have one of the following values. 0 - no errors encountered 1 - error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.2 DEMUPD^VADPT

This entry point returns demographic information for a patient.

Table 41: DEMUPD^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAPTYP	This optional variable can be set to the internal number of a patient eligibility. The variable can be used to indicate the patient's type such as VA, DOD, or IHS through the eligibility. If this variable is not defined or the eligibility does not exist, the VA patient IDs will be returned.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 - return the output array with alpha subscripts - see alpha subscripts section (e.g., VADEMO(1) would be VADEMO("NM")) 2 - return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VADEMO",$J,1)) 12 - return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VADEMO",$J,"NM",1)) stores the PREFERRED NAME
VAROOT	This optional variable can be set to a local variable or global name in which to return the output. (e.g., VAROOT="DGDEM")

Table 42: DEMUPD^VADPT Output

OUTPUT	DESCRIPTION
VADEMO(1)	The NAME of the patient. (e.g., ADTPATIENT,ONE)
VADEMO(1,1)	The PREFERRED NAME of the patient. (e.g., "NICKNAME JONES").
VADEMO(2)	The SOCIAL SECURITY NUMBER of the patient in internal^external format. (e.g., #########^###-##-####)
VADEMO(3)	The DATE OF BIRTH of the patient in internal^external format. (e.g., 2551025^OCT 25,1955)
VADEMO(4)	The AGE of the patient as of today, unless a date of death exists, in which case the age returned will be as of that date. (e.g., 36)
VADEMO(5)	The SEX of the patient in internal^external format. (e.g., M^MALE)
VADEMO(6)	The DATE OF DEATH of the patient, should one exist, in internal^external format. (e.g., 2881101.08^NOV 1,1988@08:00)
VADEMO(7)	Any REMARKS concerning this patient which may be on file. (e.g., Need to obtain dependent info.)
VADEMO(8)	The RACE of the patient in internal^external format. (e.g., 1^WHITE,NON-HISPANIC) NOTE: This has been left for historical purposes only as the RACE field has been replaced by the RACE INFORMATION multiple.
VADEMO(9)	The RELIGION of the patient in internal^external format. (e.g., 99^CATHOLIC)
VADEMO(10)	The MARITAL STATUS of the patient in internal^external format. (e.g., 1^MARRIED)
VADEMO(11)	Number of entries found in the ETHNICITY INFORMATION multiple. (e.g., 1)
VADEMO(11,1..n)	Nth repetition of ETHNICITY INFORMATION for the patient in internal^external format. (e.g., 1^HISPANIC OR LATINO)
VADEMO(11,1..n,1)	METHOD OF COLLECTION for the Nth repetition of ETHNICITY INFORMATION for the patient in internal^external format. (e.g., 2^PROXY))
VADEMO(12)	Number of entries found in the RACE INFORMATION multiple. (e.g., 1)
VADEMO(12,1..n)	Nth repetition of RACE INFORMATION for the patient in internal^external format. (e.g., 11^WHITE)
VADEMO(12,1..n,1)	METHOD OF COLLECTION for the Nth repetition of RACE INFORMATION for the patient in internal^external format. (e.g., 2^PROXY))
VAERR	The error flag will have one of the following values. 0 - no errors encountered; 1 - error encountered - DFN or ^DOT(DFN,0) is not defined.

12.2.3 ELIG^VADPT

This entry point returns eligibility information for a patient.

Table 43: ELIG^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 - return the output array with alpha subscripts - see alpha subscripts section (e.g., VAEL(1) would be VAEL("EL")) 2 - return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VAEL",$J,1)) 12 - return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VAEL",$J,"EL"))
VAROOT	This optional variable can be set to a local variable or global name in which to return the output. (e.g., VAROOT="DGELG")

Table 44: ELIG^VADPT Output

OUTPUT	DESCRIPTION
VAEL(1)	The PRIMARY ELIGIBILITY CODE of the patient in internal^external format. (e.g., 1^SERVICE CONNECTED 50-100%)
VAEL(1,#)	An array of other PATIENT ELIGIBILITIES to which the patient is entitled to care, in internal^external format. The # sign represents the internal entry number of the eligibility in the ELIGIBILITY CODE file. (e.g., 13^PRISONER OF WAR)
VAEL(2)	The PERIOD OF SERVICE of the patient in internal^external format. (e.g., 19^WORLD WAR I)
VAEL(3)	If the SERVICE CONNECTED? field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If service connected, the SERVICE CONNECTED PERCENTAGE field will be returned in the second piece. (e.g., 1^70)
VAEL(4)	If the VETERAN (Y/N)? field is YES, a "1" will be returned; otherwise, a "0" will be returned. (e.g., 1)
VAEL(5)	If an INELIGIBLE DATE exists, a "0" will be returned indicating the patient is ineligible; otherwise, a "1" will be returned. (e.g., 0)
VAEL(5,1)	If ineligible, the INELIGIBLE DATE of the patient in internal^external format. (e.g., 2880101^JAN 1,1988)
VAEL(5,2)	If ineligible, the INELIGIBLE TWX SOURCE in internal^external format. (e.g., 2^REGIONAL OFFICE)
VAEL(5,3)	If ineligible, the INELIGIBLE TWX CITY. (e.g., ALBANY)
VAEL(5,4)	If ineligible, the INELIGIBLE TWX STATE from which the ineligible notification was received in internal^external format. (e.g., 36^NEW YORK)
VAEL(5,5)	If ineligible, the INELIGIBLE VARO DECISION. (e.g., UNABLE TO VERIFY)

OUTPUT	DESCRIPTION
VAEL(5,6)	If ineligible, the INELIGIBLE REASON. (e.g., NO DD214)
VAEL(6)	The TYPE of patient in internal^external format. (e.g., 1^SC VETERAN)
VAEL(7)	The CLAIM NUMBER of the patient. (e.g., 123456789)
VAEL(8)	The current ELIGIBILITY STATUS of the patient in internal^external format. (e.g., V^VERIFIED)
VAEL(9)	The CURRENT MEANS TEST STATUS of the patient CODE^ NAME. (e.g., A^MEANS TEST EXEMPT)
VAEL(10)	The CURRENT EXPANDED MH CARE TYPE of the patient CODE^ NAME. (e.g., OTH-90^EMERGENT MH OTH)
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.4 MB^VADPT

This entry point returns monetary benefit information for a patient.

Table 45: MB^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 -- return the output array with alpha subscripts - see alpha subscripts section (e.g., VAMB(1) would be VAMB("AA")) 2 -- return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VAMB",$J,1)) 12 -- return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VAMB",$J,"AA"))
VAROOT	This optional variable can be set to a local variable or global name in which to return the output. (e.g., VAROOT="DGMB")

Table 46: MB^VADPT Output

OUTPUT	DESCRIPTION
VAMB(1)	If the RECEIVING A&A BENEFITS? field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving A&A benefits, the TOTAL ANNUAL VA CHECK AMOUNT will be returned in the second piece. (e.g., 1^1000)

OUTPUT	DESCRIPTION
VAMB(2)	If the RECEIVING HOUSEBOUND BENEFITS? field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving housebound benefits, the TOTAL ANNUAL VA CHECK AMOUNT will be returned in the second piece. (e.g., 1^0)
VAMB(3)	If the RECEIVING SOCIAL SECURITY field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving social security, the AMOUNT OF SOCIAL SECURITY will be returned in the second piece. (e.g., 0)
VAMB(4)	If the RECEIVING A VA PENSION? field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving a VA pension, the TOTAL ANNUAL VA CHECK AMOUNT will be returned in the second piece. (e.g., 1^563.23)
VAMB(5)	If the RECEIVING MILITARY RETIREMENT? field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving military retirement, the AMOUNT OF MILITARY RETIRE-MENT will be returned in the second piece. (e.g., 0)
VAMB(6)	The RECEIVING SUP. SECURITY (SSI) field is being eliminated. Since v5.2, a "0" is returned for this variable.
VAMB(7)	If the RECEIVING VA DISABILITY? field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving VA disability, the TOTAL ANNUAL VA CHECK AMOUNT will be returned in the second piece. (e.g., 0)
VAMB(8)	If the TYPE OF OTHER RETIRE-MENT field is filled in, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving other retirement, the AMOUNT OF OTHER RETIREMENT will be returned in the second piece. (e.g., 1^2500.12)
VAMB(9)	If the GI INSURANCE POLICY? field is YES, a "1" will be returned in the first piece; otherwise, a "0" will be returned. If receiving GI insurance, the AMOUNT OF GI INSURANCE will be returned in the second piece. (e.g., 1^100000)
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.5 SVC^VADPT

This entry point returns service information for a patient.

The VADPT API was updated to exclude any Future Discharge Date (FDD) record. The line tags for this API are SVC^VADPT, 7^VADPT, and 8^VADPT. The ICR for VADPT is 10061. More details can be found in FORUM, in the documentation of ICR 10061.

Table 47: SVC^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 -- return the output array with alpha subscripts - see alpha subscripts section (e.g., VASV(1) would be VASV("VN"))

INPUT	DESCRIPTION
	2 -- return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VASV",$J,1)) 12 -- return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VASV",$J,"VN"))
VAROOT	This optional variable can be set to a local variable or global name in which to return the output. (e.g., VAROOT="DGSVC")

Table 48: SVC^VADPT Output

OUTPUT	DESCRIPTION
VASV(1)	If the VIETNAM SERVICE INDICATED field is YES, a "1" will be returned; otherwise a "0" will be returned. (e.g., 0)
VASV(1,1)	If Vietnam Service, the VIETNAM FROM DATE in internal^external format. (e.g., 2680110^JAN 10,1968)
VASV(1,2)	If Vietnam Service, the VIETNAM TO DATE in internal^external format. (e.g., 2690315^MAR 15,1969)
VASV(2)	If the AGENT ORANGE EXPOS. INDICATED field is YES, a "1" will be returned; otherwise a "0" will be returned. (e.g., 0)
VASV(2,1)	If Agent Orange exposure, the AGENT ORANGE REGISTRATION DATE in internal^external format. (e.g., 2870513^MAY 13,1987)
VASV(2,2)	If Agent Orange exposure, the AGENT ORANGE EXAMINATION DATE in internal^external format. (e.g., 2871101^NOV 1,1987)
VASV(2,3)	If Agent Orange exposure, AGENT ORANGE REPORTED TO C.O. date in internal^external format. (e.g., 2871225^DEC 25,1987)
VASV(2,4)	If Agent Orange exposure, AGENT ORANGE REGISTRATION #. (e.g., 123456)
VASV(2,5)	If Agent Orange exposure, the AGENT ORANGE EXPOSURE LOCATION in internal^external format (e.g., V^VIETNAM)
VASV(3)	If the RADIATION EXPOSURE INDICATED field is YES, a "1" will be returned; otherwise a "0" will be returned (e.g., 0)
VASV(3,1)	If Radiation Exposure, RADIATION REGISTRATION DATE in internal^external format. (e.g., 2800202^FEB 02,1980)
VASV(3,2)	If Radiation Exposure, RADIATION EXPOSURE METHOD in internal^external format. (e.g., T^NUCLEAR TESTING)
VASV(4)	If the POW STATUS INDICATED field is YES, a "1" will be returned; otherwise a "0" will be returned. (e.g., 0)
VASV(4,1)	If POW status, POW FROM DATE in internal^external format. (e.g., 2450319^MAR 19,1945)
VASV(4,2)	If POW status, POW TO DATE in internal^external format. (e.g., 2470101^JAN 1,1947)
VASV(4,3)	If POW status, POW CONFINEMENT LOCATION in internal^external format. (e.g., 2^WORLD WAR II - EUROPE)

OUTPUT	DESCRIPTION
VASV(5)	If the COMBAT SERVICE INDICATED field is YES, a "1" will be returned; otherwise a "0" will be returned. (e.g., 0)
VASV(5,1)	If combat service, COMBAT FROM DATE in internal^external format. (e.g., 2430101^JAN 1,1943)
VASV(5,2)	If combat service, COMBAT TO DATE in internal^external format. (e.g., 2470101^JAN 1,1947)
VASV(5,3)	If combat service, COMBAT SERVICE LOCATION in internal^external format. (e.g., 2^WORLD WAR II - EUROPE)
VASV(6)	If a SERVICE BRANCH [LAST] field is indicated, a "1" will be returned in the first piece; otherwise a "0" will be returned. (e.g., 0)
VASV(6,1)	If service branch, BRANCH OF SERVICE field in internal^external format. (e.g., 3^AIR FORCE)
VASV(6,2)	If service branch, SERVICE NUMBER field in internal^external format. (e.g., 123456789)
VASV(6,3)	If service branch, SERVICE DISCHARGE TYPE in internal^external format. (e.g., 1^HONORABLE)
VASV(6,4)	If service branch, SERVICE ENTRY DATE in internal^external format. (e.g., 2440609^JUN 9,1944)
VASV(6,5)	If service branch, SERVICE SEPARATION DATE in internal^external format. (e.g., 2480101^JAN 1,1948)
VASV(6,6)	If service branch, SERVICE COMPONENT in internal code^external format. (e.g., R^REGULAR)
VASV(7)	If a SERVICE SECOND EPISODE field is indicated, a "1" will be returned; otherwise a "0" will be returned. (e.g., 0)
VASV(7,1)	If second episode, BRANCH OF SERVICE field in internal^external format. (e.g., 3^AIR FORCE)
VASV(7,2)	If second episode, SERVICE NUMBER field in internal^external format. (e.g., 123456789)
VASV(7,3)	If second episode, SERVICE DISCHARGE TYPE in internal^external format. (e.g., 1^HONORABLE)
VASV(7,4)	If second episode, SERVICE ENTRY DATE in internal^external format. (e.g., 2440609^JUN 9,1944)
VASV(7,5)	If second episode, SERVICE SEPARATION DATE in internal^external format. (e.g., 2480101^JAN 1,1948)
VASV(7,6)	If second episode, SERVICE COMPONENT in internal^external format. (e.g., R^REGULAR)
VASV(8)	If a SERVICE THIRD EPISODE field is indicated, a "1" will be returned; otherwise a "0" will be returned. (e.g., 0)

OUTPUT	DESCRIPTION
VASV(8,1)	If third episode, BRANCH OF SERVICE field in internal^external format. (e.g., 3^AIR FORCE)
VASV(8,2)	If third episode, SERVICE NUMBER field in internal^external format. (e.g., 123456789)
VASV(8,3)	If third episode, SERVICE DIS-CHARGE TYPE in internal^external format. (e.g., 1^HONORABLE)
VASV(8,4)	If third episode, SERVICE ENTRY DATE in internal^external format. (e.g., 2440609^JUN 9,1944)
VASV(8,5)	If third episode, SERVICE SEPARATION DATE in internal^external format. (e.g., 2480101^JAN 1,1948)
VASV(8,6)	If third episode, SERVICE COMPONENT in internal code^external format.(e.g., R^REGULAR)
VASV(9)	If the CURRENT PH INDICATOR field is YES, a “1” will be returned; otherwise a “0” will be returned (e.g., 0)
VASV(9,1)	If the CURRENT PH INDICATOR field is YES, CURRENT PURPLE HEART STATUS in internal^external format.(e.g., 2^IN PROCESS)
VASV(9,2)	If the CURRENT PH INDICATOR field is NO, CURRENT PURPLE HEART REMARKS in internal^external format. (e.g., 5^VAMC)
VASV(10)	Is either 1 or 0, 1 if there is a value for Combat Vet End Date, 0 if not
VASV(10,1)	Internal Combat Vet End Date ^external Combat Vet End Date (e.g., 3060101^JAN 1, 2006)
VASV(11)	the # of OIF conflict entries found for the veteran in the SERVICE [OEF OR OIF] #2.3215 SUB-FILE. [n = 1-> total number of OIF conflict entries]
VASV(11,n,1)	SERVICE LOCATION (#2.3215; .01) internal code=1^external (e.g., 1^OIF) ‘n’--> This number will be used to provide a unique number for each OIF or a conflict being returned.
VASV(11,n,2)	OEF/OIF FROM DATE (#2.3215; .02) internal format ^external format (e.g., 3060101^JAN 1, 2006) ‘n’--> This number will be used to provide a unique number for each OIF conflict being returned.
VASV(11,n,3)	OEF/OIF TO DATE (#2.3215; .03) internal format ^external format (e.g., 3060101^MAR 1, 2006) ‘n’--> This number will be used to provide a unique number for each OIF conflict being returned.
VASV(12)	the # of OEF conflict entries found for the veteran in the SERVICE [OEF OR OIF] #2.3215 SUB-FILE. [n = 1->VASV(12)]
VASV(12,n,1)	SERVICE LOCATION (#2.3215; .01) internal code = 2 ^external (e.g., 2^OEF) ‘n’--> This number will be used to provide a unique number for each OEF conflict being returned.
VASV(12,n,2)	OEF/OIF FROM DATE (#2.3215; .02) internal format ^external format (e.g., 3060101^JAN 1, 2006) ‘n’--> This number will be used to provide a unique number for each OEF conflict being returned.

OUTPUT	DESCRIPTION
VASV(12,n,3)	OEF/OIF TO DATE (#2.3215; .03) internal format ^external format (e.g., 3060101^MAR 1, 2006) 'n'--> This number will be used to provide a unique number for each OEF conflict being returned.
VASV(13)	the # of UNKNOWN OEF/OIF conflict entries found for the veteran in the SEVICE [OEF OR OIF] #2.3215 SUB-FILE. [n = 1->VASV(13)]
VASV(13,n,1)	SERVICE LOCATION (#2.3215; .01) internal CODE = 3^external format (e.g., 3^UNKNOWN OEF/OIF) 'n'--> This number will be used to provide a unique number for each UNKNOWN OEF/OIF conflict being returned.
VASV(13,n,2)	OEF/OIF FROM DATE (#2.3215; .02) internal format ^external format (e.g., 3060101^JAN 1, 2006) 'n'--> This number will be used to provide a unique number for each UNKNOWN OEF/OIF conflict being returned.
VASV(13,n,3)	OEF/OIF TO DATE (#2.3215; .03) internal format ^external format (e.g., 3060101^MAR 1, 2006) 'n'--> This number will be used to provide a unique number for each UNKNOWN OEF/OIF conflict being returned.
VASV(14)	If the PROJ 112/ SHAD field is populated, a "1" will be returned; otherwise, a "0" will be returned (e.g., 0)
VASV(14,1)	If the PROJ 112/SHAD field is populated, PROJ 112/SHAD in internal^external format. (e.g., 1^YES)
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.6 ADD^VADPT

This entry point returns address data for a patient. If a temporary address is in effect, the data returned will be that pertaining to that temporary address; otherwise, the permanent patient address information will be returned.

Table 49: ADD^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 -- return the output array with alpha subscripts - see alpha subscripts section (e.g., VAPA(1) would be VAPA("L1")) 2 -- return the output in the ^UTIL-ITY global with numeric subscripts (e.g., ^UTILITY("VAPA", $J,1)) 12 -- return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VAPA",$J,"L1"))
VAROOT	This optional variable can be set to a local variable or global name in which to return the output.(e.g., VAROOT="DGADD")

INPUT	DESCRIPTION
VAPA("P")	This optional variable can be set to force the return of the patient's permanent address. The permanent address array will be returned regardless of whether or not a temporary address is in effect. (e.g., VAPA("P")="")
VAPA("CD")	This is an optional input parameter set to an effective date in VA File Manager format to manipulate the active/inactive status returned in the VAPA(12) node. The indicator reflects the active status as of the date specified or the current date if VAPA("CD") is undefined.
VATEST("ADD",9)	This optional variable can be defined to a beginning date in VA File-Manager format. If the entire range specified is not within the effective time window of the temporary address start and stop dates, the patient's regular address is returned. (e.g., VATEST("ADD",9)=2920101)
VATEST("ADD",10)	This optional variable can be defined to a ending date in VA FileManager format. If the entire range specified is not within the effective time window of the temporary address start and stop dates, the patient's regular address is returned. (e.g., VATEST("ADD",10)=2920301)

Table 50: ADD^VADPT Output

OUTPUT	DESCRIPTION
VAPA(1)	The first line of the STREET ADDRESS. (e.g., 123 South Main Street)
VAPA(2)	The second line of the STREET ADDRESS. (e.g., Apartment #1245.)
VAPA(3)	The third line of the STREET ADDRESS. (e.g., P.O. Box 1234)
VAPA(4)	The CITY corresponding to the street address previously indicated. (e.g., ALBANY)
VAPA(5)	The STATE corresponding to the city previously indicated in internal^external format. (e.g., 6^CALIFORNIA)
VAPA(6)	The ZIP CODE of the city previously indicated. (e.g., 12345)
VAPA(7)	The COUNTY in which the patient is residing in internal^external format. (e.g., 1^ALAMEDA)
VAPA(8)	The PHONE NUMBER of the location in which the patient is currently residing. (e.g., (123) 456-7890)
VAPA(9)	If the address information provided pertains to a temporary address, the TEMPORARY ADDRESS START DATE in internal^external format. (e.g., 2880515^MAY 15,1988)
VAPA(10)	If the address information provided pertains to a temporary address, the TEMPORARY ADDRESS END DATE in internal^external format. (e.g., 2880515^MAY 15,1988)
VAPA(11)	The ZIP+4 (5 or 9 digit zip code) of the city previously indicated in internal^external format. (e.g., 123454444^12345-4444)
VAPA(12)	Confidential Address Active indicator. (O=Inactive 1=Active)
VAPA(13)	The first line of the Confidential Street Address.
VAPA(14)	The second line of the Confidential Street Address.

OUTPUT	DESCRIPTION
VAPA(15)	The third line of the Confidential Street Address.
VAPA(16)	The city for the Confidential Address.
VAPA(17)	The state for the Confidential Address in internal^external format. (e.g., 36^NEW YORK)
VAPA(18)	The 5 digit or 9 digit Zip Code for the Confidential Address in internal^external format. (e.g., 12208^12208 or 122081234^12208-1234)
VAPA(19)	The county for the Confidential Address in internal^external format. (e.g., 1^ALBANY)
VAPA(20)	The start date for the Confidential Address in internal^external format. (e.g., 3030324^MAR 24,2003)
VAPA(21)	The end date for the Confidential Address in internal^external format. (e.g., 3030624^JUN 24,2003)
VAPA(22,N)	The Confidential Address Categories in internal^external format^status (n=internal value) (e.g., VAPA(22,4)=4^MEDICAL RECORDS^Y)
VAPA(23)	The Permanent or Temporary Province (if temp address is current and active, it's temp)
VAPA(24)	The Permanent or Temporary Postal Code (if temp address is current and active, it's temp)
VAPA(25)	The Permanent or Temporary Country (if temp address is current and active, it's temp)
VAPA(26)	The Confidential Province
VAPA(27)	The Confidential Postal Code
VAPA(28)	The Confidential Country
VAPA(29)	The Confidential Phone Number
VAPA(30)	Residential Address Line 1
VAPA(31)	Residential Address Line 2
VAPA(32)	Residential Address Line 3
VAPA(33)	Residential Address City
VAPA(34)	Residential Address State (e.g., 6^CALIFORNIA)
VAPA(35)	Residential Address ZIP
VAPA(36)	Residential Address County (e.g., 6^WORCHESTER)
VAPA(37)	Residential Address Country (e.g., 6^UNITED STATES)
VAPA(38)	Residential Address Province
VAPA(39)	Residential Address Postal Code
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.7 OAD^VADPT

This entry point returns other specific address information.

Table 51: OAD^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 -- return the output array with alpha subscripts - see alpha subscripts section (e.g., VAOA(1) would be VAOA("L1")) 2 -- return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VAOA",$J,1)) 12 -- return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VAOA,$J,"L1")
VAROOT	This optional variable can be set to a local variable or global name in which to return the output. (e.g., VAROOT="DGOA")
VAOA("A")	This optional variable may be passed to indicate which specific address the programmer wants returned. If it is not defined, the PRIMARY NEXT-OF-KIN will be returned. Otherwise, the following will be returned based on information desired.
VAOA("A") =1	primary emergency contact
VAOA("A") =2	designee for personal effects
VAOA("A") =3	secondary next-of-kin
VAOA("A") =4	secondary emergency contact
VAOA("A") =5	patient employer
VAOA("A") =6	spouse's employer

Table 52: OAD^VADPT Output

OUTPUT	DESCRIPTION
VAOA(1)	The first line of the STREET ADDRESS. (e.g., 123 South First Street)
VAOA(2)	The second line of the STREET ADDRESS. (e.g., Apartment 9D)
VAOA(3)	The third line of the STREET ADDRESS. (e.g., P.O. Box 1234)
VAOA(4)	The CITY in which the contact/employer resides.(e.g., NEWINGTON)
VAOA(5)	The STATE in which the contact/employer resides in internal^external format. (e.g., 6^CALIFORNIA)
VAOA(6)	The ZIP CODE of the location in which the contact/employer resides. (e.g., 12345)
VAOA(7)	The COUNTY in which the contact/employer resides in internal^external format. (e.g., 1^ALAMEDA)

OUTPUT	DESCRIPTION
VAOA(8)	The PHONE NUMBER of the contact/employer. (e.g., (415) 967-1234)
VAOA(9)	The NAME of the contact or, in case of employment, the employer to whom this address information applies. (e.g., SMITH,ROBERT P.)
VAOA(10)	The RELATIONSHIP of the contact (if applicable) to the patient; otherwise, null. (e.g., FATHER)
VAOA(11)	The ZIP+4 (5 or 9 digit zip code) of the location in which the contact/employer resides in internal^external format. (e.g., 123454444^12345-4444)
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.8 INP^VADPT

This entry point will return data related to an inpatient episode.

Table 53: INP^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 -- return the output array with alpha subscripts - see alpha subscripts section (e.g., VAIN(1) would be VAIN("AN")) 2 -- return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VAIN",$J,1)) 12 -- return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VAIN,$J,"AN")
VAROOT	This optional variable can be set to a local variable or global name in which to return the output.(e.g., VAROOT="DGIN")
VAINDT	This optional variable may be set to a past date/time for which the programmer wishes to know the patient's inpatient status. This must be passed as an internal VA FileManager date/time format. If time is not passed, it will assume anytime during that day. If this variable is not defined, it will assume now as the date/time. (e.g., 2880101.08)

Table 54: INP^VADPT Output

OUTPUT	DESCRIPTION
VAIN(1)	The INTERNAL NUMBER [IFN] of the admission if one was found for the date/time requested. If no inpatient episode was found for the date/time passed, then all variables in the VAIN array will be returned as null.(e.g., 123044)
VAIN(2)	The PRIMARY CARE PHYSICIAN [PROVIDER] assigned to the patient at the date/time requested in internal^external format.(e.g., 3^SMITH,JOSEPH L.)
VAIN(3)	The TREATING SPECIALTY assigned to the patient at the date/time requested in internal^external format.(e.g., 19^GERIATRICS)
VAIN(4)	The WARD LOCATION to which the patient was assigned at the date/time requested in internal^external format.(e.g., 27^IBSICU)
VAIN(5)	The ROOM-BED to which the patient was assigned at the date/time requested in external format.(e.g., 123-B)
VAIN(6)	This will return a "1" in the first piece if the patient is in a bed status; otherwise, a "0" will be returned. A non-bed status is made based on the last transfer type to a non-bed status, (i.e., authorized absence, unauthorized absence, etc.) The second piece will contain the name of the last transfer type should one exist.(e.g., 1^FROM AUTHORIZED ABSENCE)
VAIN(7)	The ADMISSION DATE/TIME for the patient in internal^external format. (e.g., 2870213.0915^FEB 13,1987@09:15)
VAIN(8)	The ADMISSION TYPE for the patient in internal^external format. (e.g., 3^DIRECT)
VAIN(9)	The ADMITTING DIAGNOSIS for the patient. (e.g., PSYCHOSIS)
VAIN(10)	The internal entry number of the PTF record corresponding to this admission. (e.g., 2032)
VAIN(11)	The ATTENDING PHYSICIAN in internal^external format. (e.g., 25^ADTPROVIDER,ONE)
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or^DPT(DFN,0) is not defined

12.2.9 IN5^VADPT

This entry point will return data related to an inpatient episode.

Table 55: IN5^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 -- return the output array with alpha subscripts - see alpha subscripts section (e.g., VAIP(1) would be VAIP("MN")) 2 -- return the output in the ^UTILITY global with numeric subscripts e.g., ^UTILITY("VAIP",$J,1)) 12 -- return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VAIP",$J,"MN")
VAROOT	This optional variable can be set to a local variable or global name in which to return the output.(e.g., VAROOT="DGI5")
VAIP("D")	This optional variable can be defined as follows: VAIP("D") = VA FileManager date in internal format. If the patient was an inpatient at the date/time passed, movement data pertaining to that date/time will be returned. VAIP("D") = "LAST" Movement data pertaining to the last movement on file, regardless if patient is a current inpatient. VAIP("D") = Valid date without time Will return movement data if patient was an inpatient at any time during the day on the date that was passed in. VAIP("D") - Not passed will return movement data if the patient was in inpatient based on "now".
VAIP("L")	This optional variable, when passed, will include lodgers movements in the data. (e.g., VAIP("L")="")
VAIP("V")	Can be defined as the variable used instead of VAIP (e.g., VAIP("V")="SD")
VAIP("E")	This optional variable is defined as the internal file number of a specific movement. If this is defined, VAIP("D") is ignored. (e.g., VAIP("E")=123445)
VAIP("M")	This optional variable can be passed as a "1" or a "0" (or null). VAIP("M")=0 - The array returned will be based on the admission movement associated with the movement date/time passed. VAIP("M")=1 - The array returned will be based on the last movement associated with the date/time passed.

Table 56: IN5^VADPT Output

OUTPUT	DESCRIPTION
VAIP(1)	The INTERNAL FILE NUMBER [IFN] of the movement found for the specified date/time. (e.g., 231009)
VAIP(2)	The TRANSACTION TYPE of the movement in internal^external format where: 1=admission 2=transfer 3=discharge 4=check-in lodger 5=check-out lodger 6=specialty transfer (e.g., 3^DISCHARGE)

OUTPUT	DESCRIPTION
VAIP(3)	The MOVEMENT DATE/TIME in internal^external date format. (e.g., 2880305.09^MAR 5,1988@09:00)
VAIP(4)	The TYPE OF MOVEMENT in internal^external format. (e.g., 4^INTERWARD TRANSFER)
VAIP(5)	The WARD LOCATION to which patient was assigned with that movement in internal^external format. (e.g., 32^1B-SURG)
VAIP(6)	The ROOM-BED to which the patient was assigned with that movement in internal^external format. (e.g., 88^201-01)
VAIP(7)	The PRIMARY CARE PHYSICIAN assigned to the patient in internal^external format. (e.g., 3^ADTPROVIDER,TEN)
VAIP(8)	The TREATING SPECIALTY assigned with that movement in internal^external format. (e.g., 98^OPTOMETRY)
VAIP(9)	The DIAGNOSIS assigned with that movement. (e.g., UPPER GI BLEEDING)
VAIP(10)	This will return a "1" in the first piece if the patient is in a bed status; otherwise, a "0" will be returned. A non-bed status is made based on the last transfer type, if one exists, and a transfer to a non-bed status, (i.e., authorized absence, unauthorized absence, etc.) The second piece will contain the name of the last transfer type should one exist. (e.g., 1^FROM AUTHORIZED ABSENCE)
VAIP(11)	If patient is in an absence status on the movement date/time, this will return the EXPECTED RETURN DATE from absence in internal^external format. (e.g., 2880911^SEP 11,1988)
VAIP(12)	The internal entry number of the PTF record corresponding to this admission. (e.g., 2032)
VAIP(13)	The INTERNAL FILE NUMBER of the admission associated with this movement. (e.g., 200312)
VAIP(13,1)	The MOVEMENT DATE/TIME in internal^external format. (e.g., 2881116.08^NOV 16,1988@08:00)
VAIP(13,2)	The TRANSACTION TYPE in internal^external format. (e.g., 1^ADMISSION)
VAIP(13,3)	The MOVEMENT TYPE in internal^external format. (e.g., 15^DIRECT)
VAIP(13,4)	The WARD LOCATION associated with this patient with this movement in internal^external format.(e.g., 5^7BSCI)
VAIP(13,5)	The PRIMARY CARE PHYSICIAN assigned to the patient for this movement in internal^external format. (e.g., 16^JONES, CHARLES C)
VAIP(13,6)	The TREATING SPECIALTY for the patient for this movement in internal^external format.(e.g., 3^NEUROLOGY)
VAIP(14)	The INTERNAL FILE NUMBER of the last movement associated with this movement. (e.g., 187612)
VAIP(14,1)	The MOVEMENT DATE/TIME in internal^external format.(e.g., 2881116.08^NOV 16,1988@08:00)

OUTPUT	DESCRIPTION
VAIP(14,2)	The TRANSACTION TYPE in internal^external format. (e.g., 2^TRANSFER)
VAIP(14,3)	The MOVEMENT TYPE in internal^external format. (e.g., 4^INTERWARD TRANSFER)
VAIP(14,4)	The WARD LOCATION associated with this patient with this movement in internal^external format. (e.g., 5^7BSCI)
VAIP(14,5)	The PRIMARY CARE PHYSICIAN assigned to the patient for this movement in internal^external format.(e.g., 16^JONES, CHARLES C)
VAIP(14,6)	The TREATING SPECIALTY for the patient for this movement in internal^external format.(e.g., 3^NEUROLOGY)
VAIP(15)	The INTERNAL FILE NUMBER of the movement which occurred immediately prior to this one, if one exists. (e.g., 153201)
VAIP(15,1)	The MOVEMENT DATE/TIME in internal^external format. (e.g., 2881116.08^NOV 16,1988@08:00)
VAIP(15,2)	The TRANSACTION TYPE in internal^external format. (e.g., 2^TRANSFER)
VAIP(15,3)	The MOVEMENT TYPE in internal^external format. (e.g., 4^INTERWARD TRANSFER)
VAIP(15,4)	The WARD LOCATION associated with this patient with this movement in internal^external format. (e.g., 5^7BSCI)
VAIP(15,5)	The PRIMARY CARE PHYSICIAN assigned to the patient for this movement in internal^external format. (e.g., 16^ADTPROVIDER,TWO)
VAIP(15,6)	The TREATING SPECIALTY for the patient for this movement in internal^external format.(e.g., 3^NEUROLOGY)
VAIP(16)	The INTERNAL FILE NUMBER of the movement which occurred immediately following this one, if one exists. (e.g., 146609)
VAIP(16,1)	The MOVEMENT DATE/TIME in internal^external format. (e.g., 2881116.08^NOV 16,1988@08:00)
VAIP(16,2)	The TRANSACTION TYPE ininternal^external format. (e.g., 2^TRANSFER)
VAIP(16,3)	The MOVEMENT TYPE in internal^external format. (e.g., 4^INTERWARD TRANSFER)
VAIP(16,4)	The WARD LOCATION associated with this patient with this movement in internal^external format. (e.g., 5^7BSCI)
VAIP(16,5)	The PRIMARY CARE PHYSICIAN assigned to the patient for this movement in internal^external format. (e.g., 16^ADTPROVIDER,THREE)
VAIP(16,6)	The TREATING SPECIALTY for the patient for this movement in internal^external format.(e.g., 3^NEUROLOGY)
VAIP(17)	The INTERNAL FILE NUMBER of the discharge associated with this movement. (e.g., 1902212)
VAIP(17,1)	The MOVEMENT DATE/TIME in internal^external format.(e.g., 2881116.08^NOV 16,1988@08:00)
VAIP(17,2)	The TRANSACTION TYPE in internal^external format.(e.g., 3^DISCHARGE)

OUTPUT	DESCRIPTION
VAIP(17,3)	The MOVEMENT TYPE in internal^external format.(e.g., 16^REGULAR)
VAIP(17,4)	The WARD LOCATION associated with this patient for this movement iinternal^external format.(e.g., 5^7BSCI)
VAIP(17,5)	The PRIMARY CARE PHYSICIAN assigned to the patient for this movement in internal^external format.(e.g., 16^ADTPROVIDER,ONE)
VAIP(17,6)	The TREATING SPECIALTY for the patient for this movement in internal^external format. (e.g., 3^NEUROLOGY)
VAIP(18)	The ATTENDING PHYSICIAN assigned to the patient for this movement in internal^external format.(e.g., 25^ADTPROVIDER,TEN)
VAIP(19,1)	Will contain whether or not the patient chose to be excluded from the facility directory for the admission related to this movement in internal^external format.(e.g., 1^YES)
VAIP(19,2)	Date/time answer to facility directory question was answered in internal^external format. (e.g., 3030426.08^APR26,2003@08:00)
VAIP(19,3)	User entering answer to facility directory question in internal^external format. (e.g., 1934^ADTEMPLOYEE,ONE)
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or^DPT(DFN,0) is not defined

12.2.10 OPD^VADPT

Returns other pertinent patient data which is commonly used but not contained in any other calls to VADPT.

Table 57: OPD^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAHOW	This optional variable can be set to a requested format for the output array. If this variable is not defined or does not contain one of the following values, the output array will be returned with numeric subscripts. 1 -- return the output array with alpha subscripts - see alpha subscripts section (e.g., VAPD(1) would be VAPD("BC")) 2 -- return the output in the ^UTILITY global with numeric subscripts (e.g., ^UTILITY("VAPD",$J,1)) 12 -- return the output in the ^UTILITY global with alpha subscripts (e.g., ^UTILITY("VAPD",$J,"BC")
VAROOT	This optional variable can be set to a local variable or global name in which to return the output.(e.g., VAROOT="DGPD")

Table 58: OPD^VADPT Output

OUTPUT	DESCRIPTION
VAPD(1)	The PLACE OF BIRTH [CITY]. (e.g., SAN FRANCISCO)
VAPD(2)	The PLACE OF BIRTH [STATE] in internal^external format.(e.g., 6^CALIFORNIA)

OUTPUT	DESCRIPTION
VAPD(3)	The FATHER'S NAME.(e.g., ADTFATHER,ONE)
VAPD(4)	The MOTHER'S NAME.(e.g., MARY)
VAPD(5)	The MOTHER'S MAIDEN NAME.(e.g., ADTMOTHER,ONE)
VAPD(6)	The patient's OCCUPATION.(e.g., CARPENTER)
VAPD(7)	The patient's EMPLOYMENT STATUS in internal^external format. (e.g., 4^SELF EMPLOYED)
VAPD(8)	The patient's Phone Number (work)
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.11 REG^VADPT

Returns REGISTRATION/DISPOSITION data.

Table 59: REG^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAROOT	This optional variable can be set to a local variable or global name in which to return the output. (e.g., VAROOT="DGADD")
VARP("F")	Can be defined as the "from" date for which registrations are desired. This must be passed as a valid VA File-Manager date. (e.g., VARP("F")=2930101)
VARP("T")	Can be defined as the "to" date for which registrations are desired. This must be passed as a valid VA File-Manager date. If neither VARP("F") nor VARP("T") are defined, all registrations will be returned. (e.g., VARP("T")=2930530)
VARP("C")	Can be defined as the number of registrations you want returned in the array. (e.g., VARP("C")=5 - will return 5 most recent)

Table 60: REG^VADPT Output

OUTPUT	DESCRIPTION
^UTILITY("VARP",$J,#,"I")	Internal format
^UTILITY("VARP",$J,#,"E")	External format Piece 1 Registration Date/Time Piece 2 Status Piece 3 Type of Benefit applied for Piece 4 Facility Applying to Piece 5 Who Registered Piece 6 Log out (disposition) date/time Piece 7 Disposition Type

OUTPUT	DESCRIPTION
	Piece 8 Who Dispositioned
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.12 SDE^VADPT

Returns ACTIVE clinic enrollments for a patient.

Table 61: SDE^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.

Table 62: SDE^VADPT Output

OUTPUT	DESCRIPTION
^UTILITY("VAEN",$J,#,"I")	Internal format
^UTILITY("VAEN",$J,#,"E")	External format Piece 1 Clinic Enrolled in Piece 2 Enrollment Date Piece 3 OPT or AC
VAERR	The error flag will have one of the following values: 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.13 SDA^VADPT

Returns APPOINTMENT DATE/TIME data for a patient.

Table 63: SDA^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VASD("T")	Can be defined as the "to" date for which registrations are desired. This must be passed as a valid VA File-Manager date. If neither VASD("F") nor VASD("T") are defined, all future appointments will be returned.
VASD("F")	Can be defined as the "from" date for which appointments are desired. This must be passed as a valid VA File-Manager date. If not defined, it is assumed only future appointments should be returned.

INPUT	DESCRIPTION
VASD("W")	Can be passed as the specific STATUS desired in the following format. If not passed, only those appointments which are still scheduled (or kept in the event of a past date) for both inpatients and outpatients will be returned. If VASD("W") Contains a these appts. are returned 1. Active/Kept 2. Inpatient appts. only 3. No-shows 4. No-shows, auto-rebook 5. Cancelled by Clinic 6. Cancelled by Clinic, auto rebook 7. Cancelled by Patient 8. Cancelled by Patient, auto rebook 9. No action taken
VASD("C", Clinic IFN)	Can be set up to contain only those internal file entries from the HOSPITAL LOCATION file for clinics which you would like to see appointments for this particular patient. You may define this array with just one clinic or with many. If you do not define this variable, it will be assumed that you want appointments for this patient in all clinics returned.

Table 64: SDA^VADPT Output

OUTPUT	DESCRIPTION
^UTILITY("VASD",$J,#,"I")	Internal format
^UTILITY("VASD",$J,#,"E")	External format Piece 1 Date/Time of Appointment Piece 2 Clinic Piece 3 Status Piece 4 Appointment Type
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.14 PID^VADPT

This call is used to obtain the patient identifier in long and brief format.

Table 65: PID^VADPT Input

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.

INPUT	DESCRIPTION
VAPTYP	This optional variable can be set to the internal number of a patient eligibility. The variable can be used to indicate the patient's type such as VA, DOD, or IHS through the eligibility. If this variable is not defined or the eligibility does not exist, the VA patient IDs will be returned.

Table 66: PID^VADPT Output

OUTPUT	DESCRIPTION
VA("PID")	The long patient identifier. (e.g., 000-22-3333P)
VA("BID")	The short patient identifier. (e.g., 3333P)
VAERR	0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.15 PID^VADPT6

This call returns the same variables as the call mentioned above, but will eliminate the unnecessary processing time required calling PID^VADPT.

12.2.16 ADM^VADPT2

This returns the internal file number of the admission movement. If VAINDT is not defined, this will use "NOW" for the date/time.

Table 67: ADM^VADPT

INPUT	DESCRIPTION
DFN	This required variable is the internal entry number in the PATIENT file.
VAINDT	This optional variable may be set to a past date/time for which the programmer wishes to know the patient's inpatient status. This must be passed as an internal VA FileManager date/time format. (e.g., 2880101.08)

Table 68: ADM^VADPT Output

OUTPUT	DESCRIPTION
VADMVT	Returns the internal file number of the admission movement.
VAERR	The error flag will have one of the following values. 0 -- no errors encountered 1 -- error encountered - DFN or ^DPT(DFN,0) is not defined

12.2.17 KVAR^VADPT

This call is used to remove all variables defined by the VADPT routine. The programmer should elect to utilize this call to remove the arrays which were returned by VADPT.

12.2.18 KVA^VADPT

This call is used as above and will also kill the VA("BID") and VA("PID") variables.

12.2.19 COMBINATIONS

The following calls may be made to return a combination of arrays with a single call.

DFN is a required variable that is the internal entry number in the PATIENT file. See the specific call in the table below for other variable input.

Table 69: Call Combinations

Output:	DEMOGRAPHIC	ELIGIBILITY	INPATIENT	INPATIENT	ADDRESS	SERVICE	MONETARY	REGISTRATION	ENROLLMENT	APPOINTMENT
CALL	VADM	VAEL	VAIN	VAIP	VAPA	VASV	VAMB	UTILITY("VARP"	UTILITY("VAEN"	UTILITY("VASD"
OERR	X		X							
1	X		X							
2	X	X								
3		X	X							
4	X				X					
5			X		X					
6	X	X			X					
7		X				X				
8		X				X	X			
9	X							X	X	X
10									X	X
51	X			X						

Output:	DEMOGRAPHIC	ELIGIBILITY	INPATIENT	INPATIENT	ADDRESS	SERVICE	MONETARY	REGISTRATION	ENROLLMENT	APPOINTMENT
CALL	VADM	VAEL	VAIN	VAIP	VAPA	VASV	VAMB	UTILITY("VARP"	UTILITY("VAEN"	UTILITY("VASD"
52		X		X						
53				X	X					
ALL	X	X	X		X	X	X	X	X	X
A5	X	X		X	X	X	X	X	X	X

12.3 Alpha Subscripts

Table 70: Alpha Subscripts

CALL	VARIABLE	ALPHA TRANSLATION
DEM^VADPT	VADM(1)	VADM("NM")
	VADM(2)	VADM("SS")
	VADM(3)	VADM("DB")
	VADM(4)	VADM("AG")
	VADM(5)	VADM("SX")
	VADM(6)	VADM("EX")
	VADM(7)	VADM("RE")
	VADM(8)	VADM("RA")
	VADM(9)	VADM("RP")
	VADM(10)	VADM("MS")
DEMUPD^VADPT	VADEMO(1)	VADEMO("NM")
	VADEMO(1,1)	VADEMO(“NM”,1)
	VADEMO(2)	VADEMO("SS")
	VADEMO(3)	VADEMO("DB")

CALL	VARIABLE	ALPHA TRANSLATION
	VADEMO(4)	VADEMO("AG")
	VADEMO(5)	VADEMO("SX")
	VADEMO(6)	VADEMO("EX")
	VADEMO(7)	VADEMO("RE")
	VADEMO(8)	VADEMO("RA")
	VADEMO(9)	VADEMO("RP")
	VADEMO(10)	VADEMO("MS")
	VADEMO(11)	VADEMO(“ET”)
	VADEMO(12)	VADEMO(“RC”)
	VADEMO(13)	VADEMO("PL")
ELIG^VADPT	VAEL(1)	VAEL("EL")
	VAEL(1,#)	VAEL("EL",#)
	VAEL(2)	VAEL("PS")
	VAEL(3)	VAEL("SC")
	VAEL(4)	VAEL("VT")
	VAEL(5)	VAEL("IN")
	VAEL(5,#)	VAEL("IN",#)
	VAEL(6)	VAEL("TY")
	VAEL(7)	VAEL("CN")
	VAEL(8)	VAEL("ES")
	VAEL(9)	VAEL("MT")
	VAEL(10)	VAEL(“OTH”)
MB^VADPT	VAMB(1)	VAMB("AA")
	VAMB(2)	VAMB("HB")
	VAMB(3)	VAMB("SS")
	VAMB(4)	VAMB("PE")
	VAMB(5)	VAMB("MR")
	VAMB(6)	VAMB("SI")
	VAMB(7)	VAMB("DI")
	VAMB(8)	VAMB("OR")
	VAMB(9)	VAMB("GI")

CALL	VARIABLE	ALPHA TRANSLATION
SVC^VADPT	VASV(1)	VASV("VN")
	VASV(1,#)	VASV("VN",#)
	VASV(2)	VASV("AO")
	VASV(2,#)	VASV("AO",#)
	VASV(3)	VASV("IR")
	VASV(3,#)	VASV("IR",#)
	VASV(4)	VASV("PW")
	VASV(4,#)	VASV("PW",#)
	VASV(5)	VASV("CS")
	VASV(5,#)	VASV("CS",#)
	VASV(6)	VASV("S1")
	VASV(6,#)	VASV("S1",#)
	VASV(7)	VASV("S2")
	VASV(7,#)	VASV("S2",#)
	VASV(8)	VASV("S3")
	VASV(8,#)	VASV("S3",#)
	VASV(9)	VASV(“PH”)
	VASV(9,#)	VASV(“PH”,#)
	VASV(10)	VASV(“CV”)
	VASV(10,#)	VASV(“CV”,#)
	VASV(11)	VASV(“OIF”)
	VASV(11,#)	VASV(“OIF”,#)
	VASV(12)	VASV(“OEF”)
	VASV(12,#)	VASV(“OEF”,#)
	VASV(13)	VASV(“UNK”)
	VASV(13,#)	VASV(“UNK”,#)
	VASV(14)	VASV(“SHD”)
	VASV(14,#)	VASV(“SHD”,#)
ADD^VADPT	VAPA(1)	VAPA("L1")
	VAPA(2)	VAPA("L2")
	VAPA(3)	VAPA("L3")

CALL	VARIABLE	ALPHA TRANSLATION
	VAPA(4)	VAPA("CI")
	VAPA(5)	VAPA("ST")
	VAPA(6)	VAPA("ZP")
	VAPA(7)	VAPA("CO")
	VAPA(8)	VAPA("PN")
	VAPA(9)	VAPA("TS")
	VAPA(10)	VAPA("TE")
	VAPA(11)	VAPA("Z4")
	VAPA(12)	VAPA("CCA")
	VAPA(13)	VAPA("CL1")
	VAPA(14)	VAPA("CL2")
	VAPA(15)	VAPA("CL3")
	VAPA(16)	VAPA("CCI")
	VAPA(17)	VAPA("CST")
	VAPA(18)	VAPA("CZP")
	VAPA(19)	VAPA("CCO")
	VAPA(20)	VAPA("CCS")
	VAPA(21)	VAPA("CCE")
	VAPA(22)	VAPA("CTY")
	VAPA(23)	VAPA("PR")
	VAPA(24)	VAPA("PC")
	VAPA(25)	VAPA("CT")
	VAPA(26)	VAPA("CPR")
	VAPA(27)	VAPA("CPC")
	VAPA(28)	VAPA("CCT")
	VAPA(29)	VAPA("CPN")
	VAPA(30)	VAPA("RL1")
	VAPA(31)	VAPA("RL2")
	VAPA(32)	VAPA("RL3")
	VAPA(33)	VAPA("RCI")
	VAPA(34)	VAPA("RST")

CALL	VARIABLE	ALPHA TRANSLATION
	VAPA(35)	VAPA(“RZP”)
	VAPA(36)	VAPA(“RCO”)
	VAPA(37)	VAPA(“RCT”)
	VAPA(38)	VAPA(“RPR”)
	VAPA(39)	VAPA(“RPC”)
OAD^VADPT	VAOA(1)	VAOA("L1")
	VAOA(2)	VAOA("L2")
	VAOA(3)	VAOA("L3")
	VAOA(4)	VAOA("CI")
	VAOA(5)	VAOA("ST")
	VAOA(6)	VAOA("ZP")
	VAOA(7)	VAOA("CO")
	VAOA(8)	VAOA("PN")
	VAOA(9)	VAOA("NM")
	VAOA(10)	VAOA("RE")
	VAOA(11)	VAOA("Z4")
INP^VADPT	VAIN(1)	VAIN("AN")
	VAIN(2)	VAIN("DR")
	VAIN(3)	VAIN("TS")
	VAIN(4)	VAIN("WL")
	VAIN(5)	VAIN("RB")
	VAIN(6)	VAIN("BS")
	VAIN(7)	VAIN("AD")
	VAIN(8)	VAIN("AT")
	VAIN(9)	VAIN("AF")
	VAIN(10)	VAIN("PT")
	VAIN(11)	VAIN("AP")
IN5^VADPT	VAIP(1)	VAIP("MN")
	VAIP(2)	VAIP("TT")
	VAIP(3)	VAIP("MD")
	VAIP(4)	VAIP("MT")

CALL	VARIABLE	ALPHA TRANSLATION
	VAIP(5)	VAIP("WL")
	VAIP(6)	VAIP("RB")
	VAIP(7)	VAIP("DR")
	VAIP(8)	VAIP("TS")
	VAIP(9)	VAIP("MF")
	VAIP(10)	VAIP("BS")
	VAIP(11)	VAIP("RD")
	VAIP(12)	VAIP("PT")
	VAIP(13)	VAIP("AN")
	VAIP(13,#)	VAIP("AN",#)
	VAIP(14)	VAIP("LN")
	VAIP(14,#)	VAIP("LN",#)
	VAIP(15)	VAIP("PN")
	VAIP(15,#)	VAIP("PT",#)
	VAIP(16)	VAIP("NN")
	VAIP(16,#)	VAIP("NN",#)
	VAIP(17)	VAIP("DN")
	VAIP(17,#)	VAIP("DN",#")
	VAIP(18)	VAIP("AP")
OPD^VADPT	VAPD(1)	VAPD("BC")
	VAPD(2)	VAPD("BS")
	VAPD(3)	VAPD("FN")
	VAPD(4)	VAPD("MN")
	VAPD(5)	VAPD("MM")
	VAPD(6)	VAPD("OC")
	VAPD(7)	VAPD("ES")
	VAPD(8)	VAPD("WP")

13 Scheduling Application Programmer Interfaces (APIs)

The Scheduling functions and data that support outpatient scheduling are being re-engineered and re-hosted as a Government Off-the-Shelf (GOTS) application. During implementation, the appointment data currently stored in the Patient sub-file (2.98) and the Hospital Location sub-files (44.001, 44.003) have been moved into an Enterprise Oracle database on an external platform.

The API released in an implementing patch is one of several that provide the only authorized interface to appointment data. It is designed to retrieve appointments from either data source: VistA or the Oracle database.

Existing direct global references to Scheduling globals, as well as FileManager calls in all M-based applications, must be removed or redesigned. There are several possible options described below:

1. Remove. Eliminate uses of appointment data whenever possible. Access to appointment data over the network may be slower than direct access in VistA. For example, if the application displays patient appointments as a convenience feature, the display could be removed from the function because the user can get the same information directly using the Scheduler Graphical User Interface (GUI). Keeping the display in the application may become an inconvenience feature when the network is slow or unavailable. This strategy emphasizes application un-coupling in preparation for a future Clinical Context Object Workgroup (CCOW)-based application environment.
2. Replace. If the appointment data are required to support the business processes of the application, one of the encapsulation APIs must be used to interface the application with the new Resource Scheduling System. The look and feel of the application will remain the same although retrieval times may be slower.
    a. Data Layer. To optimize an application process that uses appointments, it is important to call the API only once during process execution. In most cases to achieve this it will be necessary to use the API to create a data layer. The API is called once and stores the data in a temporary global. Business processing does not start until after all the required data are retrieved in the ‘data layer’.
    b. Error Handling. As the data is retrieved from a remote database, errors could occur which may be returned to applications; therefore, it is also important to design error handling. If this is implemented now, it will not be necessary to add it later when the data is retrieved from the remote database.

13.1.1 Special Features

This section describes the special features of the Scheduling Replacement API "SDAPI" that retrieves appointment information stored in sub-files 2.98, 44.001, and 44.003. Appointment data can be retrieved by patient(s), clinic(s), both, or neither. Three other appointment fields are available for filtering. See “SDAPI - Filters” for a complete list of available appointment filters.

This API is an encapsulation API and has special features.

- Flexibility. This API can be implemented now without re-programming later because it will retrieve the same information from either database (FM globals or SQL tables). Each field in the table below has been assigned an independent identifying number that is used in the input parameter of the API. See "SDAPI - Data Fields" for a more detailed list of the available data fields.

Table 71: Special Features

Number	Feature
1	APPOINTMENT DATE/TIME
2	CLINIC IEN and NAME
3	APPOINTMENT STATUS
4	PATIENT DFN and NAME
5	LENGTH OF APPOINTMENT
6	COMMENTS
7	OVERBOOK
8	ELIGIBILITY OF VISIT IEN and NAME
9	CHECK-IN DATE/TIME
10	APPOINTMENT TYPE IEN and NAME
11	CHECK-OUT DATE/TIME
12	OUTPATIENT ENCOUNTER IEN
13	PRIMARY STOP CODE IEN and CODE
14	CREDIT STOP CODE IEN and CODE
15	WORKLOAD NON-COUNT
16	DATE APPOINTMENT MADE
17	DESIRED DATE OF APPOINTMENT
18	PURPOSE OF VISIT and SHORT DESCRIPTION
19	EKG DATE/TIME
20	X-RAY DATE/TIME
21	LAB DATE/TIME
22	STATUS
23	X-RAY FILMS
24	AUTO-REBOOKED APPOINTMENT DATE/TIME
25	NO-SHOW/CANCEL DATE/TIME
26	RSA APPOINTMENT ID

Number	Feature
28	DATA ENTRY CLERK DUZ AND NAME
29	NO-SHOW/CANCELED BY DUZ AND NAME
30	CHECK-IN USER DUZ AND NAME
31	CHECK-OUT USER DUZ AND NAME
32	CANCELLATION REASON IEN AND NAME
33	CONSULT LINK

Note: Field 27 is reserved for the 2507 Request IEN to be available in a future release.

1. Error Code 101. The API returns error code 101 when the network is too slow or is down. Applications that depend upon information stored in an external database must be re-programmed to handle this condition. Without network error handling, applications may either hang indefinitely or error out. At this point, there is one error code to indicate a network problem. See "SDAPI - Error Codes" for a complete list of all API error codes.
2. Error Code 116. The API returns error code 116 when the data returned from the RSA database doesn't match the data on VistA. An example of this would be if the RSA returns an IEN that doesn't exist on VistA. Applications must be re-programmed to handle this condition. See "SDAPI - Error Codes" for a complete list of all API error codes.
3. Error Code 117. The API returns error code 117 when the other error codes don't apply. This error code will incorporate any additional errors that may be included or returned in the future. Adding this error code will prevent re-coding of current applications, as these new error codes are introduced. See "SDAPI - Error Codes" for a complete list of all API error codes.
4. External Data Source. The API is designed to be used with an external database. The API pulls over all the data required by the application function in one request and stores it in a temporary global. The temporary global can then be used in place of the Hospital Location sub-files (44.001, 44.003) and the Patient sub-file (2.98) to perform the business logic of the application, separating the data layer from the business layer. See the example below.
    a. Example: The process of encapsulation will involve, in part, replacing direct global references in routines with APIs. As an example, consider the following piece of code. This code is designed to retrieve appointment date/time, patient DFN and name, and length of appointment for all DGCLN clinic appointments up to DGLAST date.

```
F  S DGDATE=$O(^SC(DGCLN,"S",DGDATE)) Q:'DGDATE!(DGDATE>DGLAST)  D
. S DGAPT=0 F  S DGAPT=$O(^SC(DGCLN,"S",DGDATE,1,DGAPT)) Q:'DGAPT  D
. . S DGPAT=$P(^SC(DGCLN,"S",DGDATE,1,DGAPT,0),U,1)
. . I $G(DGPAT) S DGPATNAM=$P(^DPT(DGPAT,0),U,1))
```

```
. . S DGLOAPPT=$P(^SC(DGCLN,"S",DGDATE,1,DGAPT,0),U,2)
CONTINUE PROCESSING AS NEEDED
```

Using the API, the code may be changed as follows:

```
;DATA LAYER
S DGARRAY(1)=";"_DGLAST
S DGARRAY("FLDS")="1;4;5"
S DGARRAY(2)=DGCLN
S DGCNT=$$SDAPI^SDAMA301(.DGARRAY)
```

```
;BUSINESS LAYER
;  if data is returned, process appointment data
I DGCNT>0 S DGPAT=0 F  S DGPAT=$O(^TMP($J,”SDAMA301”,DGCLN,DGPAT)
Q:DGPAT=””  D
. S DGDATE=0 F  S DGDATE=$O(^TMP($J,"SDAMA301",DGCLN,DGPAT,DGDATE)
 Q:DGDATE=""  D
.. S DGLOAPPT=$P($G(^TMP($J,”SDAMA301”,DGCLN,DGPAT,DGDATE)),U,5) ;length
 of appt
.. S DGPINFO=$P($G(^TMP($J,”SDAMA301”,DGCLN,DGPAT,DGDATE)),U,4) ;patient
 DFN and Name
.. S DGPATNAM=$P(DGPINFO,";",2) ;patient name
.. continue processing appointment data as needed
; if error returned, process error
I DGCNT<0 D
. ;check error array for DATABASE IS UNAVAILABLE error
. I $D(^TMP($J,”SDAMA301,101)) D
.. process error as needed (calling application to determine how to
handle this)
. ;check error array for DATA MISMATCH error
. I $D(^TMP($J,”SDAMA301,116)) D
.. process error as needed (calling application to determine how to
handle this)
;kill the temporary array
I DGCNT'=0 K ^TMP($J,”SDAMA301”)
```

Table 72: Application Programmer Interface SDAPI

DETAIL	DESCRIPTION
Name:	SDAPI ; Retrieve Filtered Appointment Data
Declaration:	$$SDAPI^SDAMA301(.ARRAY)
Description:	This API returns filtered appointment information and should be called using an EXTRINSIC call. To use this API, subscribe to Integration Agreement #4433.
Argument:	ARRAY – An array, passed by value, that is defined and name-spaced by the calling application, containing the following parameters:

DETAIL	DESCRIPTION
Field List	Required, ARRAY("FLDS"). List of appointment field IDs requested, each ID separated by a semicolon or "ALL" to indicate all fields are being requested. See "SDAPI - Data Fields" for a complete list of available appointment fields and their associated IDs.
Filters	Optional. See "SDAPI - Filters" for a complete list of available appointment filters and their input array format.
Max Appts	Optional, ARRAY("MAX"). Maximum appointments requested. See "SDAPI - Filters" for a description and valid values of this array entry.
Sort	Optional, ARRAY("SORT"). Allows the output to be sorted by patient DFN, instead of by Patient and Clinic IENs. See "SSDAPI - Filters" for a description and valid values of this array entry.
Purged	Optional, ARRAY("PURGED"). Output will include non-canceled appointments that were purged from the Hospital Location file yet still exist on the patient file. See "SDAPI - Filters" for a description and the valid value for this array entry. If this optional array entry is passed into the API, there are 2 other conditions that must be met else error 115 will be generated: ARRAY(4) must be populated, and several fields will not be available to request because those fields are either located on the Hospital Location file (which was purged of the appointment) or are calculated using data from the Hospital Location file. Those fields are 5-9, 11, 22, 28, 30, 31, and 33. See "SDAPI - Data Fields" for a description of those fields.

Return Values:

From the extrinsic call, this API will return "-1" if an error occurred, "0" if no appointment is found that matches the filter criteria, or account of the returned appointments. If no appointment is found that matches the filter criteria, the ^TMP($J,"SDAMA301") global will not be generated.

If appointments are found that match the filter criteria, fields 1 through 5 and 7 through 26 of the appointments will be returned in:

```
^TMP($J,"SDAMA301",SORT1,SORT2,APPT DATE/TIME)
=field1^field2^field3^…
where SORT1 and SORT2 are driven by the patient filter and defined
in the table below, and field1 is appointment data ID 1 (appt date/time)
if requested, field2 is appointment data ID 2 (clinic IEN and name) if
requested, etc.  Note:  Piece 6 will always be null, because if field 6
(Appointment comments) is requested, the comments will appear on
the subscript ("C") of the global reference:
^TMP($J,"SDAMA301",SORT1,SORT2,APPT DATE/TIME,"C")=field 6.
```

Fields 28 through 33 will be returned in:

```
^TMP($J,"SDAMA301",SORT1,SORT2,APPT DATE/TIME,0) =
field28^field29^field30^…
```

Table 73: Filters

Patient Filter is…	Sort Values
Populated	SORT1 is Patient DFN, SORT2 is Clinic IEN
Not Populated	SORT1 is Clinic IEN, SORT2 is Patient DFN

In addition, there is another filter value which can be set to alter the output. If ARRAY("SORT")="P", then the output will only include the subscript Patient DFN and not Clinic IEN, overriding the Sort Values described above. IE. ^TMP($J,"SDAMA301",DFN,APPT DATE/TIME)=field1^field2…

Note: As mentioned above, field 6 will always be null and if field 6 (Appointment Comments) is requested, the comments will appear on the next subscript ("C") of the global reference.

IE. ^TMP($J,"SDAMA301",DFN,APPT DATE/TIME,"C")=field 6.

If an error occurs, the error codes and messages will be returned in

^TMP($J,"SDAMA301",error code) = error message

See "SDAPI - Error Codes" for a list of error codes and messages.

Other: When processing has completed, kill the temporary array:

^TMP($J,"SDAMA301")

See "SDAPI - Constraints" for constraints.

13.2 SDAPI - EXAMPLES

By Clinic

Get all appointments for clinic 501 on 01/05/04. Get patient DFN and name, and appointment status. Note that the output will be sorted first by clinic, then patient, then appointment date/time. Clinic is first sort because the patient filter is not populated.

```
N SDARRAY,SDCOUNT,SDDFN,SDDATE,SDAPPT,SDPAT,SDPATNAM,SDSTATUS
S SDARRAY(1)="3040105;3040105"
S SDARRAY(2)=501
S SDARRAY("FLDS")="4;3"                              order is irrelevant
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
. ;get patient
. S SDDFN=0 F  S SDDFN=$O(^TMP($J,"SDAMA301",501,SDDFN)) Q:SDDFN="" D
. . ;get appointment date/time
. . S SDDATE=0 F  S SDDATE=$O(^TMP($J,"SDAMA301",501,SDDFN,SDDATE)) Q:SDDATE="" D
. . . S SDAPPT=$G(^TMP($J,"SDAMA301",501,SDPATDFN,SDDATE)) ;appointment data
. . . S SDSTATUS=$P($G(SDAPPT),"^",3) ;appointment status
. . . S SDPAT=$P($G(SDAPPT),"^",4) ;patient DFN and Name
. . . S SDPATNAM=$P($G(SDPAT),";",2) ;patient Name only
continue processing this appointment as needed
```

```
I SDCOUNT<0 D
 do processing for errors 101 and 116
 when finished with all processing, kill the output array
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")
```

By Patient

Get the next (after today) scheduled/regular appointment for patient 100. Get the appointment date/time, clinic IEN and name, and appointment status. Note that the output will be sorted first by patient, then clinic, then appointment date/time. Patient is first sort because it is populated.

```
N SDARRAY,SDCOUNT,SDCLIEN,SDDATE,SDAPPT,SDSTATUS,SDCLINFO,SDCLNAME
S SDARRAY(1)=DT_".2359"
S SDARRAY(3)="R;I"
S SDARRAY(4)=100
S SDARRAY("MAX")=1
S SDARRAY("FLDS")="1;2;3"
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
. ;get clinic
. S SDCLIEN=0 F  S SDCLIEN=$O(^TMP($J,"SDAMA301",100,SDCLIEN)) Q:SDCLIEN="" D
. . ; get appointment date/time
. . S SDDATE=0 F  S SDDATE=$O(^TMP($J,"SDAMA301",100,SDCLIEN,SDDATE)) Q:SDDATE="" D
. . . S SDAPPT=$G(^TMP($J,"SDAMA301",100,SDCLIEN,SDDATE)) ;appointment data
. . . S SDSTATUS=$P(SDAPPT,"^",3) ;appt status
. . . S SDCLINFO=$P(SDAPPT,"^",2) ;clinic IEN and Name
. . . S SDCLNAME=$P(SDCLINFO,";",2) ;clinic Name only
continue processing this appointment as needed
I SDCOUNT<0 D
do processing for errors 101 and 116
when finished with all processing, kill output array
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")
```

By Patient and Clinic

Get all appointments for patient 100 in clinic 501, for January 2004. Get the appointment date/time and credit stop code IEN. Note that the output will be sorted first by patient, then clinic, then appointment date/time. Patient is first sort because it is populated.

```
N SDARRAY,SDCOUNT,SDDATE,SDAPPT,SDCRSTOP
S SDARRAY(1)="3040101;3040131"
S SDARRAY(2)=501
S SDARRAY(4)=100
```

```
S SDARRAY("FLDS")="1;14;16"
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
. ; get appointment date/time
. S SDDATE=0 F  S SDDATE=$O(^TMP($J,"SDAMA301",100,501,SDDATE)) Q:SDDATE="" D
. . S SDAPPT=$G(^TMP($J,"SDAMA301",100,501,SDDATE)) ;appointment data
. . S SDCREDIT=$P(SDAPPT,"^",14) ;credit stop code IEN
. . I $G(SDCREDIT)'=";" S SDCRIEN=$P(SDCREDIT,";",1) ;credit stop code IEN only
continue processing this appointment as needed
I SDCOUNT<0 D
do processing for errors 101 and 116
when finished with all processing, kill output array
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")
```

By neither Patient nor Clinic

Get all appointments for primary stop code 300, for January 2004. Get the appointment status. Note that the output will be sorted first by clinic, then patient, then appointment date/time. Clinic is first sort because the patient filter is not populated.

```
N SDARRAY,SDCOUNT,SDCLIEN,SDDFN,SDDATE,SDAPPT,SDSTATUS
S SDARRAY(1)="3040101;3040131"
S SDARRAY(13)=300
S SDARRAY(4)=100
S SDARRAY("FLDS")="3"
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
. ; get clinic
. S SDCLIEN=0 F  S SDCLIEN=$O(^TMP($J,"SDAMA301",SDCLIEN)) Q:SDCLIEN="" D
. . ; get patient
. . S SDDFN=0 F  S SDDFN=$O(^TMP($J,"SDAMA301",SDCLIEN,SDDFN)) Q:SDDFN="" D
. . . ; get appointment date/time
. . . S SDDATE=0 F  S SDDATE=$O(^TMP($J,"SDAMA301",SDCLIEN,SDDFN,SDDATE))
Q:SDDATE="" D
. . . . S SDSTATUS=$P($G(^TMP($J,"SDAMA301",100,501,SDDATE)),"^",3) ;appointment
status
continue processing this appointment as needed
I SDCOUNT<0 D
do processing for errors 101 and 116
when finished with all processing, kill output array
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")
```

Warning: For the quickest performance, this API should be run with a patient and/or clinic filter. Omission of both filters will result in a lengthy query (time and data).

By Clinic with "Sort" filter defined

Get all appointments for clinic 501 on 01/05/04. Get patient DFN and name, and appointment status. Note that the output will be sorted first by patient, then appointment date/time. Patient is only sort because the SORT filter is populated.

```
N SDARRAY,SDCOUNT,SDDFN,SDDATE,SDAPPT,SDPAT,SDPATNAM,SDSTATUS
S SDARRAY(1)="3040105;3040105"
S SDARRAY(2)=501
S SDARRAY("SORT")="P"
S SDARRAY("FLDS")="4;3"         order is irrelevant
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
.;get patient
.S SDDFN=0 F  S SDDFN=$O(^TMP($J,"SDAMA301",SDDFN)) Q:SDDFN="" D
. . ; get appointment date/time
. . S SDDATE=0 F  S SDDATE=$O(^TMP($J,"SDAMA301",SDDFN,SDDATE)) Q:SDDATE="" D
. . . S SDAPPT=$G(^TMP($J,"SDAMA301",SDDFN,SDDATE)) ;appointment data
. . . S SDSTATUS=$P($G(SDAPPT),"^",3) ;appointment status
. . . S SDPAT=$P($G(SDAPPT),"^",4) ;patient DFN and Name
. . . S SDPATNAM=$P($G(SDPAT),";",2) ;patient Name only
;continue processing this appointment as needed
I SDCOUNT<0 D
do processing for errors 101 and 116
when finished with all processing, kill the output array
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")
```

By Clinic with "Sort" filter defined

Get all appointments for Clinic 501 on 01/05/04. Get patient DFN, and name, and appointment comments. Note that the output will be sorted first by patient, then appointment date/time, and the comments will appear on the next reference with the subscript "C". Patient is only sort because the SORT filter is populated.

```
N SDARRAY,SDCOUNT,SDDFN,SDDATE,SDAPPT,SDPAT,SDPATNAM,SDCMMNT
S SDARRAY(1)="3040105;3040105"
S SDARRAY(2)=501
S SDARRAY("SORT")="P"
S SDARRAY("FLDS")="4;6"          order is irrelevant
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
. ; get patient
. S SDDFN=0 F  S SDDFN=$O(^TMP($J,"SDAMA301",SDDFN)) Q:SDDFN="" D
. . ; get appointment date/time
```

```
. . S SDDATE=0 F  S SDDATE=$O(^TMP($J,"SDAMA301",SDDFN,SDDATE)) Q:SDDATE="" D
. . . S SDAPPT=$G(^TMP($J,"SDAMA301",SDDFN,SDDATE)) ;appointment data
. . . S SDPAT=$P($G(SDAPPT),"^",4) ;patient DFN and Name
. . . S SDPATNAM=$P($G(SDPAT),";",2) ;patient Name only
. . . S SDCMMNT=$G(^TMP($J, ,"SDAMA301",SDDFN,SDDATE,"C"))
continue processing this appointment as needed
I SDCOUNT<0 D
do processing for errors 101 and 116
when finished with all processing, kill the output array
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")

7) Does patient 999 have any appointments on file?

N SDARRAY,SDCOUNT
S SDARRAY(4)=999
S SDARRAY("FLDS")=1
S SDARRAY("MAX")=1
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
 patient has appointments on file
I SDCOUNT<0 D
 do processing for errors 101 and 116
 kill output array when processing is done
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")

8) Similar to example #4, but with a global list of patients

N SDARRAY,SDCOUNT,SDCLIEN,SDDFN,SDDATE,SDAPPT,SDSTATUS
S SDARRAY(1)="3040101;3040131"
S SDARRAY(13)=300
S ^SDDFN(1019974)=""
S ^SDDFN(1019975)=""
S ^SDDFN(1019976)=""
S ^SDDFN(1019977)=""
S ^SDDFN(1019978)=""
S ^SDDFN(1019979)=""
S SDARRAY(4)="^SDDFN("
S SDARRAY("FLDS")="3"
S SDCOUNT=$$SDAPI^SDAMA301(.SDARRAY)
I SDCOUNT>0 D
. ; get clinic
. S SDCLIEN=0 F  S SDCLIEN=$O(^TMP($J,"SDAMA301",SDCLIEN)) Q:SDCLIEN="" D
. . ;get patient
. . S SDDFN=0 F  S SDDFN=$O(^TMP($J,"SDAMA301",SDCLIEN,SDDFN)) Q:SDDFN="" D
. . . ; get appointment date/time
. . . S SDDATE=0 F  S SDDATE=$O(^TMP($J,"SDAMA301",SDCLIEN,SDDFN,SDDATE))
Q:SDDATE="" D
. . . . S SDSTATUS=$P($G(^TMP($J,"SDAMA301",100,501,SDDATE)),"^",3) ;appointment
status
```

```
 continue processing this appointment as needed
I SDCOUNT<0 D
 do processing for errors 101 and 116
 when finished with all processing, kill output array and user-defined
 patient list
I SDCOUNT'=0 K ^TMP($J,"SDAMA301")
K ^SDDFN
```

13.3 SDAPI - Data Fields

Available appointment data fields are detailed in the table below.

Table 74: Available Appointment Data Fields

ID	FIELD NAME	DATA TYPE	Format/Valid Values	Description	Examples of Returned Data
1	APPOINTMENT DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled Appointment Date/Time	3031215.113 3031201.0815
2	CLINIC IEN and NAME	TEXT	ID^name	Clinic IEN and name	150;CARDIOLOGY 32;BLOOD DONOR
3	APPOINTMENT STATUS	TEXT	R (Scheduled/Kept) I (Inpatient) NS (No-Show) NSR (No-Show, Rescheduled) CP (Cancelled by Patient) CPR (Cancelled by Patient, Rescheduled) CC (Cancelled by Clinic) CCR (Cancelled by Clinic, Rescheduled) NT (No Action Taken)	The status of the appointment.	R;SCHEDULED/KEPT I;INPATIENT NS;N0-SHOW NSR;NO-SHOW & RESCHEDULED CP;CANCELLED BY PATIENT CPR;CANCELLED BY PATIENT & RESCHEDULED CC;CANCELLED BY CLINIC CCR;CANCELLED BY CLINIC & RESCHEDULED NT;NO ACTION TAKEN
4	PATIENT DFN and NAME	TEXT	DFN;name	Patient DFN and Patient Name.	34877;JONES,BOB 455;SCHILSON,BRIAN
5	LENGTH OF APPOINTMENT	TEXT	NNN	The scheduled length of	20 60

ID	FIELD NAME	DATA TYPE	Format/Valid Values	Description	Examples of Returned Data
				appointment, in minutes.	
6	COMMENTS	TEXT	free text	Any comments associated with the appointment.	PATIENT NEEDS WHEELCHAIR Note: Comments shall be located on the “C” subscript.
7	OVERBOOK	TEXT	Y or N	“Y” if appointment is an overbook else “N”.	Y N
8	ELIGIBILITY OF VISIT IEN and NAME	TEXT	Local IEN; Local Name; National IEN; National Name	Local & National Eligibility codes and names associated with the appointment.	2;AID & ATTENDANCE;2;AID & ATTENDANCE 7;ALLIED VETERAN;7;ALLIED VETERAN 12; COLLATERAL OF VET.; 13; COLLATERAL OF VET.
9	CHECK-IN DATE/TIME	DATE/TIME	YYYMMDD.HHMM	Date/time the patient checked in for the appointment.	3031215.113
10	APPOINTMENT TYPE IEN and NAME	TEXT	IEN;name	Type of Appointment IEN and name.	1;COMPENSATION & PENSION 3;ORGAN DONORS 7; COLLATERAL OF VET.
11	CHECK-OUT DATE/TIME	DATE/TIME	YYYMMDD.HHMM	Date/time the patient checked out of the appointment.	3031215.113
12	OUTPATIENT ENCOUNTER IEN	TEXT	NNN	The outpatient encounter IEN associated with this appointment.	4578
13	PRIMARY STOP CODE IEN and CODE	TEXT	IEN;code	Primary Stop code IEN and code associated with the clinic.	301;350

ID	FIELD NAME	DATA TYPE	Format/Valid Values	Description	Examples of Returned Data
14	CREDIT STOP CODE IEN and CODE	TEXT	IEN;code	Credit Stop code IEN and code associated with the clinic.	549;500
15	WORKLOAD NON-COUNT	TEXT	Y or N	“Y” if clinic is non-count else “N”.	Y N
16	DATE APPOINTMENT MADE	DATE	YYYMMDD	Date the appointment was entered into the Scheduling system.	3031215
17	DESIRED DATE OF APPOINTMENT	DATE	YYYMMDD	The date the clinician or patient desired for the scheduling of this appointment.	3031215
18	PURPOSE OF VISIT	TEXT	Code (1, 2, 3, or 4) and short description (C&P, 10-10, SV, or UV)	The Purpose of Visit.	1;C&P 2;10-10 3;SV 4;UV
19	EKG DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled date/time of the EKG tests in conjunction with this appointment.	3031215.083
20	X-RAY DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled date/time of the X-RAY in conjunction with this appointment.	3031215.083
21	LAB DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The scheduled date/time of the Lab tests in conjunction with this appointment.	3031215.083
22	STATUS	TEXT	Status Code, Status Description, Print Status, Checked In Date/Time,	Status Information for the Visit.	8;INPATIENT APPOINTMENT;INPATIENT/CHECKED OUT;;3030218.1548;145844

ID	FIELD NAME	DATA TYPE	Format/Valid Values	Description	Examples of Returned Data
			Checked Out Date/Time, and Admission Movement IFN		
23	X-RAY FILMS	TEXT	Y or N	"Y" if x-ray films are required at clinic else "N".	Y N
24	AUTO-REBOOKED APPOINTMENT DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The date/time that the appointment was Auto-Rebooked (rescheduled) to.	3031215.083
25	NO-SHOW / CANCEL DATE/TIME	DATE/TIME	YYYMMDD.HHMM	The date/time that the appointment was No-Showed or Cancelled.	3031215.083
26	RSA APPOINTMENT ID	TEXT	NNN	The unique numeric Oracle ID that identifies a specific RSA appointment. This field will be null for appointments in legacy VistA.	34983
28	DATA ENTRY CLERK	TEXT	DUZ;Name	The DUZ and name of the clerk who scheduled the appointment.	24569;PERSON,NEW A
29	NO-SHOW / CANCELED BY	TEXT	DUZ;Name	The DUZ and name of the clerk who no-showed or canceled the appointment.	24569;PERSON,NEW A
30	CHECK IN USER	TEXT	DUZ;Name	The DUZ and name of the clerk who checked in the appointment.	24569;PERSON,NEW A
31	CHECK OUT USER	TEXT	DUZ;Name	The DUZ and name of the clerk who checked out the appointment.	24569;PERSON,NEW A

ID	FIELD NAME	DATA TYPE	Format/Valid Values	Description	Examples of Returned Data
32	CANCELLATIO N REASON	TEXT	DUZ;Name	IEN and Name of Cancellation Reason.	11;OTHER
33	CONSULT LINK	TEXT	NNN	The Consult Link IEN associated with the appointment.	23123
Note: Field 27 is reserved for the 2507 Request IEN to be available in a future release.					

13.3.1 Available Data Filters

Six fields will allow a filter. All 6 fields can be filtered in one API call. A null/undefined filter will result in all values being returned.

Table 75: Available Data Filters

APPT DATA TO BE FILTERED	ARRAY ENTRY	Format	Examples of M code to set array with filter values
APPOINTMENT DATE/TIME	ARRAY(1)	Range of appointment date/times, "from" and "to" date/time separated by semicolon. Dates must be FileMan format YYYMMDD.HHMMSS ARRAY(1)="from date; to date"	S ARRAY(1)="3030101;3030101" (one day) S ARRAY(1)="3040101" (appts after 2003) S ARRAY(1)=";3031231" (all appts thru 3031231) S ARRAY(1)=DT (all appts from today forward) S ARRAY(1)=DT_";3041231" (all appts from today through 3041231)
CLINIC IEN	ARRAY(2)	List of valid clinic IENs (each separated by a semicolon) or a global root or a local root. Clinic must exist on Hospital Location file. ARRAY (2) ="ien1; ien2" etc. ARRAY(2)="^global(" ARRAY(2)="^global(#" ARRAY(2)="^global(#," ARRAY(2)="local(" ARRAY(2)="local(#" ARRAY(2)="local(#,"	S ARRAY(2)=300 S ARRAY(2)="300;301;304" S ARRAY(2)="^GBL(" S ARRAY(2)="^GBL(""DFN""" S ARRAY(2)="^GBL(""DFN""," S ARRAY(2)="LOCAL(" S ARRAY(2)="LOCAL(""DFN""" S ARRAY(2)="LOCAL(""DFN"","

APPT DATA TO BE FILTERED	ARRAY ENTRY	Format	Examples of M code to set array with filter values
APPOINTMENT STATUS	ARRAY(3)	List of valid Appointment Status values, each separated by a semicolon. Valid values: R (Scheduled/Kept) I (Inpatient) NS (No-Show) NSR (No-Show, Rescheduled) CP (Cancelled by Patient) CPR (Cancelled by Patient, Rescheduled) CC (Cancelled by Clinic) CCR (Cancelled by Clinic, Rescheduled) NT (No Action Taken) ARRAY (3) ="status1; status2" etc.	S ARRAY(3)="I" S ARRAY(3)="R;I;NT" S ARRAY(3)="CC;CCR;CP;CPR"
PATIENT DFN	ARRAY(4)	List of valid patient DFNs (each separated by a semicolon) or a global root or a local root. DFN must exist on PATIENT file. ARRAY (4) ="dfn1; dfn2" etc. ARRAY(4)="^global(" ARRAY(4)="^global(#" ARRAY(4)="^global(#," ARRAY(4)="local(" ARRAY(4)="local(#" ARRAY(4)="local(#,"	S ARRAY(4)=7179940 S ARRAY(4)="7179940;7179939;7179920" S ARRAY(4)="^GBL(" S ARRAY(4)="^GBL(""IENLIST""" S ARRAY(4)="^GBL(""IENLIST""," S ARRAY(4)="LOCAL(" S ARRAY(4)="LOCAL(""IENLIST""" S ARRAY(4)="LOCAL(""IENLIST","
PRIMARY STOP CODE	ARRAY(13)	List of valid Primary Stop Code values (not IENs). Must be a valid AMIS REPORTING STOP CODE (field #1) on the CLINIC STOP file (#40.7). ARRAY (13) ="code1; code2" etc	S ARRAY(13)=197 S ARRAY(13)="197;198;200;203;207"

APPT DATA TO BE FILTERED	ARRAY ENTRY	Format	Examples of M code to set array with filter values
DATE APPOINTMENT MADE	ARRAY(16)	Range of Date Appointment Made dates; "from" and "to" dates separated by a semicolon. Dates must be in the FileMan format YYYMMDD (note: time is not allowed). Array(16)= "from date; to date	S ARRAY(16)= "3040101;3040101" (all appts that have a Date Appointment Made date of 3040101) S ARRAY(16)= "3040101" (appts that have a Date Appointment Made date from 3040101 forward) S ARRAY(16)= ";3031231" (all appts that have a Date Appointment Made date through 3031231) S ARRAY(16)=DT (all appts that have a Date Appointment Made date from today forward) S ARRAY(16)= DT_";3041231" (all appts that have a Date Appointment Made date from today through 3041231)

13.3.2 Input – Other Array Entries

Table 76: Input – Other Array Entries

DESCRIPTION	ARRAY ENTRY	Format	Examples of Array with filter
Field List - Required.	ARRAY("FLDS")	List of appointment field IDs, each separated by a semicolon. Order of fields is irrelevant. See “Data Fields” for the list of appointment field IDs. Or if all fields are required, then set array to “ALL” (case is irrelevant). ARRAY ("FLDS") ="id1; id2; id3", etc. ARRAY(“FLDS”)=”ALL”	ARRAY("FLDS")="1;2;3;6;7;14;20" ARRAY("FLDS")=1 ARRAY("FLDS")=”ALL” ARRAY("FLDS")=”all”
Max Appointments - Optional	ARRAY("MAX")	Maximum number of appointments requested. Must be a whole number not equal to 0. ARRAY("MAX")=value If value > 0 or value=”” return first “N” appointments. Else if value < 0 return last “N” appointments.	ARRAY("MAX")=1 ARRAY("MAX")=-1
Sort Appointments by Patient DFN – Optional	ARRAY(“SORT”)	Allows the output to be sorted by Patient, instead of by Patient and Clinic. Must be set to ‘P’. ARRAY(“SORT”)=value	ARRAY("SORT")="P"

DESCRIPTION	ARRAY ENTRY	Format	Examples of Array with filter
Include Purged Appointments - Optional	ARRAY(PURGED)	Allows the user to receive non-canceled Appts that were purged from sub-file #44.003. ARRAY("PURGED")=1	ARRAY("PURGED")=1

The Field List array entry must be populated, or else error 115 will be generated. See "SDAPI - Error Codes" for a complete list of error codes and messages.

The Maximum Appointments array entry is best used to retrieve the next or last "n" appointments for 1 patient and/or 1 clinic, in conjunction with the appointment date/time filter.

Note: If the Maximum Appointment array entry is set to a valid value and more than 1 patient and/or more than 1 clinic are passed to the API, or if no patient and clinic is passed to the API, the error 115 will be generated. See "SDAPI - Error codes" for a complete list of error codes and messages.

Example:

```
APPOINTMENT DATA TO BE FILTERED
ARRAY ENTRY  Format Examples of M code to set array with filter values
APPOINTMENT DATE/TIME ARRAY(1)  Range of appointment date/times, "from" and "to"
date/time separated by semicolon.  Dates must be FileMan format YYYMMDD.HHMMSS
ARRAY(1)="from date; to date"
S ARRAY(1)="3030101;3030101" (one day)
S ARRAY(1)="3040101" (appts after 2003)
S ARRAY(1)=";3031231" (all appts thru 3031231)
S ARRAY(1)=DT (all appts from today forward)
S ARRAY(1)=DT_";3041231" (all appts from           today through 3041231)
CLINIC IEN   ARRAY(2)     List of valid clinic IENs (each separated by a semicolon)
or a global root or a local root.  Clinic must exist on Hospital Location file.
ARRAY(2)="ien1;ien2" etc.
ARRAY(2)="^global("
ARRAY(2)="^global(#"
ARRAY(2)="^global(#,"
ARRAY(2)="local("
ARRAY(2)="local(#"
ARRAY(2)="local(#,"
S ARRAY(2)=300
S ARRAY(2)="300;301;304"
S ARRAY(2)="^GBL("
S ARRAY(2)="^GBL(""DFN"""
S ARRAY(2)="^GBL(""DFN"","
S ARRAY(2)="LOCAL("
S ARRAY(2)="LOCAL(""DFN"""
S ARRAY(2)="LOCAL(""DFN"","
APPOINTMENT STATUS  ARRAY(3)     List of valid Appointment Status values, each
separated by a semicolon.  Valid values:
R (Scheduled/Kept)
```

```
I (Inpatient)
NS (No-Show)
NSR (No-Show, Rescheduled)
CP (Cancelled by Patient)
CPR (Cancelled by Patient, Rescheduled)
CC (Cancelled by Clinic)
CCR (Cancelled by Clinic, Rescheduled)
NT (No Action Taken)
ARRAY(3)="status1;status2" etc.
S ARRAY(3)="I"
S ARRAY(3)="R;I;NT"
S ARRAY(3)="CC;CCR;CP;CPR"
```

PATIENT DFN, ARRAY(4): List of valid patient DFNs (each separated by a semicolon) or a global root or a local root. DFN must exist on PATIENT file.

```
ARRAY(4)="dfn1;dfn2" etc.
ARRAY(4)="^global("
ARRAY(4)="^global(#"
ARRAY(4)="^global(#,"
ARRAY(4)="local("
ARRAY(4)="local(#"
ARRAY(4)="local(#,"

S ARRAY(4)=7179940
S ARRAY(4)="7179940;7179939;7179920"
S ARRAY(4)="^GBL("
S ARRAY(4)="^GBL(""IENLIST"""
S ARRAY(4)="^GBL(""IENLIST"","
S ARRAY(4)="LOCAL("
S ARRAY(4)="LOCAL(""IENLIST"""
S ARRAY(4)="LOCAL(""IENLIST"","
```

PRIMARY STOP CODE, ARRAY(13): List of valid Primary Stop Code values (not IENs). Must be a valid AMIS REPORTING STOP CODE (field #1) on the CLINIC STOP file (#40.7).

```
ARRAY(13)="code1;code2" etc.
S ARRAY(13)=197
S ARRAY(13)="197;198;200;203;207"
```

DATE APPOINTMENT MADE, ARRAY(16): Range of Date Appointment Made dates; "from" and "to" dates separated by a semicolon. Dates must be in the FileMan format YYYMMDD (note: time is not allowed).

```
Array(16)= "from date; to date"
S ARRAY(16)= "3040101;3040101"   (all appts that have a Date Appointment Made date
of 3040101)
S ARRAY(16)= "3040101"   (appts that have a Date Appointment Made date from 3040101
forward)
S ARRAY(16)= ";3031231" (all appts that have a Date Appointment Made date through
3031231)
S ARRAY(16)=DT   (all appts that have a Date Appointment Made date from today
forward)
S ARRAY(16)= DT_";3041231"  (all appts that have a Date Appointment Made date from
today through 3041231)
```

13.3.3 Other Array Entries

Table 77: Other Array Entries

DESCRIPTION	ARRAY ENTRY	FORMAT EXAMPLES OF ARRAY WITH FILTER
Field List (Required)	ARRAY("FLDS")	List of appointment field IDs, each separated by a semicolon. Order of fields is irrelevant. See “Data Fields” for the list of appointment field IDs. Or if all fields are required, then set array to “ALL” (case is irrelevant).

```
ARRAY("FLDS")="id1;id2;id3", etc.
ARRAY(“FLDS”)=”ALL” ARRAY("FLDS")="1;2;3;6;7;14;20"
ARRAY("FLDS")=1
ARRAY("FLDS")=”ALL”
ARRAY("FLDS")=”all”
Max Appointments - Optional      ARRAY("MAX") Maximum number of appointments
requested.  Must be a whole number not equal to 0.
ARRAY("MAX")=value
If value > 0 or value=”” return first “N” appointments.
Else if value < 0 return last “N” appointments.
ARRAY("MAX")=1
ARRAY("MAX")=-1
Sort Appointments by Patient DFN – Optional    ARRAY(“SORT”) Allows the output to be
sorted by Patient, instead of by Patient and Clinic. Must be set to ‘P’.
ARRAY(“SORT”)=value ARRAY("SORT")="P"
```

Include Purged Appointments (Optional): ARRAY(“PURGED”) Allows the user to receive non-canceled Appts that were purged from sub-file #44.003.

ARRAY(“PURGED”)=1 ARRAY(“PURGED”)=1

The Field List array entry must be populated, or error 115 will be generated. See “SDAPI - Error Codes” for a complete list of error codes and messages.

The Maximum Appointments array entry is best used to retrieve the next or last "n" appointments for 1 patient and/or 1 clinic, in conjunction with the appointment date/time filter.

Note: If the Maximum Appointment array entry is set to a valid value and more than 1 patient and/or more than 1 clinic are passed to the API, or if no patient and clinic is passed to the API, the error 115 will be generated. See "SDAPI - Error codes" for a complete list of error codes and messages.

13.3.4 SDAPI Error Codes

Error Codes and Associated Messages

Table 78: SDAPI Error Codes

Error Code	Error Message	Occurs…
101	DATABASE IS UNAVAILABLE	If the Scheduling database or VistALink is unavailable
115	INVALID INPUT ARRAY ENTRY	If the input array has an invalid entry or the field list is null
116	DATA MISMATCH	If VistA and the database are out of sync. i.e., the database returns an IEN not found on VistA
117	SDAPI ERROR	For catching new error codes that could be added at a later time.
Error codes 101, 116 and 117 will not occur until the RSA has been implemented. Coding for these error codes needs to be done now so that no other coding changes will need to be made in the future. Each application will need to decide how to handle the return of those three error codes.		

13.3.5 SDAPI Constraints

API CONSTRAINTS

Cancelled appointments are returned only if the patient filter is populated.

Cancelled appointments will always have null values in the following fields:

Length of Appointment Eligibility of Visit Comments

Check-Out Date/Time Check-In Date/Time Overbook

If you want canceled appointments, but don't want to specify a subset of patients, then set the patient filter [ARRAY(4)] equal to "^DPT(". This will result in canceled appointments being returned. Note, however, that this will decrease the performance time of the API, as it will spin through the entire VistA Patient file, looking for appointments in the specified clinics (if filter is populated). It will, however, have no negative performance impact when it retrieves appointments from the RSA.

The Max Appointments array entry can only be used with 1 patient and/or 1 clinic. If multiple patients and/or clinics are passed or no clinic and/or patient is passed, an error message will be generated.

Use of the PURGED array parameter requires 2 conditions to be met: the patient filter must be populated; and the field list must not contain fields 5-9, 11, 22, 28, 30, 31, or 33, otherwise error 115 will be returned.

13.3.6 Application Programmer Interface GETAPPT

Name: GETAPPT; Retrieve Appointment Data for a Patient ID

Declaration: GETAPPT^SDAMA201(SDIEN,SDFIELDS,SDAPSTAT, SDSTART,SDEND,SDRESULT,SDIOSTAT)

Description: Returns appointment information for a specific patient ID. To use this API, subscribe to Integration Agreement #3859.

Arguments: SDIEN Patient IEN (required)

SDFIELDS Field List (optional, each field number separated by a semi-colon)

SDAPSTAT Appointment Status Filter (optional, each value separated by a semi-colon. See "Filters" for default and valid values)

SDSTART Start Date (optional, internal FileMan format)

SDEND End Date (optional, internal FileMan format)

SDRESULT Local variable to hold returned appointment Count (optional, passed by reference)

SDIOSTAT Patient Status Filter (optional, see "Filters" for default and valid values)

Field List: A null value in this parameter will result in ALL appointment data fields being returned. See "Data Fields" for a list of the field numbers and corresponding data available in this API.

Return Values: If no errors occur and appointments are found, SDRESULT will contain the appointment count and the requested data will be returned in:
^TMP($J,"SDAMA201","GETAPPT",x,y) = field y data where 'x' is an incremental appointment count (starting with 1) and 'y' is the field number requested.

If no errors occur and no appointments are found, then SDRESULT will contain a value of 0 and the ^TMP($J,"SDAMA201","GETAPPT",x,y) array will not be generated.

If an error occurs, SDRESULT will be –1 and the error codes and messages will be returned in ^TMP($J,"SDAMA201","GETAPPT","ERROR",error code) = error message. See "Error Codes" for a list of error codes and messages.

Other: When processing has completed, kill the temporary array:
^TMP($J,"SDAMA201","GETAPPT")

GETAPPT Examples

Retrieve scheduled/kept inpatient appointment date/time, clinic ID, appt status, comments, and patient status for patient 99 from 1/1/02 through 1/31/02:

```
>D GETAPPT^SDAMA201(99,"1;2;3;6;12","R",3020101,3020131,.SDRESULT,"I")
```

```
>ZW SDRESULT
SDRESULT=3
>ZW ^TMP($J,”SDAMA201”,”GETAPPT”)
^TMP(1000,”SDAMA201”,”GETAPPT”,1,1)=3020101.10
^TMP(1000,”SDAMA201”,”GETAPPT”,1,2)=130^TOM’S CLINIC
^TMP(1000,”SDAMA201”,”GETAPPT”,1,3)=”R”
^TMP(1000,”SDAMA201”,”GETAPPT”,1,6)=”PATIENT REQUESTS A RIDE HOME”
^TMP(1000,”SDAMA201”,”GETAPPT”,1,12)=”I”
^TMP(1000,”SDAMA201”,”GETAPPT”,2,1)=3020115.08
^TMP(1000,”SDAMA201”,”GETAPPT”,2,2)= 150^BOB’S CLINIC
^TMP(1000,”SDAMA201”,”GETAPPT”,2,3)=”R”
^TMP(1000,”SDAMA201”,”GETAPPT”,2,6)=
^TMP(1000,”SDAMA201”,”GETAPPT”,2,12)=”I”
^TMP(1000,”SDAMA201”,”GETAPPT”,3,1)=3020115.09
^TMP(1000,”SDAMA201”,”GETAPPT”,3,2)= 150^BOB’S CLINIC
^TMP(1000,”SDAMA201”,”GETAPPT”,3,3)=”R”
^TMP(1000,”SDAMA201”,”GETAPPT”,3,6)=”WHEELCHAIR REQUESTED”
^TMP(1000,”SDAMA201”,”GETAPPT”,3,12)=”I”
```

Retrieve inpatient and outpatient appointment date/time, clinic ID, appointment status, and comments for patient 99 from 1/1/02 at 8am through 1/31/02 for scheduled/kept appointments:

```
>D GETAPPT^SDAMA201(99,”1;2;3;6”,”R”,3020101.08,3020131,.SDRESULT)
>ZW SDRESULT
SDRESULT=2
>ZW ^TMP($J,”SDAMA201”,”GETAPPT”)
^TMP(1000,”SDAMA201”,”GETAPPT”,1,1)=3020101.10
^TMP(1000,”SDAMA201”,”GETAPPT”,1,2)=130^TOM’S CLINIC
^TMP(1000,”SDAMA201”,”GETAPPT”,1,3)=”R”
^TMP(1000,”SDAMA201”,”GETAPPT”,1,6)=”PATIENT REQUESTS A RIDE HOME”
^TMP(1000,”SDAMA201”,”GETAPPT”,2,1)=3020115.09
^TMP(1000,”SDAMA201”,”GETAPPT”,2,2)= 150^BOB’S CLINIC
^TMP(1000,”SDAMA201”,”GETAPPT”,2,3)=”R”
^TMP(1000,”SDAMA201”,”GETAPPT”,2,6)=”WHEELCHAIR REQUESTED”
```

13.4 Application Programmer Interface - NEXTAPPT

Name: NEXTAPPT; Retrieve Next Appointment Data for a Patient ID

Declaration: $$NEXTAPPT^SDAMA201(SDIEN,SDFIELDS, DAPSTAT,SDIOSTAT)

Description: This API returns requested next appointment information for a patient ID and should be called using an EXTRINSIC call. The "next" appointment is defined as the next appointment on file after the current date/time. To use this API, subscribe to Integration Agreement #3859.

Arguments: SDIEN Patient IEN (required)

SDFIELDS Field List (optional, each field number separated by a semi-colon)

SDAPSTAT Appointment Status Filter (optional, each value separated by a semi-colon. See "Filters" for default and valid values)

SDIOSTAT Patient Status Filter (optional, see "Filters" for default and valid values)

Field List: A null value in this parameter will result in NO appointment data fields being returned. See "Data Fields" for a list of the field numbers and corresponding data available in this API.

Return Values: This API will return "-1" if an error occurred, "0" if no future appointment is found, or "1" if a future appointment was found.

If no future appointment is found, then the ^TMP($J,"SDAMA201","NEXTAPPT",y) array will not be generated.

If the user enters an optional field list and a future appointment is found, the data for the next appointment will be returned in ^TMP($J,"SDAMA201","NEXTAPPT",y) = field y data where 'y' is the field number requested.

If an error occurs, the error codes and messages will be returned in ^TMP($J,"SDAMA201","NEXTAPPT","ERROR",error code) = error message. See "Error Codes" for a list of error codes and messages.

Other: When processing has completed, kill the temporary array:

^TMP($J,"SDAMA201","NEXTAPPT")

NEXTAPPT Examples:

See if patient 321 has a future appointment (inpatient or outpatient).

```
I $$NEXTAPPT^SDAMA201(321) D
insert code here to continue processing as needed
```

No appointment data is returned from the above example because no fields were passed in.

If patient 99 has a future scheduled inpatient appointment, retrieve appointment date/time, clinic ID, appointment status, and patient status:

```
I $$NEXTAPPT^SDAMA201(99,"1;2;3;12","R","I")  D
S NEXTDATE=$G(^TMP($J,"SDAMA201","NEXTAPPT",1))
S CLINIEN=+$G(^TMP($J,"SDAMA201","NEXTAPPT",2))
S APPTSTAT=$G(^TMP($J,"SDAMA201","NEXTAPPT",3))
S PATSTATS=$G(^TMP($J,"SDAMA201","NEXTAPPT",12))

>ZW ^TMP($J,"SDAMA201","NEXTAPPT")
```

```
^TMP(1000,"SDAMA201","NEXTAPPT",1)=3030115.10
^TMP(1000,"SDAMA201","NEXTAPPT",2)=130^SAM'S CLINIC
^TMP(1000,"SDAMA201","NEXTAPPT",3)=R
^TMP(1000,"SDAMA201","NEXTAPPT",12)="I"
```

If patient 111 has a future appointment (scheduled, cancelled, or no-show), retrieve appointment date/time, clinic ID, appointment status, and patient status:

```
I $$NEXTAPPT^SDAMA201(111,"1;2;3;12")  D
S NEXTDATE=$G(^TMP($J,"SDAMA201","NEXTAPPT",1))
S CLINIEN=+$G(^TMP($J,"SDAMA201","NEXTAPPT",2))
S APPTSTAT=$G(^TMP($J,"SDAMA201","NEXTAPPT",3))
S PATSTATS=$G(^TMP($J,"SDAMA201","NEXTAPPT",12))
>ZW ^TMP($J,"SDAMA201","NEXTAPPT")
^TMP(1000,"SDAMA201","NEXTAPPT",1)=3030130.10
^TMP(1000,"SDAMA201","NEXTAPPT",2)=130^SAM'S CLINIC
^TMP(1000,"SDAMA201","NEXTAPPT",3)=C
^TMP(1000,"SDAMA201","NEXTAPPT",12)=""
```

Note that a cancelled appointment was returned above because the appointment status filter was undefined and it was the next appointment on the file. The patient status was returned with a value of null.

13.5 Application Programmer Interface - GETPLIST

Name: GETPLIST ; Retrieve Appointment Data for a Clinic ID

Declaration: GETPLIST^SDAMA202(SDIEN,SDFIELDS,SDAPSTAT, SDSTART, SDEND, SDRESULT, SDIOSTAT)

Description: Returns requested clinic appointment information for a specific clinic ID. To use this API, subscribe to Integration Agreement #3869. Note: This API will return appointment information for 'regular', 'no-show', and 'no action taken' appointments only; while the appointment data is located in VistA, cancelled appointments will not be returned because they are not retained on the Hospital Location sub-files (44.001, 44.003).

Arguments: SDIEN Clinic IEN (required)

SDFIELDS: Field List (optional, each field number separated by a semi-colon)

SDAPSTAT: Appointment Status Filter (optional, each value separated by a semi-colon. See "Filters" for default and valid values)

SDSTART: Start Date/time (optional, internal FileMan format)

SDEND: End Date/time (optional, internal FileMan format)

SDRESULT: Local variable to hold returned appointment count (optional, passed by reference)

SDIOSTAT: Patient Status Filter (optional, see "Filters" for default and valid values)

Field List: A null value in this parameter will result in ALL appointment data fields being returned. See "Data Fields" for a list of the field numbers and corresponding data available in this API.

Return Values: If no errors occur and appointments are found, SDRESULT will contain the appointment count and the data will be returned in ^TMP($J,"SDAMA202","GETPLIST",x,y) = field y data where 'x' is an incremental appointment count (starting with 1) and 'y' is the field number requested.

If no errors occur and no appointments are found, then SDRESULT will contain a value of 0 and the ^TMP($J,"SDAMA202","GETPLIST",x,y) array will not be generated.

If an error occurs, SDRESULT will be –1 and the error codes and messages will be returned in ^TMP($J,"SDAMA202","GETPLIST","ERROR",error code) = error message. See "Error Codes" for a list of error codes and messages.

Other: When processing has completed, kill the temporary array:

^TMP($J,"SDAMA202","GETPLIST")

GETPLIST Example

Retrieve inpatient and outpatient appointment date/time, patient ID, and length of appointment for clinic 100 for 1/1/02 from 8am to 10am:

```
>D GETPLIST^SDAMA202(100,"1;4;5",,3020101.08,3020101.1,.SDRESULT)
>ZW SDRESULT
SDRESULT=4
>ZW ^TMP($J,"SDAMA202","GETPLIST")
^TMP(1000,"SDAMA202","GETPLIST",1,1)=3020101.08
^TMP(1000,"SDAMA202","GETPLIST",1,4)=4564^JONES,CANDACE
^TMP(1000,"SDAMA202","GETPLIST",1,5)=60
^TMP(1000,"SDAMA202","GETPLIST",2,1)=3020101.09
^TMP(1000,"SDAMA202","GETPLIST",2,4)=9007^HEADRICK,ANITA
^TMP(1000,"SDAMA202","GETPLIST",2,5)=30
^TMP(1000,"SDAMA202","GETPLIST",3,1)=3020101.093
^TMP(1000,"SDAMA202","GETPLIST",3,4)=24389^SIMPSON,LEANORA
^TMP(1000,"SDAMA202","GETPLIST",3,5)=30
^TMP(1000,"SDAMA202","GETPLIST",4,1)=3020101.1
^TMP(1000,"SDAMA202","GETPLIST",4,4)=40374^SMITH,SAMUEL
^TMP(1000,"SDAMA202","GETPLIST",4,5)=30
```

13.6 Application Programmer Interface - PATAPPT

Name: PATAPPT; Check for existence of any appointment for a patient

Declaration: PATAPPT^SDAMA204(SDDFN)

Description: Returns 1, 0, -1 according to the existence of appointment(s) for a patient ID. To use this API, please subscribe to Integration Agreement #4216.

Argument: SDDFN Patient IEN (required)

Return Values: Patient scheduling record(s) Value Returned

Appointment(s) on file 1

No Appointment(s) on file 0

Error 1

Depending on the existence of appointment(s) for a specific patient ID, an extrinsic value will be returned according to the Return Values table listed above.

If an error occurs, a –1 will be returned, and a node with error information will be created.

The format will be:

```
W $$PATAPPT^SDAMA204(0) -1
The error information will reside in the following node:
ZW ^TMP(634,"SDAMA204","PATAPPT","ERROR")
^TMP(634,"SDAMA204","PATAPPT","ERROR",114)="INVALID PATIENT ID"
See "Error Codes" for a list of error codes and messages.
```

This function does not remove the ^TMP node created when an error occurs. It is the calling program's responsibility to delete the node.

PATAPPT Examples

The following examples show the initialization of variable X with the value from the function $$PATAPPT^SDAMA204(SDDFN):

```
1) Patient Appointments Exists
Cache>S X=$$PATAPPT^SDAMA204(123)
Cache>W X
1
2) No Patient Appointments Exists
Cache>S X=$$PATAPPT^SDAMA204(11)
Cache>W X
0
3) Invalid Patient ID
Cache>S X=$$PATAPPT^SDAMA204(0)
Cache>W X
-1
Cache>ZW ^TMP($J,"SDAMA204","PATAPPT","ERROR")
^TMP(659,"SDAMA204","PATAPPT","ERROR",114)="INVALID PATIENT ID"
```

Table 79: Error Codes

Error Code	Error Message
101	DATABASE IS UNAVAILABLE
102	PATIENT ID IS REQUIRED
103	INVALID FIELD LIST
104	CLINIC ID IS REQUIRED
105	INVALID START DATE
106	INVALID END DATE
108	FACILITY ID IS REQUIRED
109	INVALID APPOINTMENT STATUS FILTER
110	ID MUST BE NUMERIC
111	START DATE CAN'T BE AFTER END DATE
112	INVALID PATIENT STATUS FILTER
113	APPT STATUS AND PATIENT STATUS FILTER COMBINATION UNSUPPORTED IN VISTA
114	INVALID PATIENT ID

14 Data Fields

14.1 Available Data Fields

Table 80: Available Data Fields

ID	FIELD NAME	DATA TYPE	Format or Valid Values	Description	Examples of Returned Data
1	APPOINTMENT DATE/TIME	DATE/TIME	YYYMMDD@HHMM	The scheduled Appointment Date/Time	3021215@113 3021201@0815
2	CLINIC ID and NAME	POINTER and TEXT	ID^name	Clinic ID and name	150^CARDIOLOGY 32^TOM'S CLINIC
3	APPOINTMENT STATUS	ALPHA	N (No-Show) C (Cancelled) R (Scheduled/Kept) NT (No Action Taken)	The status of the appointment. N for no-show appointment, C for cancelled appointment (cancelled for ANY reason), NT for no action taken, and R for a future appointment or a past kept appointment	N C R NT
4	PATIENT ID and NAME	POINTER and TEXT	ID^name	Patient ID and name	34877^JONES,BOB 455^SCHILSON,BRIAN
5	LENGTH OF APPOINTMENT	NUMERIC	NNN	The scheduled length of appointment, in minutes	20 60
6	COMMENTS	TEXT	free text	Any comments associated with the appointment	PATIENT NEEDS WHEELCHAIR
7	OVERBOOK	TEXT	Y or N	"Y" if appointment is an overbook else "N"	Y N
8	ELIGIBILITY OF VISIT ID and NAME	POINTER and TEXT	ID^name	Eligibility code and name associated with the appointment	2^AID & ATTENDANCE

ID	FIELD NAME	DATA TYPE	Format or Valid Values	Description	Examples of Returned Data
					7^ALLIED VETERAN 13^COLLATERAL OF VET.
9	CHECK-IN DATE/TIME	DATE/TIME	YYYMMDD@HHMM	Date/time the patient checked in for the appointment	3021215@113
10	APPOINTMENT TYPE ID and NAME	POINTER and TEXT	ID^name	Type of appointment ID and name	1^COMPENSATION & PENSION 3^ORGAN DONORS 7^COLLATERAL OF VET.
11	CHECK-OUT DATE/TIME	DATE/TIME	YYYMMDD@HHMM	Date/time the patient checked out of the appointment	3021215@113
12	PATIENT STATUS	TEXT	I O null	For future, scheduled appointments, the current status of the patient. For past, kept appointments, the status at the time of the appointment. For cancelled and no-show appointments, this will be null	I O “”

14.2 FILTERS

14.2.1 Valid Appointment Status Filters

The SDAPSTAT filter parameter can be used if you wish to screen on appointment status. If this parameter contains a value or set of values, then those appointments will be returned in the resulting array set. Request more than 1 value in the filter by separating them with a semi-colon (i.e. SDAPSTAT=”R;NT”).

A null or undefined value will result in all being returned.

Table 81: Valid Appointment Status Filters

APPT STATUS FILTER VALUE	APPOINTMENT STATUS VALUE(S) RETURNED
R	R (scheduled/kept)

APPT STATUS FILTER VALUE	APPOINTMENT STATUS VALUE(S) RETURNED
N	N (no-show)
C	C (cancelled)
NT	NT (no action taken)
Null (default)	ALL appointment status values will be returned: R (scheduled/kept) N (no-show) C (cancelled) NT (no action taken)

14.2.2 Valid Patient Status Filters

The SDIOSTAT filter parameter can be used if you wish to retrieve only inpatient records or only outpatient records. A null or undefined value will result in both being returned.

Table 82: Valid Patient Status Filters

Patient Status Filter value	Description
I	Inpatient
O	Outpatient
Null (default)	Both will be returned (inpatient and outpatient)

14.2.3 Valid Patient Status and Appointment Status Filter Combinations

Due to the design of VistA, the patient status (new field #12) of appointments that are cancelled, no-show, or no action taken, will not be available. If the patient status field is requested, a null value will be returned in the ^TMP output global for this field. Patient status is determined by analyzing the value of the STATUS field (#3) on the Patient subfile (2.98).

Inpatient appointments contain an "I" in this field and are identified only if the field has not been changed (cancelled, etc.). Therefore, if the user wishes to specifically request only inpatient appointments (using the Patient Status filter = "I"), then the Appointment Status filter must be set to "R".

Any other value in the Appointment Status filter (including null or undefined) will cause an error (#113) to be generated and returned in the ^TMP global. The same is true when specifically requesting outpatient appointments. To retrieve No-Show, Cancelled, or No Action Taken appointments, the Patient Status filter must be left null or undefined. See table below for results of combinations of these two filters.

Table 83: Status Filter Combinations

Patient Status Filter	Appointment Status Filter	Valid/Invalid	Patient Status value in ^TMP (if requested)
I or O	R	Valid	I for inpatient appointments, O for outpatient appointments
I or O	N	Invalid	N/A
I or O	C	Invalid	N/A
I or O	NT	Invalid	N/A
I or O	Any combination of R, N, C, and NT	Invalid	N/A
I or O	Null/Undefined	Invalid	N/A
Null/Undefined	R	Valid	I for inpatient appointments; O for outpatient appointments
Null/Undefined	N	Valid	Null
Null/Undefined	C	Valid	Null
Null/Undefined	NT	Valid	Null
Null/Undefined	Null/Undefined, or any combination of R, N, C, and NT	Valid	I or O for scheduled/kept inpatient and outpatient appointments; null for cancelled, no-show, and no action taken appointments

Table 84: Filter Keys

PATIENT STATUS FILTER KEY	APPOINTMENT STATUS FILTER KEY
I = Inpatient	R = scheduled/kept appointments
O = Outpatient	N = all no-show appointments
	C = all cancelled appointments
	NT = no action taken appointments

14.3 Application Programmer Interface SDIMO

Name: SDIMO; Inpatient Medications for Outpatients

Declaration: $$SDIMO^SDAMA203(SDCLIEN,SDDFN)

Description: This API returns encounter date/time for a clinic IEN and patient DFN. If the patient does not have an encounter in the specified clinic today (or yesterday if current time is before 6am), then the patient's scheduled appointment date/time for that clinic, today or in the future (or yesterday if current time is before 6am), is returned. This API should be called using an EXTRINSIC call.

Arguments: SDCLIEN Clinic IEN (required) SDDFN Patient DFN (required)

Table 85: SDIMO API Return Values

Return Value	Meaning
1	Patient has at least one encounter today or one scheduled appointment today or in the future in the authorized clinic
0	Patient does not have an encounter today or an appointment today or in the future in the authorized clinic
-1	Clinic is not authorized, clinic is inactive, or clinic IEN is null
-2	Patient DFN is null
-3	Scheduling Database is unavailable
SDIMO(1)	Encounter date/time or appointment date/time

If a 1 is returned, then the variable SDIMO(1) will contain the encounter or appointment date/time. If something other than a 1 is returned, the variable SDIMO(1) will not be created.

Other: When processing has completed, the variable SDIMO(1) needs to be killed.

SDIMO Examples:

```
1)  Is patient 123 authorized to receive inpatient medication at clinic 800?
I $$SDIMO^SDAMA203(800,123) D
S APPTDT=$G(SDIMO(1))
K SDIMO(1)
;continue processing as needed
2)  Example of handling an error:
S SDRESULT=$$SDIMO^SDAMA203(800,123)
I SDRESULT<1 D
I SDRESULT=-1 D
process clinic error as needed
  Configuring Bar Code Label Printers
```

14.4 Configuring Bar Code Label Printers for Print Patient Label Option

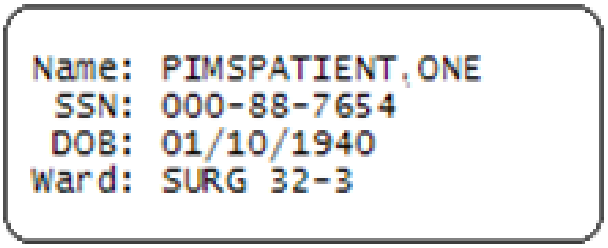
The Veteran Identification Card (VIC) provided by the VIC Replacement project does not support embossing of protected health information. Instead, a new Print Patient Label [DG

PRINT PATIENT LABEL] option will allow labels to be printed with the patient's protected health information.

The labels will contain the patient's name, social security number, and date of birth. An optional fourth line contains the patient's inpatient location (ward and room#).

The labels may be affixed to medical record forms in lieu of using the current embossed cards to imprint this information.

Figure 1: Example Label



The Print Patient Label [DG PRINT PATIENT LABEL] option was exported with the Veteran ID Card (VIC) Replacement patch (DG*5.3*571). This option was placed on the ADT Outputs Menu [DG OUTPUTS MENU] option.

This option supports plain text printing to dot matrix and laser printers by prompting the user for the number of lines that the label stock can contain. In addition, bar code label printers, such as Zebra and Intermec, are supported on systems that have installed the Kernel Support for Bar Code Printers patch (XU*8*205).

14.4.1 Hardware Setup

The printer must be physically connected to the network and then defined in the DEVICE (#3.5) and TERMINAL TYPE (#3.2) files.

14.4.2 Software Setup

Bar code label printers, such as the Zebra and Intermec printers, require control codes to be defined in the CONTROL CODES subfile (#3.2055) of the TERMINAL TYPE file (#3.2).

The patient label print routine (DGPLBL) checks for the existence of the control codes before attempting to execute. Presently, the patient label print routine (DGPLBL) uses eight control codes. DBIA #3435 allows direct MUMPS read access to the CONTROL CODES subfile (#3.2055) of the TERMINAL TYPE file (#3.2).

It is not required that all control codes be defined - just build the necessary control codes for the selected printer.

14.5 Control Code Overview

These are the control codes that are currently used by the patient label print routine (DGPLBL). In order for the routine to work correctly, these control codes must be entered through FileMan in the CONTROL CODES subfile (#3.2055) of the TERMINAL TYPE file (#3.2) using the names listed below.

Table 86: Control Codes

CODE	DESCRIPTION
FI	Format Initialization
FE	Format End
SL	Start of Label
EL	End of Label
ST	Start of Text
ET	End of Text
STF	Start of Text Field
ETF	End of Text Field

14.5.1 Patient Label Print Routine Control Code Use

The following pseudo-code listing shows the flow and the points at which each of the control codes are used. It is not required that all control codes be defined - just build the necessary control codes for the selected printer.

1. Label print routine invoked.
2. Control codes loaded into local array DGIOCC. Variable DGIOCC is defined to indicate whether or not control codes exist.
3. Format Initialization.
4. For each label printed:
    - Start of Label
    - Start of Text*
    - Start of Text Field*
    - Text Information*
    - End of Text Field*
    - End of Text*
    - End of Label.
5. Format End.

*indicates items that may be executed repeatedly

14.5.2 Label Printer Setup Examples

The following are examples of the control codes setup in the CONTROL CODES subfile (#3.2055) of the TERMINAL TYPE file (#3.2) for the Zebra and Intermec label printers.

These printers were used during the development process, and the examples are provided to guide the user in the control code setup. The examples provided are based on a 1 ½ by 3 ½ inch label.

14.5.3 Zebra Label Printer

Example of Control Codes setup for horizontal labels.

```
NUMBER: 1
ABBREVIATION: FI
FULL NAME: FORMAT INITIALIZATION
CONTROL CODE: W "^XA",!,"^LH0,0^FS",!
NUMBER: 2
ABBREVIATION: SL
FULL NAME: START LABEL
CONTROL CODE: W "^XA",! S DGY=30,DGX=10
NUMBER: 3
ABBREVIATION: ST
FULL NAME: START TEXT
CONTROL CODE: W "^FO",DGX,",",DGY,"^A0N,30,30" S DGY=DGY+40
NUMBER: 4
ABBREVIATION: STF
FULL NAME: START TEXT FIELD
CONTROL CODE: W "^FD"
NUMBER: 5
ABBREVIATION: ETF
FULL NAME: END TEXT FIELD
CONTROL CODE: W "^FS",!
NUMBER: 6
ABBREVIATION: EL
 FULL NAME: END LABEL
CONTROL CODE: W "^XZ",!
```

Example of Control Codes setup for vertical labels.

```
NUMBER: 1
ABBREVIATION: FI
FULL NAME: FORMAT INITIALIZATION
CONTROL CODE: W "^XA",!,"^LH0,0^FS",!
NUMBER: 2
ABBREVIATION: SL
FULL NAME: START LABEL
CONTROL CODE: W "^XA",! S DGY=50,DGX=190
NUMBER: 3
ABBREVIATION: ST
```

```
FULL NAME: START TEXT
CONTROL CODE: W "^FO",DGX,",",DGY,"^A0R,30,20" S DGX=DGX-40
NUMBER: 4
ABBREVIATION: STF
FULL NAME: START TEXT FIELD
CONTROL CODE: W "^FD"
NUMBER: 5
ABBREVIATION: ETF
FULL NAME: END TEXT FIELD
CONTROL CODE: W "^FS",!
NUMBER: 6
ABBREVIATION: EL
FULL NAME: END LABEL
CONTROL CODE: W "^XZ",!
```

14.6 Intermec Label Printer

Intermec label printers require that a label format be sent to the printer prior to sending any data to print. The label format is defined in an M routine, which is then defined in the OPEN EXECUTE field (#6) of the TERMINAL TYPE file (#3.2).

Two sample formats are provided with patch DG*5.3*571 in routine DGPLBL1.

The entry point HINTERM^DGPLBL1 creates a horizontal format label and the entry point VINTERM^DGPLBL1 creates a vertical format label. The following setup examples show the OPEN EXECUTE (#6) and CONTROL CODES (#55) field values that were used in the development process and are provided to guide the user in this setup.

The examples are based on a 1 ½ by 3 ½ inch label.

Example of Control Codes setup for horizontal labels

```
OPEN EXECUTE: D HINTERM^DGPLBL1
NUMBER: 1
ABBREVIATION: FI
FULL NAME: FORMAT INITIALIZATION
CONTROL CODE: W "<STX>R;<ETX>",!
NUMBER: 2
ABBREVIATION: SL
FULL NAME: START LABEL
CONTROL CODE: W "<STX><ESC>E2<ETX>",!,"<STX><CAN><ETX>",!
NUMBER: 3
ABBREVIATION: ST
FULL NAME: START TEXT
CONTROL CODE: W "<STX>”
NUMBER: 4
ABBREVIATION: ET
FULL NAME: END TEXT
```

```
CONTROL CODE: W "<CR><ETX>",!
NUMBER: 5
ABBREVIATION: EL
FULL NAME: END LABEL
CONTROL CODE: W "<STX><ETB><ETX>",!
```

Example of Control Codes setup for vertical labels.

```
OPEN EXECUTE: D VINTERM^DGPLBL1
NUMBER: 1
ABBREVIATION: FI
FULL NAME: FORMAT INITIALIZATION
CONTROL CODE: W "<STX>R;<ETX>",!
NUMBER: 2
ABBREVIATION: SL
FULL NAME: START LABEL
CONTROL CODE: W "<STX><ESC>E2<ETX>",!,"<STX><CAN><ETX>",!
NUMBER: 3
ABBREVIATION: ST
FULL NAME: START TEXT
CONTROL CODE: W "<STX>”
NUMBER: 4
ABBREVIATION: ET
FULL NAME: END TEXT
CONTROL CODE: W "<CR><ETX>",!
NUMBER: 5
ABBREVIATION: EL
FULL NAME: END LABEL
CONTROL CODE: W "<STX><ETB><ETX>",!
```

15 HL7 Interface Specification for Transmission of Ambulatory Care Data

NOTE: Starting December 1, 2018, the Ambulatory Care nightly job and Performance Monitor data extract daily transmissions, and monthly APM Performance Monitor Task generated from each VistA site are no longer needed to be sent to the AITC; the NPCDB is being shut down in Austin and the Corporate Data Warehouse (CDW) is replacing the database as the authoritative source. The VistA extracts done to populate the CDW will replace the need for the HL7 transmission.

This transmission has been stopped with Scheduling patch SD*5.3*640. This patch release includes:

- Disable AMB-CARE and SDPM logical links in the HL LOGICAL LINK file (#870).
- Unschedule the following three tasks:
  - Ambulatory Care Nightly Transmission to NPCDB [SCDX AMBCAR NIGHTLY XMIT]
  - Nightly job for PM data extract [SDOQM PM NIGHTLY JOB]
  - Schedule APM Performance Monitor Task [SCRPW APM TASK JOB].
- Place the following options 'out of order':
  - Ambulatory Care Nightly Transmission to NPCDB [SCDX AMBCAR NIGHTLY XMIT]
  - Retransmit Ambulatory Care Data by Date Range [SCDX AMBCAR RETRANS BY DATE]
  - Retransmit Selected Error Code [SCDX AMBCAR RETRANS ERROR]
  - Selective Retransmission of NPCDB Rejections [SCDX AMBCAR RETRANS SEL REJ]
  - Schedule APM Performance Monitor Task [SCRPW APM TASK JOB]
  - Performance Monitor Retransmit Report (AAC) [SCRPW PM RETRANSMIT REPORT]
  - Nightly job for PM data extract [SDOQM PM NIGHTLY JOB]

This interface specification specifies the information needed for Ambulatory Care data reporting. This data exchange will be triggered by specific outpatient events that relate to workload credit in VISTA. The basic communication protocol will be addressed, as well as the information that will be made available and how it will be obtained.

This application uses an abstract message approach and encoding rules specified by HL7. HL7 is used for communicating data associated with various events which occur in health care environments. For example, when a check out occurs in VISTA, the event will trigger an update patient information message. This message is an unsolicited transaction to all external systems interfacing with VISTA.

The formats of these messages conform to the Version 2.3 HL7 Interface Standards where applicable. HL7 custom message formats ("Z" segments) are used only when necessary.

15.1 Assumptions

Assumptions have been made at the beginning of this project in order to help define the scope and meet the initial needs in interfacing with the Austin Information Technology Center (AITC), (formerly the Austin Automation Center (AAC)).

15.1.1 Message Content

The data sent in the HL7 messages will be limited to the information that can be processed by the AITC, with the exception of the PID and ZPD segments, which will be populated using the nationally supported VISTA call. The data sent will also be limited to what is available in VISTA.

In order to capture the most information, specific outpatient events will generate messages to the AITC systems. This is not intended to cover all possible outpatient events, only those events which may result in the capture of workload information and data needed to update the National Patient Care Database (NPCDB).

The mode for capturing data for outpatient events was chosen to capture as much of the data as possible. (See Data Capture and Transmission (1.2.2) for further information on the mode for capturing the outpatient events.)

15.1.2 Data Capture and Transmission

When AICS, PIMS, and PCE options or calls are used to update specific outpatient encounter data in VISTA, these events and changes will be captured. Any changes made to the VISTA database in non-standard ways, such as a direct global set by an application or by MUMPS code, will not be captured.

15.1.3 Background Messages

A nightly background job will be sending HL7 messages for each outpatient encounter event for the day.

15.1.4 Batch Messages & Acknowledgements

Batch messages will be used to transmit the outpatient encounter events.

Each batch message sent will be acknowledged at the application level. The batch acknowledgment will contain acknowledgment messages only for those messages containing errors.

Using this mode, it is possible that an empty batch acknowledgment will be sent. This will happen only when all messages in the batch being acknowledged were accepted.

15.1.5 VA MailMan Lower Level Protocol

HL7 V. 1.6 of the VA MailMan lower level protocol (LLP) will be used. This version of the VA MailMan LLP differs from HL7 V. 1.5 in that a blank line is placed between each segment in the message [denoting a carriage return].

15.2 HL7 Control Segments

This section defines the HL7 control segments supported by VistA. The messages are presented separately and defined by category. Segments are also described. The messages are presented in the following categories:

- Message Control
- Unsolicited Transactions from VistA (Section 3)

15.3 Message Definitions

From the VISTA perspective, all incoming or outgoing messages are handled or generated based on an event.

In this section, and the following sections, these elements will be defined for each message:

- The trigger events
- The message event code
- A list of segments used in the message
- A list of fields for each segment in the message

Each message is composed of segments. Segments contain logical groupings of data. Segments may be optional or repeatable. A [ ] indicates the segment is optional, the { } indicates the segment is repeatable.

For each message category there will be a list of HL7 standard segments or "Z" segments used for the message.

15.4 Segment Table Definitions

For each segment, the data elements are described in table format. The table includes the sequence number (SEQ), maximum length (LEN), data type (DT), required or optional (R/O), repeatable (RP/#), the table number (TBL #), the element name, and the VISTA description.

Each segment is described in the following sections.

15.5 Message Control Segments

This section describes the message control segments which are contained in message types described in this document. These are generic descriptions.

Any time any of the segments described in this section are included in a message in this document, the VISTA descriptions and mappings will be as specified here, unless otherwise specified in that section.

15.5.1 MSH MESSAGE HEADER SEGMENTS

The message header segment sequences are detailed in the table below.

Table 87: Message Header Segments

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	1	ST	R			Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat = | (bar) Escape = \ (back slash) Subcomponent = & (ampersand)
3	15	ST				Sending Application	When originating from facility: AMBCARE-DH441 When originating from NPCDB NPCD-AAC*
4	20	ST				Sending Facility	When originating from facility: Station's facility number When originating from NPCDB: 200
5	30	ST				Receiving Application	Not used
6	30	ST				Receiving Facility	Not used
7	26	TS				Date/Time Of Message	Date and time message was created
8	40	ST				Security	Not used
9	7	CM	R		0076 0003	Message Type	2 Components Component 1: Refer to Table 0076 Component 2: Refer to Table 0003
10	20	ST	R			Message Control ID	Automatically generated by VISTA HL7 Package
11	1	ID	R		0103	Processing ID	P (production)

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
12	8	ID	R		0104	Version ID	2.3 (Version 2.3)
13	15	NM				Sequence Number	Not used
14	180	ST				Continuation Pointer	Not used
15	2	ID			0155	Accept Acknowledgment Type	NE (never acknowledge)
16	2	ID			0155	Application Acknowledgment Type	AL (always acknowledge)
17	2	ID				Country Code	Not used
*AAC stands for Austin Automation Center. The name of that facility has been changed to Austin Information Technology Center.							

15.5.2 BHS - Batch Header Segment

Table 88: Batch Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	1	ST	R			Batch Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Batch Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat = | (bar) Escape = \ (back slash) Subcomponent = & (ampersand)
3	15	ST				Batch Sending Application	When originating from facility: AMBCARE-DH142 When originating from NPCDB: NPCD-AAC*
4	20	ST				Batch Sending Facility	When originating from facility: Station's facility number When originating from NPCDB: 200

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
5	15	ST				Batch Receiving Application	When originating from facility: NPCD-AAC When originating from NPCDB: AMBCARE-DH142
6	20	ST				Batch Receiving Facility	When originating from facility: 200 When originating from NPCDB: Station's facility number
7	26	TS				Batch Creation Date/Time	Date and time batch message was created
8	40	ST				Batch Security	Not used
	20	ST				Batch Name/ID/Type	4 Components: Component 1: Not used Component 2: P Component 3: ADT|Z00 Component 4: 2.3
10	80	ST				Batch Comment	2 Components[1]: Component 1: Refer to Table 0008 Component 2: Text Message
11	20	ST				Batch Control ID	Automatically generated by VistA HL7 Package
12	20	ST				Reference Batch Control ID	Batch Control ID of batch message being acknowledged

The VISTA HL7 package has placed special meaning on this field.

[1] The VistA HL7 package has placed special meaning on this field. Note that this field is only used with batch acknowledgments.

*AAC stands for Austin Automation Center. The name of that facility has been changed to Austin Information Technology Center.

15.5.3 BTS Batch Trailer Segment

BTS batch trailer segment.

Table 89: Batch Trailer Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	10	ST			0093	Batch Message Count	Number of messages within batch
2	80	ST			0094	Batch Comment	Not used
3	100	CM		Y	0095	Batch Totals	Not used

15.5.4 MSA MESSAGE ACKNOWLEDGMENT SEGMENT

Table 90: Message Acknowledgement Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	2	ID	R		0008	Acknowledgment Code	Refer to Table 0008
2	20	ST	R			Message Control ID	Message Control ID of message being acknowledged
3	80	ST			NPCD 001	Text Message	Repetitive list of error codes denoting why the message was rejected[2]
4	15	NM				Expected Sequence Number	Not used
5	1	ID			0102	Delayed Acknowledgment Type	Not used
6	100	CE				Error Condition	Not used

15.5.5 EVN EVENT TYPE SEGMENT

Table 91: Event Type Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	3	ID	R		0003	Event Type Code	Refer to Table 0003

[2] Special meaning placed on this field to support multiple rejection reasons by the National Patient Care Database (NPCDB).

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
2	26	TS	R			Date/Time of Event	Date/Time Event Occurred
3	26	TS				Date/Time Planned Event	Not used
4	3	ID			0062	Event Reason Code	Not used
5	60	CN			0188	Operator ID	Not used

15.6 PID Patient Identification Segment

Please refer to "Section 3.15.PID-Patient Identification Segment" in the "MPI/PD HL7 Interface Specification" manual found on the VistA Documentation Library (VDL).

15.6.1 PD1 Patient Additional Demographic Segment

Table 92: Patient Additional Demographic Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	2	IS	O	Y	0223	LIVING DEPENDENCY	NOT USED
2	2	IS	O		0220	LIVING ARRANGEMENT	NOT USED
3	90	XON	O	Y		PATIENT PRIMARY FACILITY[3]	8 COMPONENTS FACILITY NAME NOT USED FACILITY NUMBER NOT USED NOT USED NOT USED NOT USED NOT USED
4	90	XCN	O	Y		PATIENT PRIMARY CARE PROVIDER NAME & ID NO.	14 COMPONENTS 2 SUB-COMPONENTS POINTER TO ENTRY IN NEW PERSON FILE (#200) FACILITY NUMBER NOT USED NOT USED NOT USED NOT USED

[3] This element is only available from CIRN enabled facilities.

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
							NOT USED NOT USED THIS WILL ALWAYS BE VA200 (NEW PERSON FILE) NOT USED NOT USED NOT USED NOT USED NOT USED NOT USED
5	2	IS	O		0231	STUDENT INDICATOR	NOT USED
6	2	IS	O		0295	HANDICAP	NOT USED
7	2	IS	O		0315	LIVING WILL	NOT USED
8	2	IS	O		0316	ORGAN DONOR	NOT USED
9	2	ID	O		0136	SEPARATE BILL	NOT USED
10	2	CX	O	Y		DUPLICATE PATIENT	NOT USED
11	1	CE	O		0125	PUBLICITY INDICATOR	NOT USED
12	1	ID	O		01293	PROTECTION INDICATOR	NOT USED

15.6.2 PV1 Patient Visit Segment

Table 93: Patient Visit Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	4	SI				Set ID - Patient Visit	Sequential Number
2	1	ID	R		0004	Patient Class	This will always be O (outpatient)
3	12	CM				Assigned Patient Location	Not used
4	4	ID			0007	Admission Type	Refer to Table SD009 (Purpose of Visit)
5	20	ST				Preadmit Number	Not used
6	12	CM				Prior Patient Location	Not used
7	60	CN			0010	Attending Doctor	Not used
8	60	CN			0010	Referring Doctor	Not used
9	60	CN		Y	0010	Consulting Doctor	Not used

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
10	3	ID			0069	Hospital Service	Not used
11	12	CM				Temporary Location	Not used
12	2	ID			0087	Preadmit Test Indicator	Not used
13	2	ID			0092	Readmission Indicator	Not used
14	3	ID			0023	Admit Source	Refer to Table 0023 (Location of Visit)
15	2	ID		Y	0009	Ambulatory Status	Not used
16	2	ID			0099	VIP Indicator	Not used
17	60	CN			0010	Admitting Doctor	Not used
18	2	ID			0018	Patient Type	Not used
19	15	NM				Visit Number	Pointer to entry in OUTPATIENT ENCOUNTER file (#409.68)
20	50	CM		Y	0064	Financial Class	Not used
21	2	ID			0032	Charge Price Indicator	Not used
22	2	ID			0045	Courtesy Code	Not used
23	2	ID			0046	Credit Rating	Not used
24	2	ID		Y	0044	Contract Code	Not used
25	8	DT		Y		Contract Effective Date	Not used
26	12	NM		Y		Contract Amount	Not used
27	3	NM		Y		Contract Period	Not used
28	2	ID			0073	Interest Code	Not used
29	1	ID			0110	Transfer to Bad Debt Code	Not used
30	8	DT				Transfer to Bad Debt Date	Not used
31	10	ID			0021	Bad Debt Agency Code	Not used
32	12	NM				Bad Debt Transfer Amount	Not used
33	12	NM				Bad Debt Recovery Amount	Not used
34	1	ID			0111	Delete Account Indicator	Not used
35	8	DT				Delete Account Date	Not used
36	3	ID			0112	Discharge Disposition	Not used
37	25	CM			0113	Discharged to Location	Not used

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
38	2	ID			0114	Diet Type	Not used
39	74	ID			0115	Servicing Facility	Facility number and suffix
40	1	ID			0116	Bed Status	Not used
41	2	ID			0117	Account Status	Not used
42	12	CM				Pending Location	Not used
43	12	CM				Prior Temporary Location	Not used
44	26	TS				Admit Date/Time	Date/time of encounter
45	26	TS				Discharge Date/Time	Not used
46	12	NM				Current Patient Balance	Not used
47	12	NM				Total Charges	Not used
48	12	NM				Total Adjustments	Not used
49	12	NM				Total Payments	Not used
50	20	CM				Alternate Visit ID	Unique Identifier (PCE)

15.6.3 PV2 Patient Visit - Additional Information Segment

Table 94: PV2 Additional Information Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME	Vista Description
1	80	PL	C			00181	Prior Pending Location	Not used
2	250	CE	O		0129	00182	Accommodation Code	Not used
3	250	CE	O			00183	Admit Reason	Not used
4	250	CE	O			00184	Transfer Reason	Not used
5	25	ST	O	Y		00185	Patient Valuables	Not used
6	25	ST	O			00186	Patient Valuables Location	Not used
7	2	IS	O	Y	0130	00187	Visit User Code	Not used
8	26	TS	O			00188	Expected Admit Date/Time	Not used
9	26	TS	O			00189	Expected Discharge Date/Time	Not used
10	3	NM	O			00711	Estimated Length of Inpatient Stay	Not used

[4] According to the HL7 standard, the maximum length of this element is 2.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME	Vista Description
11	3	NM	O			00712	Actual Length of Inpatient Stay	Not used
12	50	ST	O			00713	Visit Description	Not used
13	250	XCN	O	Y		00714	Referral Source Code	Not used
14	8	DT	O			00715	Previous Service Date	Not used
15	1	ID	O		0136	00716	Employment Illness Related Indicator	Not used
16	1	IS	O		0213	00717	Purge Status Code	Not used
17	8	DT	O			00718	Purge Status Date	Not used
18	2	IS	O		0214	00719	Special Program Code	Not used
19	1	ID	O		0136	00720	Retention Indicator	Not used
20	1	NM	O			00721	Expected Number of Insurance Plans	Not used
21	1	IS	O		0215	00722	Visit Publicity Code	Not used
22	1	ID	O	Y	0136	00723	Visit Protection Indicator	Visit Protection Indicator
23	250	XON	O			00724	Clinic Organization Name	Not used
24	2	IS	O		0216	00725	Patient Status Code	Not used
25	1	IS	O		0217	00726	Visit Priority Code	Not used
26	8	DT	O			00727	Previous Treatment Date	Not used
27	2	IS	O		0112	00728	Expected Discharge Disposition	Not used
28	8	DT	O			00729	Signature on File Date	Not used
29	8	DT	O			00730	First Similar Illness Date	Not used
30	250	CE	O		0218	00731	Patient Charge Adjustment Code	Not used
31	2	IS	O		0219	00732	Recurring Service Code	Not used
32	1	ID	O		0136	00733	Billing Media Code	Not used
33	26	TS	O			00734	Expected Surgery Date and Time	Not used
34	1	ID	O		0136	00735	Military Partnership Code	Not used
35	1	ID	O		0136	00736	Military Non-Availability Code	Not used
36	1	ID	O		0136	00737	Newborn Baby Indicator	Not used
37	1	ID	O		0136	00738	Baby Detained Indicator	Not used
38	250	CE	O		0430	01543	Mode of Arrival Code	Not used

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME	Vista Description
39	250	CE	O	Y	0431	01544	Recreational Drug Use Code	Not used
40	250	CE	O		0432	01545	Admission Level of Care Code	Not used
41	250	CE	O	Y	0433	01546	Precaution Code	Not used
42	250	CE	O		0434	01547	Patient Condition Code	Not used
43	2	IS	O		0315	00759	Living Will Code	Not used
44	2	IS	O		0316	00760	Organ Donor Code	Not used
45	250	CE	O	Y	0435	01548	Advance Directive Code	Not used
46	8	DT	O			01549	Patient Status Effective Date	Not used
47	26	TS	C			01550	Expected LOA Return Date/Time	Not used
48	26	TS	O			01841	Expected Pre-admission Testing Date/Time	Not used

15.6.4 DG1 Diagnosis Information Segment

Table 95: Diagnosis Information Segment

SEQ	LEN	DT	R/O	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	4	SI	R		Set ID - Diagnosis	Sequential Number
2	2	ID	R	0053	Diagnosis Coding Method	I9 = ICD-9-CM I10 = ICD-10-CM
3	8	ID		0051	Diagnosis Code	Diagnosis code from OUTPATIENT DIAGNOSIS (#409.43) and ICD DIAGNOSIS (#80) files. Refer to Table 0051 for sample listing of possible values.
4	40	ST			Diagnosis Description	Corresponding diagnosis description from ICD DIAGNOSIS (#80) file. Refer to Table 0051 for sample listing of possible values.
5	26	TS			Diagnosis Date/Time	Date/time of encounter
6	2	ID		0052	Diagnosis Type	Not used
7	60	CE		0118	Major Diagnostic Category	Not used

SEQ	LEN	DT	R/O	TBL#	ELEMENT NAME	VISTA DESCRIPTION
8	4	ID		0055	Diagnostic Related Group	Not used
9	2	ID			DRG Approval Indicator	Not used
10	2	ID		0056	DRG Grouper Review Code	Not used
11	60	CE		0083	Outlier Type	Not used
12	3	NM			Outlier Days	Not used
13	12	NM			Outlier Cost	Not used
14	4	ST			Grouper Version And Type	Not used
15	2	NM			Diagnosis Priority	Will contain 1 if this is the primary diagnosis for the episode.
16	60	CN			Diagnosing Clinician	Not used

15.6.5 PR1 Procedure Information Segment

Table 96: Procedure Information Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	4	SI	R			Set ID - Procedure	Sequential Number
2	2	ID	R		0089	Procedure Coding Method	Not used
3	80	CE	R		0088	Procedure Code	3 Components: 1. Procedure Code 2. Corresponding procedure description from CPT file (#81) 3. Coding Method (this will always be C4) Refer to Table 0088 for sample listing of possible procedure codes and descriptions.
4	40	ST				Procedure Description	Not used
5	26	TS				Procedure Date/Time	Not used
6	2	ID			0090	Procedure Type	Not used

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
7	4	NM				Procedure Minutes	Not used
8	60	CN				Anesthesiologist	Not used
9	2	ID			0019	Anesthesia Code	Not used
10	4	NM				Anesthesia Minutes	Not used
11	60	CN				Surgeon	Not used
12	60	CM		Y		Procedure Practitioner	Not used
13	2	ID			0059	Consent Code	Not used
14	2	NM				Procedure Priority	Not used
15	80	CD				Associated Diagnosis Code	Not used
16	80	CE		Y	0340	Procedure Code Modifier	3 Components: 1. Modifier Code 2. Corresponding modifier description from CPT MODIFIER file (#81.3) 3. Coding Method: C=CPT H=HCPCS Refer to Table 0340 for sample listing of possible modifier codes and descriptions.

15.6.6 ROL Role Segment

Table 97: Role Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
1	60	EI	R			Role Instance ID	4 Components Entity Identifier[5] [6]

[5] This element will be 1-15 characters/digits followed by a hyphen (-) followed by 3 characters/digits followed by a hyphen (-) followed by 1-15 digits followed by an asterisk (*) followed by 1-4 digits. (Ex: 123AZ-ALB-1934*1)

[6] The trailing set of digits (i.e., everything to the right of the asterisk) are an appended Set ID and should be treated as such.

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
							Not used Not used Not used
2	2	ID	R		0287	Action Code	This will always be CO (correct)
3	80	CE	R			Role	6 Components Provider Type Code Not used This will always be VA8932.1 (PERSON CLASS file) Primary Encounter Provider Designation Not used This will always be VA01
4	80	XCN	R	Y/2		Role Person	14 Components Repetition 1 2 Sub-Components Pointer to entry in NEW PERSON file (#200) Facility Number Not used Not used Not used Not used Not used Not used This will always be **VA200** (NEW PERSON file) Not used Not used Not used Not used Not used Not used Not used Repetition 2 SSN Not used Not used Not used Not used Not used Not used This will always be **SSA** (Social Security Administration)

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA DESCRIPTION
							Not used Not used Not used Not used Not used Not used
5	26	TS	O			Role Begin Date/Time	Not used
6	26	TS	O			Role End Date/Time	Not used
7	80	CE	O			Role Duration	Not used
8	80	CE	O			Role Action Reason	Not used

15.6.7 ZPD VA-Specific Patient Information Segment

Table 98: VA-Specific Patient Information Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID - PATIENT ID
2	60	ST				REMARKS
3	20	ST				PLACE OF BIRTH CITY
4	2	ST				PLACE OF BIRTH STATE
5	2	ID			VA02	CURRENT MEANS TEST STATUS
6	35	ST				FATHER'S NAME
7	35	ST				MOTHER'S NAME
8	1	ID			VA01	RATED INCOMPETENT
9	19	TS				DATE OF DEATH
10	48	PN				COLLATERAL SPONSOR
11	1	ID			VA01	ACTIVE HEALTH INSURANCE?
12	1	ID			VA01	COVERED BY MEDICAID?
13	19	TS				DATE MEDICAID LAST ASKED
14	1	ID			VA07	RACE[7]
15	3	ID			VA08	RELIGION[8]

[7] This element is also found in the Patient Identification (PID) segment.
[8] This element is also found in the Patient Identification (PID) segment.

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
16	1	ID			VA01	HOMELESS INDICATOR
17	1	ID				POW STATUS INDICATED?
18	2	ID			VA12	TYPE OF INSURANCE
19	1	ID			VA14	MEDICATION COPAYMENT EXEMPTION STATUS
20	1	ID			VA0023	PRISONER OF WAR LOCATION CODE
21	30	ST				PRIMARY CARE TEAM

15.6.8 ZEL VA-Specific Patient Eligibility Segment

Table 99: ZEL VA-Specific Patient Eligibility Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID
2	2	ID			VA04	ELIGIBILITY CODE
3	16	CK				LONG ID
4	12	ST				SHORT ID
5	1	ID			VA05	DISABILITY RETIREMENT FROM MIL.
6	8	NM				CLAIM FOLDER NUMBER
7	40	ST				CLAIM FOLDER LOCATION
8	1	ID			VA01	VETERAN?
9	30	ST				TYPE OF PATIENT
10	1	ID			VA06	ELIGIBILITY STATUS
11	8	DT				ELIGIBILITY STATUS DATE
12	8	DT				ELIGIBILITY INTERIM RESPONSE
13	50	ST				ELIGIBILITY VERIFICATION METHOD
14	1	ID			VA01	RECEIVING A&A BENEFITS?
15	1	ID			VA01	RECEIVING HOUSEBOUND BENEFITS?
16	1	ID			VA01	RECEIVING A VA PENSION?
17	1	ID			VA01	RECEIVING A VA DISABILITY?
18	1	ID			VA01	EXPOSED TO AGENT ORANGE
19	1	ID			VA01	RADIATION EXPOSURE INDICATED?
20	1	ID			VA01	SW ASIA CONDITIONS?

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
21	5	NM				TOTAL ANNUAL VA CHECK AMOUNT
22	1	ID			VA0022	RADIATION EXPOSURE METHOD CODE
23	1	ID			VA0036	MILITARY SEXUAL TRAUMA STATUS
24	8	DT				DATE MILITARY SEXUAL TRAUMA STATUS CHANGED
25	7	ID			VA0115	SITE DETERMINING MST STATUS
26	8	DT				AGENT ORANGE REGISTRATION DATE
27	8	DT				AGENT ORANGE EXAM DATE
28	6	NM				AGENT ORANGE REGISTRATION #
29	1	ID			VA0046	AGENT ORANGE EXPOSURE LOCATION
30	8	DT				RADIATION REGISTRATION DATE
31	8	DT				SW ASIA COND EXAM DATE
32	8	DT				SW ASIA COND REGISTRATION DATE
33	8	DT				MONETARY BEN. VERIFY DATE
34	8	DT				USER ENROLLEE VALID THROUGH
35						USER ENROLLEE SITE
36						ELIGIBILITY VERIFICATION SOURCE AND SITE
37	1	ID			VA01	COMBAT VETERAN
38	8	DT				COMBAT VETERAN STATUS END DATE
39	1	ID			VA01	DISCHARGE DUE TO DISABILITY?
40	1	ID			VA01	PROJECT 112/SHAD?

15.6.9 VA-Specific Income Segment

Table 100: VA-Specific Income Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID
2	1	ID			VA01	MARRIED LAST CALENDAR YEAR
3	1	ID			VA01	LIVED WITH PATIENT

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
4	8	NM				AMOUNT CONTRIBUTED TO SPOUSE
5	1	ID			VA01	DEPENDENT CHILDREN
6	1	ID			VA01	INCAPABLE OF SELF-SUPPORT
7	1	ID			VA01	CONTRIBUTED TO SUPPORT
8	1	ID			VA01	CHILD HAD INCOME
9	1	ID			VA01	INCOME AVAILABLE TO YOU
10	2	NM				NUMBER OF DEPENDENT CHILDREN
11	2	ST				NUMBER OF DEPENDENTS
12	10	NM				PATIENT INCOME
13	2	ID			VA10	MEANS TEST INDICATOR

15.6.10 ZCL VA-Specific Outpatient Classification Segment

Table 101: ZCL VA-Specific Outpatient Classification Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID
2	2	ID	R		SD008	Outpatient Classification Type
3	50	ST				Value

15.6.11 ZSC VA-Specific Stop Code Segment

Table 102: ZSC VA-Specific Stop Code Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			Sequential number
2	4	ID	R		SD001	Stop Code
3	30	ST			SD001	Name
4	1	NM				Cost Distribution Center
5	1	ID				Current Exempt. Fr Classification

15.6.12 ZSP VA-Specific Service Period Segment

Table 103: ZSP – VA-Specific Service Period Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
2	1	ID	R		VA01	Service Connected?
3	3	NM				Service Connected Percentage
4	2	ID			VA11	Period of Service
5	1	ST				VIETNAM SERVICE INDICATED?
6	1	ID			VA01	P&T
7	1	ID			VA01	UNEMPLOYABLE
8	19	TS				SC AWARD DATE

15.6.13 ZEN VA-Specific Enrollment Segment

Table 104: ZEN VA-Specific Enrollment Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID
2	8	DT				ENROLLMENT DATE
3	1	ID			VA0024	SOURCE OF ENROLLMENT
4	1	ID			VA0015	ENROLLMENT STATUS
5	1	ID			VA0016	REASON CANCELED/DECLINED
6	60	TX				CANCELED/DECLINED REMARKS
7	7	ID			VA0115	FACILITY RECEIVED
8	7	ID			VA0115	PRIMARY FACILITY
9	1	ID			VA0021	ENROLLMENT PRIORITY
10	8	DT				EFFECTIVE DATE
11	8	DT				ENROLLMENT APPLICATION DATE
12	8	DT				ENROLLMENT END DATE
13	1	IS			VA035	ENROLLMENT SUB-GROUP
14	2	ID				SOURCE DESIGNATION V=VISTA, E = ESR, PA = PCP Active, PI = PCP Inactive

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
15	1	IS			VA117	REASON FOR CLOSED APPLICATION
16	1	IS			VA001	PT APPLIED FOR ENROLLMENT? 0 – No 1 - Yes
17	1	IS				REGISTRATION ONLY REASON '1' - C&P DISABILITY BENEFITS EXAM '2' - ACTIVE DUTY '3' - SERVICE CONNECTED ONLY '4' - EXPOSURE REGISTRY EXAM '5' - RESEARCH '6' - HUMANITARIAN/EMERGENCY '7' - EMPLOYEE '8' - BENEFICIARY '9' - OTHER THAN HONORABLE (OTH) '10' - MARRIAGE/FAMILY COUNSELING '11' - COLLATERAL (OTHER) '12' - ART/IVF '13' - NEWBORN '14' - LEGISLATIVE MANDATE '15' - OTHER '16' - NORTH CHICAGO ACTIVE DUTY '17' - UNANSWERED '18' - CAREGIVER '19' - VHA TRANSPLANT PROGRAM
18	8	DT				REGISTRATION ONLY DATE
19	8	ST				SOURCE OF REGISTRATION Valid values: '1' - 'VAMC' '2' - 'HEC '3' - 'HCA' '4' – CARMA '5' - OTHER

15.7 PURPOSE

This section defines the HL7 message transactions that are necessary to support the outpatient database interface for the Austin Information Technology Center (AITC), (formerly the Austin Automation Center (AAC)).

These messages will use the generic HL7 format, so that they can be expanded later to support new interfaces at other facilities.

15.8 Trigger Events and Message Definitions

Each triggering event is listed below, along with the applicable form of the message to be exchanged. The notation used to describe the sequence, optionally, and repetition of segments is described in the HL7 Final Standard Manual, Chapter 2, Section 2.4.8, Chapter Formats for Defining Abstract Messages, and in summary form, in Section 2.1 of this document.

15.8.1 Update Patient Information (A08)

The Outpatient Event Driver will be triggered under the following circumstances:

- When an outpatient appointment is checked out
- When a checked out outpatient appointment is edited
- When stop codes for an outpatient appointment are added or edited
- When a check out creates an occasion of service

Taking advantage of the outpatient event driver, this will trigger an A08 message to be sent. The receiving system will replace any data that exists with the "new" data that is transmitted with this message.

Table 105: A08 Codes and Descriptions

CODE	DESCRIPTION
ADT	ADT Message
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PD1	Patient Additional Demographic
PV1	Patient Visit
PV2	Patient Visit Additional Information
[{ DG1 }]	Diagnosis Information
{ PR1 }	Procedure Information
{ROL}	Role
ZPD	VA-Specific Patient Information
ZEL	VA-Specific Patient Eligibility Information
ZIR	VA-Specific Income
{ZCL}	VA-Specific Outpatient Classification
{ZSC}	VA-Specific Stop Code

CODE	DESCRIPTION
ZSP	VA-Specific Service Period
ZEN	VA Specific Enrollment
ACK	General Acknowledgment Message
MSH	Message Header
MSA	Message Acknowledgment

15.8.2 Delete a Patient Record (A23)

When a check out is deleted, this message instructs the receiver to delete the information for this patient's visit.

Table 106: A23 Codes and Descriptions

CODE	DESCRIPTION
ADT	ADT Message
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PD1	Patient Additional Demographic
PV1	Patient Visit
ZPD	VA-Specific Patient Information
ACK	General Acknowledgment Message
MSH	Message Header
MSA	Message Acknowledgment

15.9 SUPPORTED AND USER-DEFINED HL7 TABLES

15.9.1 TABLE 0001 SEX

Table 107: Table 0001 Sex

VALUE	DESCRIPTION
F	FEMALE
M	MALE
O	OTHER
U	UNKNOWN

15.9.2 TABLE 0002 MARITAL STATUS

Table 108: Table 0002 Marital Status

VALUE	DESCRIPTION
A	SEPARATED
D	DIVORCED
M	MARRIED
S	SINGLE
W	WIDOWED

15.9.3 TABLE 0003 EVENT TYPE CODE

Table 109: Table 0003 Event Type Code

VALUE	DESCRIPTION
A08	UPDATE PATIENT INFORMATION
A23	DELETE PATIENT RECORD

15.9.4 TABLE 0008 ACKNOWLEDGMENT CODE

Table 110: Table 0008 Acknowledgment Code

VALUE	DESCRIPTION
AA	APPLICATION ACKNOWLEDGMENT: ACCEPT
AE	APPLICATION ACKNOWLEDGMENT: ERROR
AR	APPLICATION ACKNOWLEDGMENT: REJECT
CA	ACCEPT ACKNOWLEDGMENT: COMMIT ACCEPT
CE	ACCEPT ACKNOWLEDGMENT: COMMIT ERROR
CR	ACCEPT ACKNOWLEDGMENT: COMMIT REJECT

15.9.5 TABLE 0023 ADMIT SOURCE (USER DEFINED)

Used for Location of Visit. The two possible values and their descriptions are:

- 1 This Facility
- 6 Other Facility

15.9.6 TABLE 0051 DIAGNOSIS CODE (USER DEFINED)

Use ICD DIAGNOSIS (#80) file, Code Number (.01) for value and Diagnosis (3) for Description. Sample listing of possible values.

- 253.2 PANHYPOPITUITARISM
- 253.3 PITUITARY DWARFISM
- 253.4 ANTER PITUITARY DIS NEC
- 253.5 DIABETES INSIPIDUS
- 253.6 NEUROHYPOPHYSIS DIS NEC
- 253.7 IATROGENIC PITUITARY DIS
- 253.8 DISEASES OF THYMUS NEC
- 253.9 PITUITARY DISORDER NOS
- 254.1 ABSCESS OF THYMUS
- 254.8 DISEASES OF THYMUS NEC
- 254.9 DISEASE OF THYMUS NOS
- 255.1 HYPERALDOSTERONISM
- 255.2 ADRENOGENITAL DISORDERS

15.9.7 TABLE 0069 HOSPITAL SERVICE (USER DEFINED)

Use SPECIALTY file (#42.4), PTF Code (.001). Sample listing of possible values.

- 2 CARDIOLOGY
- 6 DERMATOLOGY
- 7 ENDOCRINOLOGY
- 8 GEM ACUTE MEDICINE
- 12 CORONARY CARE UNIT
- 12 EMERGENCY MEDICINE
- 15 GENERAL MEDICINE
- 21 BLIND REHAB
- 31 GEM INTERMEDIAT E CARE
- 55 EVAL/BRF TRMT PTSD
- 72 ALCOHOL

- 85 DOM
- 88 DOMICILIARY PTSD
- 91 GASTROENTEROLOGY
- 92 GEN INTERMEDIATE PSYCH

15.9.8 TABLE 0076 MESSAGE TYPE

Sample listing of possible values.

- ADT ADT MESSAGE
- ACK GENERAL ACKNOWLEDGMENT

15.9.9 TABLE 0088 PROCEDURE CODE (USER DEFINED)

Sample listing of possible values.

- 10141 INCISION AND DRAINAGE OF HEMATOMA; COMPLICATED

15.9.10 TABLE 0115 SERVICING FACILITY (USER DEFINED)

Sample listing of possible values.

- 512 9AC Perry Point (Nursing Home)

15.9.11 TABLE 0133 PROCEDURE PRACTITIONER TYPE (USER DEFINED)

Sample listing of possible values.

Table 111: Procedure Practitioner Types

VALUE	OCCUPATION	SPECIALTY/SUB-SPECIALTY
V110000	Physicians (M.D.) and Osteopaths (D.O.)	
V110100	Physicians (M.D.) and Osteopaths (D.O.)	Addiction Medicine
V110300	Physicians (M.D.) and Osteopaths (D.O.)	Allergy and Immunology
V110301	Physicians (M.D.) and Osteopaths (D.O.)	Allergy and Immunology Clinical and Laboratory
V110200	Physicians (M.D.) and Osteopaths (D.O.)	Allergy
V110400	Physicians (M.D.) and Osteopaths (D.O.)	Anesthesiology
V110401	Physicians (M.D.) and Osteopaths (D.O.)	Anesthesiology Critical Care
V110402	Physicians (M.D.) and Osteopaths (D.O.)	Anesthesiology Pain Management

15.9.12 TABLE 0136 YES/NO INDICATOR

The values are Y (Yes) and N (No).

15.9.13 TABLE SD001 SERVICE INDICATOR (STOP CODE)

Sample listing of possible values.

Table 112: SD001 Service Indicators

CODE	DESCRIPTION
104	PULMONARY FUNCTION
105	X-RAY
106	EEG
107	EKG
108	LABORATORY
109	NUCLEAR MEDICINE
110	CARDIOVASCULAR NUCLEAR MED
111	ONCOLOGICAL NUCLEAR MED
112	INFECTIOUS DISEASE NUCLEAR MED
113	RADIONUCLIDE TREATMENT
114	SING PHOTON EMISS TOMOGRAPHY
115	ULTRASOUND
117	NURSING
118	HOME TREATMENT SERVICES
119	COMM NURSING HOME FOLLOW-UP

15.9.14 TABLE SD008 OUTPATIENT CLASSIFICATION TYPE

Table 113: Outpatient Classification Types

NUMBER	DESCRIPTION
1	AGENT ORANGE
2	IONIZING RADIATION
3	SERVICE CONNECTED
4	SW ASIA CONDITIONS
5	MILITARY SEXUAL TRAUMA
6	HEAD AND/OR NECK CANCER
7	COMBAT VETERAN
8	PROJECT 112/SHAD

15.9.15 TABLE SD009 PURPOSE OF VISIT

Value denotes a combination of Purpose of Visit and Appointment Type.

Table 114: Purpose of Visit Codes

VALUE	PURPOSE OF VISIT	APPOINTMENT TYPE
0101	C&P	COMPENSATION & PENSION
0102	C&P	CLASS II DENTAL
0103	C&P	ORGAN DONORS
0104	C&P	EMPLOYEE
0105	C&P	PRIMA FACIA
0106	C&P	RESEARCH
0107	C&P	COLLATERAL OF VET.
0108	C&P	SHARING AGREEMENT
0109	C&P	REGULAR
0111	C&P	SERVICE CONNECTED
0201	10-10	COMPENSATION & PENSION
0202	10-10	CLASS II DENTAL
0203	10-10	ORGAN DONORS
0204	10-10	EMPLOYEE
0205	10-10	PRIMA FACIA
0206	10-10	RESEARCH
0207	10-10	COLLATERAL OF VET.
0208	10-10	SHARING AGREEMENT
0209	10-10	REGULAR
0211	10-10	SERVICE CONNECTED
0301	SCHEDULED VISIT	COMPENSATION & PENSION
0302	SCHEDULED VISIT	CLASS II DENTAL
0303	SCHEDULED VISIT	ORGAN DONORS
0304	SCHEDULED VISIT	EMPLOYEE
0305	SCHEDULED VISIT	PRIMA FACIA
0306	SCHEDULED VISIT	RESEARCH

VALUE	PURPOSE OF VISIT	APPOINTMENT TYPE
0307	SCHEDULED VISIT	COLLATERAL OF VET.
0308	SCHEDULED VISIT	SHARING AGREEMENT
0309	SCHEDULED VISIT	REGULAR
0311	SCHEDULED VISIT	SERVICE CONNECTED
0401	UNSCHED. VISIT	COMPENSATION & PENSION
0402	UNSCHED. VISIT	CLASS II DENTAL
0403	UNSCHED. VISIT	ORGAN DONORS
0404	UNSCHED. VISIT	EMPLOYEE
0405	UNSCHED. VISIT	PRIMA FACIA
0406	UNSCHED. VISIT	RESEARCH
0407	UNSCHED. VISIT	COLLATERAL OF VET.
0408	UNSCHED. VISIT	SHARING AGREEMENT
0409	UNSCHED. VISIT	REGULAR
0411	UNSCHED. VISIT	SERVICE CONNECTED

15.9.16 TABLE VA01 YES/NO

Table 115: Yes/No Values

VALUE	DESCRIPTION
0	NO
1	YES
N	NO
Y	YES
U	UNKNOWN

15.9.17 TABLE VA02 CURRENT MEANS TEST STATUS

Type of Care (#.03) field of MEANS TEST STATUS (#408.32) file.

- D DISCRETIONARY
- M MANDATORY
- N NOT APPLICABLE

15.9.18 TABLE VA04 ELIGIBILITY

Name (#.01) field of MAS ELIGIBILITY CODE (#8.1) file.

- 1 SERVICE CONNECTED 50% to 100%
- 2 AID & ATTENDANCE
- 3 SC LESS THAN 50%
- 4 NSC - VA PENSION
- 5 NSC
- 6 OTHER FEDERAL AGENCY
- 7 ALLIED VETERAN
- 8 HUMANITARIAN EMERGENCY
- 9 SHARING AGREEMENT
- 10 REIMBURSABLE INSURANCE
- 12 CHAMPVA
- 13 COLLATERAL OF VET.
- 14 EMPLOYEE
- 15 HOUSEBOUND
- 16 MEXICAN BORDER WAR
- 17 WORLD WAR I
- 18 PRISONER OF WAR
- 19 TRICARE/CHAMPUS
- 21 CATASTROPHIC DISABILITY
- 22 PURPLE HEART RECIPIENT
- 23 EXPANDED MH CARE NON-ENROLLEE

15.9.19 TABLE VA05 DISABILITY RETIREMENT FROM MILITARY

Disability Ret. From Military? (#.362) field of PATIENT (#2) file.

- 0 NO
- 1 YES, RECEIVING MILITARY RETIREMENT
- 2 YES, RECEIVING MILITARY RETIREMENT IN LIEU OF VA COMPENSATION
- 3 UNKNOWN

15.9.20 TABLE VA06 ELIGIBILITY STATUS

Eligibility Status (#.3611) field of PATIENT (#2) file.

- P PENDING VERIFICATION
- R PENDING RE-VERIFICATION

- V VERIFIED

15.9.21 TABLE VA07 - RACE

Abbreviation (#2) field of RACE (#10) file.

1. HISPANIC, WHITE
2. HISPANIC, BLACK
3. AMERICAN INDIAN OR ALASKA NATIVE
4. BLACK, NOT OF HISPANIC ORIGIN
5. ASIAN OR PACIFIC ISLANDER
6. WHITE, NOT OF HISPANIC ORIGIN
7. UNKNOWN

15.9.22 TABLE VA08 RELIGION

Code (#3) field of RELIGION (#13) file.

0 ROMAN CATHOLIC CHURCH
1 JUDAISM
2 EASTERN ORTHODOX
3 BAPTIST
4 METHODIST
5 LUTHERAN
6 PRESBYTERIAN
7 UNITED CHURCH OF CHRIST
8 EPISCOPALIAN
9 ADVENTIST
10 ASSEMBLY OF GOD
11 BRETHREN
12 CHRISTIAN SCIENTIST
13 CHURCH OF CHRIST
14 CHURCH OF GOD
15 DISCIPLES OF CHRIST
16 EVANGELICAL COVENANT
17 FRIENDS
18 JEHOVAH'S WITNESSES
19 LATTER DAY SAINTS

20 ISLAM
21 NAZARENE
22 OTHER
23 PENTECOSTAL
24 PROTESTANT
25 PROTESTANT, NO DENOMINATION
26 REFORMED
27 SALVATION ARMY
28 UNITARIAN-UNIVERSALISM
29 UNKNOWN/NO PREFERENCE
30 NATIVE AMERICAN
31 ZEN BUDDHISM
32 AFRICAN RELIGIONS
33 AFRO-CARIBBEAN RELIGIONS
34 AGNOSTICISM
35 ANGLICAN
36 ANIMISM
37 ATHEISM
38 BABI & BAHA'I FAITHS
39 BON
40 CAO DAI
41 CELTICISM
42 CHRISTIAN (NON-SPECIFIC)
43 CONFUCIANISM
44 CONGREGATIONAL
45 CYBERCULTURE RELIGIONS
46 DIVINATION
47 FOURTH WAY
48 FREE DAISM
49 FULL GOSPEL
50 GNOSIS
51 HINDUISM
52 HUMANISM

53 INDEPENDENT
54 JAINISM
55 MAHAYANA
56 MEDITATION
57 MESSIANIC JUDAISM
58 MITRAISM
59 NEW AGE
60 NON-ROMAN CATHOLIC
61 OCCULT
62 ORTHODOX
63 PAGANISM
64 PROCESS, THE
65 REFORMED/PRESBYTERIAN
66 SATANISM
67 SCIENTOLOGY
68 SHAMANISM
69 SHIITE (ISLAM)
70 SHINTO
71 SIKISM
72 SPIRITUALISM
73 SUNNI (ISLAM)
74 TAOISM
75 THERAVADA
76 UNIVERSAL LIFE CHURCH
77 VAJRAYANA (TIBETAN)
78 VEDA
79 VOODOO
80 WICCA
81 YAOHUSHUA
82 ZOROASTRIANISM
83 ASKED BUT DECLINED TO ANSWER

15.9.23 TABLE VA10 MEANS TEST INDICATOR

Table 116: Table VA10 – Means Test Indicator

VALUE	DESCRIPTION
AS	This Means Test category includes all compensable service-connected (0-100%) veterans and special category veterans. Special category veterans include: Mexican Border War and World War I veterans; former Prisoners of War; and patients receiving care for conditions potentially related to exposure to either Agent Orange (Herbicides), Ionizing Radiation or SW Asia Conditions. This category also includes 0% non-compensable service-connected veterans when they are treated for a service-connected condition.
AN	This Means Test category includes NSC veterans who are required to complete VA Form 10-10F (Financial Worksheet) and those NSC veterans in receipt of VA pension, aid and attendance, housebound allowance, or entitled to State Medicaid. This category may also include 0% non-compensable service-connected veterans when they are not treated for a service-connected condition and are placed in this category based on completion of a Means Test.
C	This Means Test category includes those veterans who, based on income and/or net worth, are required to reimburse VA for care rendered. This category also includes those pending adjudication. This category may also include 0% non-compensable service-connected veterans when they are not treated for a service-connected condition and are placed in this category based on completion of a Means Test.
G	This Means Test category includes veterans whose income is less than or equal to the MT threshold and whose estate value is greater than or equal to the net worth threshold, or such veterans whose income is greater than the MT threshold, but less than or equal to the GMT threshold, and whose estate value is less than the net worth threshold.
N	This Means Test category includes only non-veterans receiving treatment at VA facilities.
X	This Means Test category includes treatment of patients who are not required to complete the Means Test for the care being provided. If the veteran was admitted prior to July 1, 1986 with no change in the level of care being received, (i.e., if the patient was in the Nursing Home Care Unit (NHCU) on June 30, 1986 and has remained in the NHCU since that date with no transfer to the hospital for treatment), the "X" Means Test indicator will be accepted. This category also includes patients admitted to the domiciliary, patients seen for completion of a compensation and pension examination, and Class II dental treatment.
U	This Means Test category includes only those patients who require a Means Test, and the Means Test has not been done/completed. The National Patient Care Database will not accept the transaction unless the Means Test has been completed.

15.9.24 TABLE VA11 PERIOD OF SERVICE

0 KOREAN

1 WORLD WAR I

2 WORLD WAR II

3 SPANISH AMERICAN

4 PRE-KOREAN

5	POST-KOREAN
6	OPERATION DESERT SHIELD
7	VIETNAM ERA
8	POST-VIETNAM
9	OTHER OR NONE
A	ARMY - ACTIVE DUTY
B	NAVY, MARINE - ACTIVE DUTY
C	AIR FORCE - ACTIVE DUTY
D	COAST GUARD - ACTIVE DUTY
E	RETIRED, UNIFORMED FORCES
F	MEDICAL REMEDIAL ENLIST
G	MERCHANT SEAMEN - USPHS
H	OTHER USPHS BENEFICIARIES
I	OBSERVATION/EXAMINATION
J	OFFICE OF WORKERS COMP
K	JOB CORPS/PEACE CORPS
L	RAILROAD RETIREMENT
M	BENEFICIARIES-FOREIGN GOV
N	HUMANITARIAN (NON-VET)
O	CHAMPUS RESTORE
P	OTHER REIMBURS. (NON-VET)
Q	OTHER FEDERAL - DEPENDENT
R	DONORS (NON-VET)
S	SPECIAL STUDIES (NON-VET)
T	OTHER NON-VETERANS
U	CHAMPVA - SPOUSE, CHILD
V	CHAMPUS
W	CZECHOSLOVAKIA/POLAND SVC
X	PERSIAN GULF WAR
Y	CAV/NPS
Z	MERCHANT MARINE

15.9.25 TABLE VA12 TYPE OF INSURANCE

0 NO INSURANCE
1 MAJOR MEDICAL
2 DENTAL
3 HMO
4 PPO
5 MEDICARE
6 MEDICAID
7 CHAMPUS
8 WORKMAN COMP
9 INDEMNITY
10 PRESCRIPTION
11 MEDICARE SUPPLEMENTAL
12 ALL OTHER

15.9.26 TABLE VA0015 ENROLLMENT STATUS

1 UNVERIFIED
2 VERIFIED
3 INACTIVE
4 REJECTED
5 SUSPENDED
6 TERMINATED
7 CANCELED/DECLINED
8 EXPIRED
9 PENDING

15.9.27 TABLE VA0016 REASON CANCELED/DECLINED

1 DISSATISFIED WITH CARE
2 GEOGRAPHIC ACCESS
3 OTHER INSURANCE
4 OTHER

15.9.28 TABLE VA0021 ENROLLMENT PRIORITY

1 PRIORITY 1

2 PRIORITY 2

3 PRIORITY 3

4 PRIORITY 4

5 PRIORITY 5

6 PRIORITY 6

7 PRIORITY 7

8 PRIORITY 8

15.9.29 TABLE VA0022 RADIATION EXPOSURE METHOD

2 NAGASAKI - HIROSHIMA

3 NUCLEAR TESTING

4 BOTH

15.9.30 TABLE VA0023 PRISONER OF WAR LOCATION

4 WORLD WAR I

5 WORLD WAR II - EUROPE

6 WORLD WAR II - PACIFIC

7 KOREAN

8 VIETNAM

9 OTHER

A PERSIAN GULF WAR

B YUGOSLAVIA AS A COMBAT ZONE

15.9.31 TABLE VA0024 - SOURCE OF ENROLLMENT

1 VAMC

2 HEC

3 OTHER VAMC

15.9.32 TABLE VA0046 - AGENT ORANGE EXPOSURE LOCATION

K KOREAN DMZ

V VIETNAM

O OTHER

15.9.33 TABLE NPCD 001 - NATIONAL PATIENT CARE DATABASE ERROR CODES

Sample listing of possible values.

100 EVENT TYPE SEGMENT

200 PATIENT NAME

205 DATE OF BIRTH

210 SEX

215 RACE

15.10 HL7 Interface Specification for the Transmission of PCMM Primary Care Data

PCMM no longer transfers data using HL7 transmissions. This was replaced by Corporate Data Warehouse (CDW)/VHA Support Service Center (VSSC) in 2009.

15.11 Assumptions

PCMM no longer transfers data using HL7 transmissions. This was replaced by Corporate Data Warehouse (CDW)/VHA Support Service Center (VSSC) in 2009.

15.12 Message Definitions

PCMM no longer transfers data using HL7 transmissions. This was replaced by Corporate Data Warehouse (CDW)/VHA Support Service Center (VSSC) in 2009.

15.13 Segment Table Definitions

PCMM no longer transfers data using HL7 transmissions. This was replaced by Corporate Data Warehouse (CDW)/VHA Support Service Center (VSSC) in 2009.

15.14 Message Control Segments

PCMM no longer transfers data using HL7 transmissions. This was replaced by Corporate Data Warehouse (CDW)/VHA Support Service Center (VSSC) in 2009.

16 HL7 Message Transactions

PCMM no longer transfers data using HL7 transmissions. This was replaced by Corporate Data Warehouse (CDW)/VHA Support Service Center (VSSC) in 2009.

VistA Scheduling uses HL7 to send updated Return To Clinic (RTC) appointments from VistA Scheduling to Computerized Patient Record System (CPRS).

17 Supported and User-Defined Hl7 Tables

17.1 Table 0001 Sex

F	FEMALE
M	MALE
O	OTHER
U	UNKNOWN

17.2 Table 0002 Marital Status

A	SEPARATED
D	DIVORCED
M	MARRIED
S	SINGLE
W	WIDOWED

17.3 Table 0003 Event Type Code

A08	UPDATE PATIENT INFORMATION

17.4 Table 0005 - Race

1	HISPANIC, WHITE
2	HISPANIC, BLACK
3	AMERICAN INDIAN OR ALASKA NATIVE
4	BLACK, NOT OF HISPANIC ORIGIN
5	ASIAN OR PACIFIC ISLANDER
6	WHITE, NOT OF HISPANIC ORIGIN
7	UNKNOWN

17.5 Table 0006 - Religion

0	ROMAN CATHOLIC CHURCH
1	JUDAISM
2	EASTERN ORTHODOX
3	BAPTIST
4	METHODIST
5	LUTHERAN
6	PRESBYTERIAN

7 UNITED CHURCH OF CHRIST
8 EPISCOPALIAN
9 ADVENTIST
10 ASSEMBLY OF GOD
11 BRETHREN
12 CHRISTIAN SCIENTIST
13 CHURCH OF CHRIST
14 CHURCH OF GOD
15 DISCIPLES OF CHRIST
16 EVANGELICAL COVENANT
17 FRIENDS
18 JEHOVAH'S WITNESSES
19 LATTER DAY SAINTS
20 ISLAM
21 NAZARENE
22 OTHER
23 PENTECOSTAL
24 PROTESTANT
25 PROTESTANT, NO DENOMINATION
26 REFORMED
27 SALVATION ARMY
28 UNITARIAN-UNIVERSALISM
29 UNKNOWN/NO PREFERENCE
30 NATIVE AMERICAN
31 ZEN BUDDHISM
32 AFRICAN RELIGIONS
33 AFRO-CARIBBEAN RELIGIONS
34 AGNOSTICISM
35 ANGLICAN
36 ANIMISM
37 ATHEISM
38 BABI & BAHA'I FAITHS
39 BON

40 CAO DAI
41 CELTICISM
42 CHRISTIAN (NON-SPECIFIC)
43 CONFUCIANISM
44 CONGREGATIONAL
45 CYBERCULTURE RELIGIONS
46 DIVINATION
47 FOURTH WAY
48 FREE DAISM
49 FULL GOSPEL
50 GNOSIS
51 HINDUISM
52 HUMANISM
53 INDEPENDENT
54 JAINISM
55 MAHAYANA
56 MEDITATION
57 MESSIANIC JUDAISM
58 MITRAISM
59 NEW AGE
60 NON-ROMAN CATHOLIC
61 OCCULT
62 ORTHODOX
63 PAGANISM
64 PROCESS, THE
65 REFORMED/PRESBYTERIAN
66 SATANISM
67 SCIENTOLOGY
68 SHAMANISM
69 SHIITE (ISLAM)
70 SHINTO
71 SIKISM
72 SPIRITUALISM

73 SUNNI (ISLAM)
74 TAOISM
75 THERAVADA
76 UNIVERSAL LIFE CHURCH
77 VAJRAYANA (TIBETAN)
78 VEDA
79 VOODOO
80 WICCA
81 YAOHUSHUA
82 ZOROASTRIANISM
83 ASKED BUT DECLINED TO ANSWER

17.6 Table 0076 - Message Type

ADT ADT MESSAGE

18 HL7 Interface Specification for VIC Card VistA to NCMD

When a Veteran's ID Card (VIC) Image Capture workstation retrieves demographic data from VistA, a record will be created in a VistA file to indicate that a VIC request is pending under the following exception conditions.

- The patient does not have a National Integrated Control Number (ICN).
- The eligibility/enrollment information needed to determine the patient's eligibility for a VIC is incomplete.
- The current status of the veteran's claim for Purple Heart eligibility is either pending or in-process.

A Health Level 7 (HL7) message will be used to notify the National Card Management Directory (NCMD) when these exceptions have been resolved.

This specifies the information needed to either release the previous hold or cancel a pending VIC order request and communicate the order action to the NCMD.

The data exchange will be triggered when the daily VistA re-evaluation of the pending VIC order request finds that a National ICN exists and the VIC eligibility can be determined.

The basic communication protocol will be addressed, as well as the information that will be made available and how it will be obtained.

This application will use the abstract message approach and encoding rules specified by HL7. HL7 is used for communicating data associated with various events which occur in health care environments.

The formats of these messages conform to the Version 2.4 HL7 Interface Standards where applicable.

18.1 Assumptions

The transmission of VIC requests from VistA to the NCMD assumes the following.

- All VistA sites will have installed VistA HL7 software and it is operational.
- The veteran's demographics and digital photograph have been previously loaded into the NCMD.

18.2 Message Content

The data sent in the HL7 messages will be limited to the information that is required to uniquely identify the patient and request the VIC card. The data transmitted will be limited to available VistA data.

18.3 Data Capture and Transmission

The following event trigger will generate a General Order Message (ORM~O01).

- VistA re-evaluates a pending VIC card request and the associated patient has a nationally assigned ICN and the necessary eligibility/enrollment information needed to determine the patient's VIC eligibility.

Note: Any modification made to the VistA database in non-standard ways, such as a direct global set by an application or by MUMPS code, will not be captured.

18.4 VA TCP/IP Lower Level Protocol

The HL7 V. 1.6 TCP/IP lower level protocol (LLP) will be used which implements the HL7 Minimal Lower Layer Protocol (MLLP) referenced in section C.4 of Appendix C of the Health Level 7 Implementation Guide (v2.3).

HL7 CONTROL SEGMENTS - This section defines the HL7 control segments supported by VistA. The messages are presented separately and defined by category. Segments are also described. The messages are presented in the Message Control category.

18.4.1 Message Definitions

From the VistA perspective, all incoming or outgoing messages are handled or generated based on an event.

In this section and the following sections, the following elements will be defined for each message.

- Trigger events
- Message event code
- List of segments used in the message
- List of fields for each segment in the message

Each message is composed of segments. Segments contain logical groupings of data. Segments may be optional or repeatable. A [ ] indicates the segment is optional, the { } indicates the segment is repeatable. For each message category, there will be a list of HL7 standard segments used for the message.

18.4.2 Segment Table Definitions

For each segment, the data elements are described in table format. The table includes the sequence number (SEQ), maximum length (LEN), data type (DT), required or optional (R/O), repeatable (RP/#), the table number (TBL#), the element name, and the VistA description. Each segment is described in the following sections.

18.4.3 Message Control Segments

This section describes the message control segments that are contained in message types described in this document. These are generic descriptions. Any time any of the segments described in this section are included in a message in this document, the VistA descriptions and mappings will be as specified here unless otherwise specified in that section.

18.4.4 MSH Message Header Segment

Table 117: MSH Message Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	1	ST	R			Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat = | (bar) Escape = \ (back slash) Sub-component = & (ampersand)
3	15	ST				Sending Application	Name field of HL7 Application Parameter file.
4	20	ST				Sending Facility	Sending station's facility number from Institution field of HL7 Communication Parameters file.
5	30	ST				Receiving Application	Name field of HL7 Application Parameter file.
6	30	ST				Receiving Facility	Receiving station’s facility number from Institution field of HL Logical Link file.
7	26	TS				Date/Time Of Message	Date and time message was created.
8	40	ST				Security	Not used
9	7	CM	R		0076 0003	Message Type	2 Components Refer to Table 0076 Refer to Table 0003
10	20	ST	R			Message Control ID	Automatically generated by VISTA HL7 Package.
11	1	ID	R		0103	Processing ID	P (production)
12	8	ID	R		0104	Version ID	Version ID field of event protocol in Protocol file.
13	15	NM				Sequence Number	Not used
14	180	ST				Continuation Pointer	Not used
15	2	ID			0155	Accept Acknowledgment Type	NE (never acknowledge)

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
16	2	ID			0155	Application Acknowledgment Type	AL (always acknowledge)
17	2	ID				Country Code	USA
18	6	ID		Y/3	0211	Character Set	Not used
19	60	CE				Principal Language of Message	Not used

18.4.5 MSA Message Acknowledgement Segment

Table 118: MSA Message Acknowledgement Segment

2.3.1	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	2	ID	R		0008	Acknowledgment Code	Refer to HL7 table 0008
2	20	ST	R			Message Control ID	Message Control ID of the message being acknowledged.
3	80	ST	O			Text Message	Free text error message
4	15	NM	O			Expected Sequence Number	Not used
5	1	ID	B		0102	Delayed Acknowledgment Type	Not used
6	100	CE	O			Error Condition	Not used

18.4.6 PID Patient Identification Segment

Table 119: PID Patient Identification Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	4	SI				Set ID - Patient ID	Always set to ‘1’
2	20	CK				Patient ID (External ID)	Social Security Number field of Patient file.

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
3	20	CM	R	Y		Patient ID (Internal ID)	Integrated Control Number (ICN) field of Patient file. Component 1: ICN w/checksum Component 2: Null Component 3: Null Component 4: Assigning authority (subcomponent 1: 'USVHA', subcomponent 3: 'L' Component 5: Type 'NI'
4	12	ST				Alternate Patient ID	Not used
5	48	PN	R			Patient Name	Name
6	30	ST				Mother's Maiden Name	Not used
7	26	TS				Date of Birth	Date of birth
8	1	ID			0001	Sex	Not used
9	48	PN		Y		Patient Alias	Not used
10	1	ID			0005	Race	Not used
11	106	AD		Y		Patient Address	Not used
12	4	ID				County Code	Not used
13	40	TN		Y		Phone Number – Home	Not used
14	40	TN		Y		Phone Number – Business	Not used
15	25	ST				Language – Patient	Not used
16	1	ID			0002	Marital Status	Not used
17	3	ID			0006	Religion	Not used
18	20	CK				Patient Account Number	Not used
19	16	ST				SSN Number – Patient	Social security number and pseudo indicator.
20	25	CM				Driver's Lic Num – Patient	Not used
21	20	CK				Mother's Identifier	Not used
22	1	ID			0189	Ethnic Group	Not used
23	25	ST				Birth Place	Not used
24	2	ID				Multiple Birth Indicator	Not used
25	2	NM				Birth Order	Not used
26	3	ID		Y	0171	Citizenship	Not used

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
27	60	CE			0172	Veterans Military Status	Not used

18.4.7 ORC Common Order Segment

Table 120: ORC Common Order Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	2	ID	R		0119	Order Control	Refer to Table 0119
2	22	EI	C			Placer Order Number	Not used
3	22	EI	C			Filler Order Number	Not used
4	22	EI				Placer Group Number	Not used
5	2	ID			0038	Order Status	Not used
6	1	ID			0121	Response Flag	Not used
7	200	TQ				Quantity/timing	Not used
8	200	CM				Parent	Not used
9	26	TS				Date/Time of Transaction	Not used
10	120	XCN				Entered By	Not used
11	120	XCN				Verified By	Not used
12	120	XCN				Ordering Provider	Not used
13	80	PL				Enterer's Location	Not used
14	40	XTN		Y/2		Call Back Phone Number	Not used
15	26	TS				Order Effective Date/Time	Not used
16	200	CE				Order Control Code Reason	Not used
17	60	CE				Entering Organization	Not used
18	60	CE				Entering Device	Not used
19	120	XCN				Action By	Not used

18.4.8 RQD Requisition Detail Segment

Table 121: RQD Requisition Detail Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	4	SI				Requisition Line Number	Always set to "1"
2	60	CE	C			Item Code – Internal	Not used

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
3	60	CE	C			Item Code – External	NCMD Card ID (.01) field from VIC REQUEST (#39.6) file.
4	60	CE	C			Hospital Item Code	Not used
5	6	NM				Requisition Quantity	Not used
6	60	CE				Requisition Unit of Measure	Not used
7	30	IS			0319	Dept. Cost Center	Not used
8	30	IS			0320	Item Natural Account Code	Not used
9	60	CE				Deliver to ID	Not used
10	8	DT				Date Needed	Not used

18.4.9 NTE Notes and Comments

Table 122: NTE Notes and Comments

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	4	SI	O			Set ID	Not used
2	8	ID	O		105	Source of Comment	Not used
3	65536	FT	O	Y		Comment	1st repetition: String “POW:” followed by single character Prisoner Of War indicator calculated from the PATIENT ELIGIBILITIES (#361) field of the PATIENT (#2) file and the current enrollment status derived from the supported call $$STATUS^DGENA. Example: POW:Y 2nd repetition: String “PH:” followed by single character Purple Heart indicator calculated from CURRENT PH INDICATOR (#.531) and CURRENT PURPLE HEART STATUS (#.532) fields of the PATIENT (#2) file. Example: PH:N
4	250	CE	O		364	Comment Type	Not used

18.5 Trigger Events and Message Definitions

Each triggering event is listed below along with the applicable form of the message to be exchanged. The notation used to describe the sequence, option, and repetition of segments is described in the HL7 V. 2.4 Standard Specification Manual, Chapter 2, and in summary form, in Section 2.1 of this document.

18.6 ORM General Order Message (event O01)

ORM~O01 message to be sent to the NCMD

ORM Order Message Section

MSH Message Header

PID Patient Identification

ORC Common Order

RQD Requisition Detail

NTE Notes and Comments

Sample Message

```
MSH^~|\&^VIC NCMD SEND^500~FO-ALBANY.MED.VA.GOV~DNS^VIC NCMD
RECV^NCMD^20031008144616-0400^^ORM~O01^50018835^P^2.4^^^NE^AL^USA
PID^1^222-33-4444~~^1001178082V735077~~~USVHA&&L~NI^^DOE~JOHN^^
19500404^^^^^^^^^^^222334444
ORC^RL
RQD^1^^22233444-DOE-1
NTE^^^POW:N|PH:Y
```

18.7 ORR General Order Response Message response to any ORM (event O02)

Upon receipt of a VIC Card request order message, the NCMD will respond with an ORR~O02 message.

ORR Order Response Message

MSH Message Header

MSA Message Acknowledgment

Sample Messages

General Order Response (ORR~O02) message when the General Order Message (ORM~O01) is successful.

```
MSH^~|\&^VIC NCMD RECV^NCMD^VIC NCMD SEND^500~FO-
ALBANY.MED.VA.GOV~DNS^20031008144616-0400^^ORR~O02^782218835^P^2.4^^^NE^AL^USA
MSA^AA^50018835
```

General Order Response (ORR~O02) message when the General Order Message (ORM~O01) fails.

```
MSH^~|\&^VIC NCMD RECV^NCMD^VIC NCMD SEND^500~FO-
ALBANY.MED.VA.GOV~DNS^20031008144616-0400^^ORR~O02^782218835^P^2.4^^^NE^AL^USA
MSA^AE^50018835^CardID not on file
```

18.8 Supported and User Defined HL7 Tables

18.8.1 Table 0003 Event Type Code

- O01 ORM – Order Message
- O02 ORR – Order Response

18.8.2 Table 0008 Acknowledgment Code

- AA Original mode: Application Accept
  - Enhanced mode: Application acknowledgment: Accept
- AE Original mode: Application Error
  - Enhanced mode: Application acknowledgment: Error
- AR Original mode: Application Reject
  - Enhanced mode: Application acknowledgment: Reject
- CA Enhanced mode: Accept acknowledgment: Commit Accept
- CE Enhanced mode: Accept acknowledgment: Commit Error
- CR Enhanced mode: Accept acknowledgment: Commit Reject

18.8.3 Table 0076 Message Type

- ORM Order Message
- ORR Order Acknowledgment Message

18.8.4 Table 0119 Order Control Codes

- RL Release Previous Hold
- CA Cancel Order Request

19 HL7 Generic PID, EVN, PV1 Segment Builder Established by MPI

This section describes functionality that can be used by other applications to dynamically build fully populated PID, EVN, and PV1 segments for use in communicating to and from VistA and/or HeV VistA.

This document specifies the information needed by applications to utilize the generic HL7 v2.4 segment builders. In order for applications to utilize this functionality they must first subscribe to the Integration Agreement #3630 described below.

For more information about the specific data elements included in these segments, see the MPI HL7 v2.4 Interface Specification on the VDL at the following address:

19.1 Integration Agreement (IA) #3630

This Integration Agreement consists of three Health Level 7 (HL7), Version 2.4 segment builders in the form of the following APIs:

- BLDEVN^VAFCQRY
- BLDPD1^VAFCQRY
- BLDPID^VAFCQRY

These generic segment builders can be used to build Version 2.4 HL7 PID, EVN and PD1 segments.

19.1.1 Custodial Package

REGISTRATION has the following Subscribing Packages

- MASTER PATIENT INDEX VISTA
- CLINICAL INFO RESOURCE NETWORK
- OUTPATIENT PHARMACY
- CLINICAL PROCEDURES
- PHARMACY BENEFITS MANAGEMENT
- RADIOLOGY/NUCLEAR MEDICINE
- GEN. MED. REC. - VITALS
- ADVERSE REACTION TRACKING
- LAB SERVICE
- CLINICAL CASE REGISTRIES

19.2 API: BLDEVN^VAFCQRY

Description: The entry point builds the EVN segment via version 2.4 including the Treating Facility last treatment date and event reason.

Format BLDEVN^VAFCQRY

INPUT VARIABLES

- DFN: Internal Entry Number of the patient in the PATIENT file (#2).
- SEQ: Variable consisting of sequence numbers delimited by commas that will be used to build the message.
- EVN: (Passed by reference). This is the array location to place EVN segment result. The array can have existing values when passed.
- HL: Array that contains the necessary HL variables (init^hlsub).
- EVR: Event reason that triggered this message.
- ERR: Array used to return an error.

19.3 API: BLDPD1^VAFCQRY

Description: This entry point will build the version 2.4 PD1 segment.

Format BLDPD1^VAFCQRY

INPUT VARIABLES

- DFN: Internal Entry Number of the patient in the PATIENT file (#2).
- SEQ: Variable consisting of sequence numbers delimited by commas that will be used to build the message.
- PD1: (Passed by reference). Array location to place PD1 segment result. The array can have existing values when passed.
- HL: Array that contains the necessary HL variables (init^hlsub).
- ERR: Array used to return an error.

19.4 API: BLDPID^VAFCQRY

Description: This entry point will build the version 2.4 PID segment.

Format

BLDPID^VAFCQRY

INPUT VARIABLES

- DFN: Internal Entry Number of the patient in the PATIENT file (#2).
- CNT: The value to be place in PID seq#1 (SET ID).
- SEQ: Variable consisting of sequence numbers delimited by commas that will be used to build the message. "ALL" can be passed to get all available fields in the PID Segment that are available. This is the default.
- PID: (Passed by reference). The array location to place PID segment result, the array can have existing values when passed.

- HL: Array that contains the necessary HL variables (init^hlsub).
- ERR: Array used to return an error.

20 HL7 Interface Specification for Home Telehealth (HTH)

The Home Telehealth application is in support of the Care Coordination Program that involves the use of Home Telehealth technologies. Home Telehealth helps the Veterans Health Administration (VHA) by 836creating a framework for optimizing the overall development and implementation of Telemedicine in VHA.

This document specifies the information needed for activation and inactivation of Home Telehealth patients with their perspective HTH vendors.

This application will use the abstract message approach and encoding rules specified by HL7. HL7 is used for communicating data associated with various events which occur in health care environments.

The formats of these messages conform to the Version 2.4 HL7 Interface Standards.

20.1 Assumptions

The transmission of HTH registration/inactivation requests from VistA to the HTH vendors assumes the following.

- All VistA sites will have installed VistA HL7 software and it is operational.
- The associated VistA Consult Patch GMRC*3*42 has been installed and HTH consults activated.

20.2 Message Content

The data sent in the HL7 messages will be limited to the information that is required to uniquely identify the patient and requested by the HTH vendors. The data transmitted will be recorded and available in VistA.

20.3 Data Capture and Transmission

The following event trigger will generate a Register a Patient (Event A04).

- Provider evaluates patient and refers patient for HTH care by submitting a consult request. A pending consult request goes to the HTH Care Coordinator and verifies eligibility. A registration request is submitted to HTH vendor by using Patient Sign-Up/Activation [DGHT PATIENT SIGNUP] menu option.
- The protocol DG HOME TELEHEALTH ADT-A04 CLIENT in PROTOCOL file (#101) is used for the Patient Sign-Up/Activation process.
- The entry DG HOME TELEHEALTH in the HL7 APPLICATION PARAMETER file (#771) is used for processing outgoing HL7 messages from the Home Telehealth vendors.
- The entry HTAPPL in the HL7 APPLICATION PARAMETER file (#771) is used for processing incoming HL7 messages from the Home Telehealth vendors.

The following entries in the HL LOGICAL LINK file (#870) facilitate the transmission of Home Telehealth patient data to Home Telehealth vendor server system via the Austin Interface.

- DG HT AMD
- DG HT ATI
- DG HT HH
- DG HT VIT
- DG HT VN
- DG HTH

The mail group DGHTERR generates mail messages for any transmission rejects received from the vendor server.

The following event trigger will generate an inactivation of a Patient (Event A03).

- HTH Care Coordinator determines patient care is now complete. An inactivation request is submitted to HTH vendor Patient Inactivation [DGHT PATIENT INACTIVATION] menu option.
- The protocol DG HOME TELEHEALTH ADT-A03 CLIENT in the PROTOCOL file (#101) is used for the Patient Inactivation process.
- The entry DG HOME TELEHEALTH in the HL7 APPLICATION PARAMETER file (#771) is used for processing outgoing HL7 messages from the Home Telehealth vendors.
- The entry HTAPPL in the HL7 APPLICATION PARAMETER file (#771) is used for processing incoming HL7 messages from the Home Telehealth vendors.

The following entries in the HL LOGICAL LINK file (#870) facilitate the transmission of Home Telehealth patient data to Home Telehealth vendor server system via the Austin Interface.

- DG HT AMD
- DG HT ATI
- DG HT HH
- DG HT VIT
- DG HT VN
- DG HTH

The mail group DGHTERR generates mail messages for any transmission rejects received from the vendor server.

Note: Any modification made to the VistA database in non-standard ways, such as a direct global set by an application or by MUMPS code, will not be processed appropriately.

21 VA TCP/IP Lower Level Protocol

The HL7 V. 1.6 TCP/IP lower level protocol (LLP) will be used which implements the HL7 Minimal Lower Layer Protocol (MLLP) referenced in section C.4 of Appendix C of the Health Level 7 Implementation Guide (v2.4).

21.1 HL7 CONTROL SEGMENTS

This section defines the HL7 control segments supported by VistA. The messages are presented separately and defined by category. Segments are also described. The messages are presented in the Message Control category.

21.2 Message Definitions

From the VistA perspective, all incoming or outgoing messages are handled or generated based on an event.

In this section and the following sections, the following elements will be defined for each message.

- Trigger events
- Message event code
- List of segments used in the message
- List of fields for each segment in the message

Each message is composed of segments. Segments contain logical groupings of data. Segments may be optional or repeatable. A [ ] indicates the segment is optional, the { } indicates the segment is repeatable. For each message category, there will be a list of HL7 standard segments used for the message.

21.3 Segment Table Definitions

For each segment, the data elements are described in table format. The table includes the sequence number (SEQ), maximum length (LEN), data type (DT), required or optional (R/O), repeatable (RP/#), the table number (TBL#), the element name, and the VistA description. Each segment is described in the following sections.

21.4 Message Control Segments

This section describes the message control segments that are contained in message types described in this document. These are generic descriptions. Any time any of the segments described in this section are included in a message in this document, the VistA descriptions and mappings will be as specified here unless otherwise specified in that section.

Table 123: MSH Message Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	1	ST	R			Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Encoding Characters	Recommended delimiter values:
3	15	ST				Sending Application	Name field of HL7 Application Parameter file.
4	20	ST				Sending Facility	Sending station's facility number from Institution field of HL7 Communication Parameters file.
5	30	ST				Receiving Application	Name field of HL7 Application Parameter file.
6	30	ST				Receiving Facility	Receiving station’s facility number from Institution field of HL Logical Link file.
7	26	TS				Date/Time Of Message	Date and time message was created.
8	40	ST				Security	Not used
9	7	CM	R		0076 0003	Message Type	2 Components Refer to Table 0076 Refer to Table 0003
10	20	ST	R			Message Control ID	Automatically generated by VISTA HL7 Package.
11	1	ID	R		0103	Processing ID	P (production)

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
12	8	ID	R		0104	Version ID	Version ID field of event protocol in Protocol file.
13	15	NM				Sequence Number	Not used
14	180	ST				Continuation Pointer	Not used
15	2	ID			0155	Accept Acknowledgment Type	NE (never acknowledge)
16	2	ID			0155	Application Acknowledgment Type	AL (always acknowledge)
17	2	ID				Country Code	USA
18	6	ID		Y/3	0211	Character Set	Not used
19	60	CE				Principal Language of Message	Not used

Table 124: EVN Event Type Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	1	ST	R			Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat = | (bar) Escape = \ (back slash) Sub-component = & (ampersand)
3	15	ST				Sending Application	Name field of HL7 Application Parameter file.
4	20	ST				Sending Facility	Sending station's facility number from Institution field of HL7 Communication Parameters file.
5	30	ST				Receiving Application	Name field of HL7 Application Parameter file.

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
6	30	ST				Receiving Facility	Receiving station's facility number from Institution field of HL Logical Link file.
7	26	TS				Date/Time Of Message	Date and time message was created.
8	40	ST				Security	Not used
9	7	CM	R		0076 0003	Message Type	2 Components Refer to Table 0076 Refer to Table 0003
10	20	ST	R			Message Control ID	Automatically generated by VISTA HL7 Package.
11	1	ID	R		0103	Processing ID	P (production)
12	8	ID	R		0104	Version ID	Version ID field of event protocol in Protocol file.
13	15	NM				Sequence Number	Not used
14	180	ST				Continuation Pointer	Not used
15	2	ID			0155	Accept Acknowledgment Type	NE (never acknowledge)
16	2	ID			0155	Application Acknowledgment Type	AL (always acknowledge)
17	2	ID				Country Code	USA
18	6	ID		Y/3	0211	Character Set	Not used
19	60	CE				Principal Language of Message	Not used

Table 125: PID – Patient Identification Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	4	SI				Set ID - Patient ID	Always set to '1'
2	20	CK				Patient ID (External ID)	Social Security Number field of Patient file.
3	20	CM	R	Y		Patient ID (Internal ID)	Integrated Control Number (ICN) field of Patient file. Component 1: ICN w/checksum Component 2: DFN Component 3: Null

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
							Component 4: Assigning authority (subcomponent 1: 'USVHA', subcomponent 3: 'L' Component 5: Type 'NI'
4	12	ST				Alternate Patient ID	Not used
5	48	PN	R			Patient Name	Name
6	30	ST				Mother's Maiden Name	Not used
7	26	TS				Date of Birth	Date of birth
8	1	ID			0001	Sex	Not used
9	48	PN		Y		Patient Alias	Not used
10	1	ID			0005	Race	Not used
11	106	AD		Y		Patient Address	Home Address
12	4	ID				County Code	Not used
13	40	TN		Y		Phone Number – Home	Home Phone Validated
14	40	TN		Y		Phone Number – Business	Not used
15	25	ST				Language – Patient	Not used
16	1	ID			0002	Marital Status	Not used
17	3	ID			0006	Religion	Not used
18	20	CK				Patient Account Number	Not used
19	16	ST				SSN Number – Patient	Social security number and pseudo indicator.
20	25	CM				Driver's Lic Num – Patient	Not used
21	20	CK				Mother's Identifier	Not used
22	1	ID			0189	Ethnic Group	Not used
23	25	ST				Birth Place	Not used
24	2	ID				Multiple Birth Indicator	Not used
25	2	NM				Birth Order	Not used
26	3	ID		Y	0171	Citizenship	Not used
27	60	CE			0172	Veterans Military Status	Not used

Table 126: PDI Patient Additional Demographic Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	2	IS	O	Y	0223	00755	Living Dependency
2	2	IS	O		0220	00742	Living Arrangement
3	250	XON	O	Y		00756	Patient Primary Facility
4	250	XCN	B	Y		00757	Patient Primary Care Provider Name and ID No.
5	2	IS	O		0231	00745	Student Indicator
6	2	IS	O		0295	00753	Handicap
7	2	IS	O		0315	00759	Living Will Code
8	2	IS	O		0316	00760	Organ Donor Code
9	1	ID	O		0136	00761	Separate Bill
10	250	CX	O	Y		00762	Duplicate Patient
11	250	CE	O		0215	00743	Publicity Code
12	1	ID	O		0136	00744	Protection Indicator
13	8	DT	O			01566	Protection Indicator Effective Date
14	250	XON	O	Y		01567	Place of Worship
15	250	CE	O	Y	0435	01568	Advance Directive Code
16	1	IS	O		0441	01569	Immunization Registry Status
17	8	DT	O			01570	Immunization Registry Status Effective Date
18	8	DT	O			01571	Publicity Code Effective Date
19	5	IS	O		0140	01572	Military Branch
20	2	IS	O		0141	00486	Military Rank/Grade
21	3	IS	O		0142	01573	Military Status

Table 127: PV1 Patient Visit Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	O			00131	Set ID - PV1
2	1	IS	R		0004	00132	Patient Class
3	80	PL	O			00133	Assigned Patient Location
4	2	IS	O		0007	00134	Admission Type
5	250	CX	O			00135	Preadmit Number

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
6	80	PL	O			00136	Prior Patient Location
7	250	XCN	O	Y	0010	00137	Attending Doctor
8	250	XCN	O	Y	0010	00138	Referring Doctor
9	250	XCN	B	Y	0010	00139	Consulting Doctor
10	3	IS	O		0069	00140	Hospital Service
11	80	PL	O			00141	Temporary Location
12	2	IS	O		0087	00142	Preadmit Test Indicator
13	2	IS	O		0092	00143	Re-admission Indicator
14	6	IS	O		0023	00144	Admit Source
15	2	IS	O	Y	0009	00145	Ambulatory Status
16	2	IS	O		0099	00146	VIP Indicator
17	250	XCN	O	Y	0010	00147	Admitting Doctor
18	2	IS	O		0018	00148	Patient Type
19	250	CX	O			00149	Visit Number
20	50	FC	O	Y	0064	00150	Financial Class
21	2	IS	O		0032	00151	Charge Price Indicator
22	2	IS	O		0045	00152	Courtesy Code
23	2	IS	O		0046	00153	Credit Rating
24	2	IS	O	Y	0044	00154	Contract Code
25	8	DT	O	Y		00155	Contract Effective Date
26	12	NM	O	Y		00156	Contract Amount
27	3	NM	O	Y		00157	Contract Period
28	2	IS	O		0073	00158	Interest Code
29	4	IS	O		0110	00159	Transfer to Bad Debt Code
30	8	DT	O			00160	Transfer to Bad Debt Date
31	10	IS	O		0021	00161	Bad Debt Agency Code
32	12	NM	O			00162	Bad Debt Transfer Amount
33	12	NM	O			00163	Bad Debt Recovery Amount
34	1	IS	O		0111	00164	Delete Account Indicator
35	8	DT	O			00165	Delete Account Date
36	3	IS	O		0112	00166	Discharge Disposition

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
37	47	DLD	O		0113	00167	Discharged to Location
38	250	CE	O		0114	00168	Diet Type
39	2	IS	O		0115	00169	Servicing Facility
40	1	IS	B		0116	00170	Bed Status
41	2	IS	O		0117	00171	Account Status
42	80	PL	O			00172	Pending Location
43	80	PL	O			00173	Prior Temporary Location
44	26	TS	O			00174	Admit Date/Time
45	26	TS	O	Y		00175	Discharge Date/Time
46	12	NM	O			00176	Current Patient Balance
47	12	NM	O			00177	Total Charges
48	12	NM	O			00178	Total Adjustments
49	12	NM	O			00179	Total Payments
50	250	CX	O		0203	00180	Alternate Visit ID
51	1	IS	O		0326	01226	Visit Indicator
52	250	XCN	B	Y	0010	01274	Other Healthcare Provider

Table 128: MSA Message Acknowledgement Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VistA DESCRIPTION
1	2	ID	R		0008	Acknowledgment Code	Refer to HL7 table 0008
2	20	ST	R			Message Control ID	Message Control ID of the message being acknowledged.
3	80	ST	O			Text Message	Free text error message
4	15	NM	O			Expected Sequence Number	Not used
5	1	ID	B		0102	Delayed Acknowledgment Type	Not used
6	100	CE	O			Error Condition	Not used

22 HL7 Interface Specification for Patient Record Flags (PRF)

Please refer to the Patient Record Flags HL7 Interface Specification document in the VA Software Document Library Patient Record Flags folder that contains the HL7 Interface Specification for Patient Record Flags (PRF) functionality.

23 HL7 Interface Specification for Community Care Referrals and Authorization (CCRA) Scheduling Actions

The Community Care Referrals and Authorization (CCRA) appointment actions updates VistA to schedule, cancel, or update appointments in support of the HealthShare Referral Manager (HSRM) application. When an appointment is made or canceled, or if an appointment is updated as a No Show for a community care referral in HSRM, HSRM sends an HL7 message to VistA to update the VistA files with the appointment information. This information is then viewable in VistA Scheduling Options, CPRS, VSE, and other applications.

The formats of the HL7 messages conform to HL7 Version 2.5, Schedule Information Unsolicited (SIU) message type, the message structure will be S12 for Schedule an appointment, S15 for Cancel and appointment and S26 to update the appointment as a NO SHOW by the patient.

23.1 Assumptions

The transmission of HSRM HL7 appointment messages assumes the following:

- VistA sites have patches GRMC*3.0*99 and GMRC*3.0*106 installed.
- All VistA systems have installed patch SD*5.3*707. This patch receives the HL7 messages from HSRM and processes the date.

23.2 Message Content

The scheduling messages contain only the data necessary to perform the scheduling action.

23.3 HL7 Protocols

- CCRA HSRM SIU-S12 CLIENT – This is the subscriber protocol that processes the make appointment message.
- CCRA HSRM SIU-S12 SERVER – This the event driver protocol that is triggered when a make appointment message is received.
- CCRA HSRM SIU-S15 CLIENT – This is the subscriber protocol that processes the cancel appointment message.
- CCRA HSRM SIU-S15 SERVER – This is the event driver protocol that is triggered when a cancel appointment message is received.
- CCRA HSRM SIU-S26 CLIENT – This is the subscriber protocol that processes the appointment update for a NO SHOW appointment action.
- CCRA HSRM SIU-S26 SERVER – This is the event driver protocol that is triggered when a NO SHOW update message is received.

23.4 HL7 Application Parameters

- SD-CCRA-HSRM – Defines the sending application parameters

- SD-CCRA-VISTA – Defines the receiving application parameters

23.5 HL7 Messaging Segments

23.5.1 SCH Schedule Activity Information Segment

The SCH segment contains general information about the scheduled appointment.

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	Element Name	VistA Description
1	75	EI	R			860	Placer Appointment ID	Not used
2	75	EI	C			861	Filler Appointment ID	Not used
3	5	NM	C			862	Occurrence Number	VistA consult ID
4	22	EI	O			218	Placer Group Number	Not used
5	250	CE	O			864	Schedule ID	Not used
6	250	CE	R			883	Event Reason	Scheduled or Canceled
7	250	CE	O			866	Appointment Reason	Not used
8	250	CE	O			867	Appointment Type	Not used
9	20	NM				868	Appointment Duration	Appointment length
10	250	CE	O			869	Appointment Duration Units	Minutes or hours
11	200	TQ	R	Y		884	Appointment Timing Quantity	^^^Appointment Start Date Time^Appointment End Date Time
12	250	XCN	O	Y		874	Placer Contact Person	^Provider Last Name^Provider First Name
13	250	XTN	O			875	Placer Contact Phone Number	^^^Scheduler's VA exchange email
14	250	XAD	O	Y		876	Placer Contact Address	Not used
15	80	PL	O			877	Placer Contact Location	Not used
16	250	XCN	R	Y		885	Filler Contact Person	Duz^name of person that scheduled the appointment
17	250	XTN	O			886	Filler Contact Phone Number	Not used
18	250	XAD	O			887	Filler Contact Address	Not used
19	80	PL	O			888	Filler Contact Location	Not used

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	Element Name	VistA Description
20	250	XCN	R	Y		878	Entered by Person	Free text scheduler name
21	250	XTN	O	Y		879	Entered by Phone Number	Not Used
22	80	PL	O			880	Entered by Location	Not used
23	75	EI	O			881	Parent Placer Appointment ID	Not used
24	75	EI	O			882	Parent Filler Appointment ID	Not used
25	250	CE	R			889	Filler Status Code	Scheduled or Canceled
26	22	EI	C	Y		216	PLACER ORDER NUMBER	Not Used
27	22	EI	C	Y		217	FILLER ORDER NUMBER	Not Used

23.5.2 PID Patient Information Segment

The PID segment has patient identification information.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
1	4	SI	O			104	Set ID - PID	Not used
2	20	CX	B			105	Patient ID	Not used
3	250	CX	R	Y		106	Patient Identifier List	Patient ICN^^^USAVHA^NI~DFN
4	20	CX	B	Y		107	Alternate Patient ID - PID	Not used
5	250	XPN	R	Y		108	Patient Name	Last Name^First Name^MI^^^^L
6	250	XPN	O	Y		109	Mother's Maiden Name	Not used
7	26	TS	O			110	Date/Time of Birth	Patient Date of Birth
8	1	IS	O		1	111	Administrative Sex	Patient's Gender
9	250	XPN	B	Y		112	Patient Alias	Not used
10	250	CE	O	Y	5	113	Race	Not used
11	250	XAD	O	Y		114	Patient Address	Not used
12	4	IS	B		289	115	County Code	Not used

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
13	250	XTN	O	Y		116	Phone Number - Home	Not used
14	250	XTN	O	Y		117	Phone Number - Business	Not used
15	250	CE	O		296	118	Primary Language	Not used
16	250	CE	O		2	119	Marital Status	Not used
17	250	CE	O		6	120	Religion	Not used
18	250	CX	O			121	Patient Account Number	Consult ID related to this appointment
19	16	ST	B			122	SSN Number - Patient	Not used
20	25	DLN	O			123	Driver's License Number - Patient	Not used
21	250	CX	O	Y		124	Mother's Identifier	Not used
22	250	CE	O	Y	189	125	Ethnic Group	Not used
23	250	ST	O			126	Birth Place	Not used
24	1	ID	O		136	127	Multiple Birth Indicator	Not used
25	2	NM	O			128	Birth Order	Not used
26	250	CE	O	Y	171	129	Citizenship	Not used
27	250	CE	O		172	130	Veterans Military Status	Not used
28	250	CE	B		212	739	Nationality	Not used
29	26	TS	O			740	Patient Death Date and Time	Not used
30	1	ID	O		136	741	Patient Death Indicator	Not used
31	1	ID	O		136	1535	Identity Unknown Indicator	Not used
32	20	IS	O	Y	445	1536	Identity Reliability Code	Not used
33	26	TS	O			1537	Last Update Date/Time	Not used
34	40	HD	O			1538	Last Update Facility	Not used
35	250	CE	C		446	1539	Species Code	Not used

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
36	250	CE	C		447	1540	Breed Code	Not used
37	80	ST	O			1541	Strain	Not used
38	250	CE	O	2	429	1542	Production Class Code	Not used

23.5.3 PV1 Patient Visit Segment

The PV1 segment has the patient visit information.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
1	4	SI	O			131	Set ID - PV1	Not used
2	1	IS	R		4	132	Patient Class	Not used
3	80	PL	O			133	Assigned Patient Location	Not used
4	2	IS	O		7	134	Admission Type	Not used
5	250	CX	O			135	Preadmit Number	Not used
6	80	PL	O			136	Prior Patient Location	Not used
7	250	XCN	O	Y	10	137	Attending Doctor	Not used
8	250	XCN	O	Y	10	138	Referring Doctor	Not used
9	250	XCN	B	Y	10	139	Consulting Doctor	Not used
10	3	IS	O		69	140	Hospital Service	Not used
11	80	PL	O			141	Temporary Location	Not used
12	2	IS	O		87	142	Preadmit Test Indicator	Not used
13	2	IS	O		92	143	Re-admission Indicator	Not used
14	6	IS	O		23	144	Admit Source	Not used
15	2	IS	O	Y	9	145	Ambulatory Status	Not used
16	2	IS	O		99	146	VIP Indicator	Not used
17	250	XCN	O	Y	10	147	Admitting Doctor	Not used
18	2	IS	O		18	148	Patient Type	Not used
19	250	CX	O			149	Visit Number	VistA Consult Id
20	50	FC	O	Y	64	150	Financial Class	Not used
21	2	IS	O		32	151	Charge Price Indicator	Not used

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
22	2	IS	O		45	152	Courtesy Code	Not used
23	2	IS	O		46	153	Credit Rating	Not used
24	2	IS	O	Y	44	154	Contract Code	Not used
25	8	DT	O	Y		155	Contract Effective Date	Not used
26	12	NM	O	Y		156	Contract Amount	Not used
27	3	NM	O	Y		157	Contract Period	Not used
28	2	IS	O		73	158	Interest Code	Not used
29	1	IS	O		110	159	Transfer to Bad Debt Code	Not used
30	8	DT	O			160	Transfer to Bad Debt Date	Not used
31	10	IS	O		21	161	Bad Debt Agency Code	Not used
32	12	NM	O			162	Bad Debt Transfer Amount	Not used
33	12	NM	O			163	Bad Debt Recovery Amount	Not used
34	1	IS	O		111	164	Delete Account Indicator	Not used
35	8	DT	O			165	Delete Account Date	Not used
36	3	IS	O		112	166	Discharge Disposition	Not used
37	25	CM	O		113	167	Discharged to Location	Not used
38	250	CE	O		114	168	Diet Type	Not used
39	2	IS	O		115	169	Servicing Facility	Not used
40	1	IS	B		116	170	Bed Status	Not used
41	2	IS	O		117	171	Account Status	Not used
42	80	PL	O			172	Pending Location	Not used
43	80	PL	O			173	Prior Temporary Location	Not used
44	26	TS	O			174	Admit Date/Time	Appointment Date/Time
45	26	TS	O	Y		175	Discharge Date/Time	Not used

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
46	12	NM	O			176	Current Patient Balance	Not used
47	12	NM	O			177	Total Charges	Not used
48	12	NM	O			178	Total Adjustments	Not used
49	12	NM	O			179	Total Payments	Not used
50	250	CX	O		203	180	Alternate Visit ID	Not used
51	1	IS	O		326	1226	Visit Indicator	Not used
52	250	XCN	B	Y	10	1274	Other Healthcare Provider	Not used

23.5.4 RGS Resource Group Segment

The RGS segment is the appointment grouper segment.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
1	4	SI	R			1203	Set ID - RGS	1
2	3	ID	C		206	763	Segment Action Code	A = Add/Insert D = Delete U = Update
3	250	CE	O			1204	Resource Group ID	Not used

23.5.5 AIS Appointment Information Segment

The AIS segment contains information about the appointment.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
1	4	SI	R			890	Set ID - AIS	Segment Sequence Number
2	3	ID	C		206	763	Segment Action Code	A=Add/Insert D=Delete U=Update Make appointment will be A Cancel appointment will be D
3	250	CE	R			238	Universal Service Identifier	ICD Code^Provisional Diagnosis
4	26	TS	C			1202	Start Date/Time	Appointment start date time in UTC

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
5	20	NM	C			891	Start Date/Time Offset	Not used
6	250	CE	C			892	Start Date/Time Offset Units	Not used
7	20	NM	O			893	Duration	Length of appointment
8	250	CE	O			894	Duration Units	Not used
9	10	IS	C		279	895	Allow Substitution Code	Not used
10	250	CE	C		278	889	Filler Status Code	Not used
11	250	CE	O	Y	411	1474	Placer Supplemental Service Information	Not used
12	250	CE	O	Y	411	1475	Filler Supplemental Service Information	Not used

23.5.6 AIG Appointment Insurance Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Data Element
1	4	SI	R			896	Set ID - AIG	Segment Sequence Number
2	3	ID	C		206	763	Segment Action Code	A = Add, D = Delete U = Update
3	250	CE	C			897	Resource ID	Provider Name
4	250	CE	R			898	Resource Type	Provider
5	250	CE	O	Y		899	Resource Group	Not used
6	5	NM	O			900	Resource Quantity	Not used
7	250	CE	O			901	Resource Quantity Units	Not used
8	26	TS	C			1202	Start Date/Time	Not used
9	20	NM	C			891	Start Date/Time Offset	Not used
10	250	CE	C			892	Start Date/Time Offset Units	Not used
11	20	NM	O			893	Duration	Not used
12	250	CE	O			894	Duration Units	Not used

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Data Element
13	10	IS	C		279	895	Allow Substitution Code	Not used
14	250	CE	C		278	889	Filler Status Code	Not used

23.5.7 AIL Appointment Location Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
1	4	SI	R			902	Set ID - AIL	Segment Sequence Number
2	3	ID	C		206	763	Segment Action Code	A = Add D = Cancel U = Update
3	80	PL	C			903	Location Resource ID	Consult Title
4	250	CE	R			904	Location Type- AIL	Consult Title
5	250	CE	O			905	Location Group	Not Used
6	26	TS	C			1202	Start Date/Time	Not Used
7	20	NM	C			891	Start Date/Time Offset	Not used
8	250	CE	C			892	Start Date/Time Offset Units	Not used
9	20	NM	O			893	Duration	Not used
10	250	CE	O			894	Duration Units	Not used
11	10	IS	C		279	895	Allow Substitution Code	Not used
12	250	CE	C		278	889	Filler Status Code	Not used

23.5.8 AIP – Appointment Provider Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
1	4	SI	R			906	Set ID - AIP	Segment Sequence Number
2	3	ID	C		206	763	Segment Action code	A = Add D = Delete U = Update

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
3	250	XCN	C	Y		913	Personnel Resource ID	Provider duz^^Provider Last Name^Provider First Name
4	250	CE	R			907	Resource Role	Will be Provider
5	250	CE	O			899	Resource Group	Not used
6	26	TS	C			1202	Start Date/Time	Not used
7	20	NM	C			891	Start Date/Time Offset	Not used
8	250	CE	C			892	Start Date/Time Offset Units	Not used
9	20	NM	O			893	Duration	Not used
10	250	CE	O			894	Duration Units	Not used
11	10	IS	C		279	895	Allow Substitution Code	Not used
12	250	CE	C		278	889	Filler Status Code	Not used

24 Appendix A: Demographics Domain Native Domain Standardization (NDS)

This appendix provides a brief description of the new features and functions of the Demographics Domain Native Domain Standardization project. This project consists of multiple patches, which must be installed for the functionality to perform.

The Collaborative Terminology Tooling and Data Management (CTT & DM) Native Domain Standardization (NDS) Demographics Domain project supports the effort to standardize the following VistA Files: Race (#10), Marital Status (#11), and the Religion (#13) in a native format within the existing Veterans Health Information Systems Technology Architecture (VistA). Demographics data is generated in the PATIENT file (#2) in VistA, which is part of the Registration package. This file includes 469 fields, 88 forward pointers, 357 backward pointers, 28 sub-files, and eight computed fields.

Standardization of the VistA Race (#10), Marital Status (#11), and Religion (#13) files facilitate the broad exchange of health information, which will ultimately contribute to improved patient safety, healthcare quality, and efficiency. Mapping tables will serve as an interim solution to achieving VA's ultimate goal of providing VA and its partner institutions with applications that can be used natively without the need for mapping tables. The use of a standard terminology will also facilitate the ability to provide more automated decision support for patient care. Because the Demographics Domain contributes a substantial amount of valuable clinical data, the importance of having this data in a standard, structured, easily mineable format is imperative.

This product shall run on standard hardware platforms used by the Department of Veterans Affairs (VA) Healthcare facilities.

24.1 New Functionality

The added functional components are:

The system will include one new field that will incorporate code data from their respective Standards Development Organizations (SDO) to the Race (#10), Marital Status (#11), and Religion (#13) files. These new fields will be set as a multiple in order to accommodate the potential need to store multiple codes to define a given term.

The system will include three new files that will incorporate code data from the respective Standards Development Organizations (SDO) for race (RACE MASTER file #10.99), marital status (MASTER MARITAL STATUS file #11.99), and religion (MASTER RELIGION file #13.99).

The system will include new VistA menu options to provide a method of interactively associating local race, marital status, and religion file entries to the corresponding master file if they have not already been associated via the Master File Server (MFS).

The system will include new VistA reports to list the local race, marital status, and religion files' associations to the corresponding master file.

The entirety of the work within the scope of this effort will have no impact on Graphic User Interfaces (GUI) within the VA network, and will not impact the work-flow of clinicians.

Refer to the following CTT &DM NDS documents for additional information:

Collaborative Terminology Tooling & Data Management Demographics Compendium V5.0, November 2016

Collaborative Terminology Development Tooling Business Requirements Document (BRD)

DoD/VA Interagency Program Office (IPO), Healthcare Information Interoperability Technical Package (I2TP), Version 6.0, DRAFT, August 2016

Options and Build Components

This patch implements Demographics domain changes required by the Collaborative Terminology Tooling & Data Management (CTT & DM) Native Domain Standardization (NDS) project. This patch adds the following new 'Master' files containing standard sets of concepts from the Health Level Seven (HL7) Standards Development Organization (SDO):

- RACE MASTER (#10.99)
- MASTER MARITAL STATUS (#11.99)
- MASTER RELIGION (#13.99).

New fields have also been added to the RACE (#10), MARITAL STATUS (#11), and RELIGION (#13) files pointing to the corresponding master file for the purpose of interoperability, by allowing each VA concept (Race, Marital Status, Religion) to be associated with a standard, interoperable, concept.

The RACE MASTER (#10.99), MASTER MARITAL STATUS (#11.99), and MASTER RELIGION (#13.99) files have been 'locked down' to prevent local changes to the contents of the file; as each of these files contain entries representing the sets of concept names and codes from the respective Standards Development Organizations, and a VA Unique Identifier (VUID) identifying the standard SDO concept across the VHA enterprise.

The new Master File Association [DGMF AMAIN] and Master File Reports [DGMF RMAIN] VistA menu options are accessible via the following menu path:

```
Supervisor ADT Menu [DG SUPERVISOR MENU]
  ADT System Definition Menu [DG SYSTEM DEFINITION MENU]
      Master Demographics Files [DGMF MENU]
         Master File Association Enter/Edit [DGMF AMAIN]
          Master File Reports [DGMF RMAIN]
```

```
Patch Components:
-----------------
Files & Fields Associated:
File Name (Number)     Field Name (Number)          New/Modified/Deleted
------------------     -------------- -----        --------------------
RACE (#10)             RACE MASTER  (#90)                  New

RACE MASTER (#10.99)   REPLACED BY VHA STANDARD           New
                        TERM (#99.97)
RACE MASTER (#10.99)   MASTER ENTRY FOR VUID (#99.98)     New
RACE MASTER (#10.99)   VUID (#99.99)                      New
```

```
RACE MASTER (#10.99)   EFFECTIVE DATE/TIME (#99.991)       New
EFFECTIVE DATE/TIME    EFFECTIVE DATE/TIME (#.01)          New
 (sub-file #10.9901)
EFFECTIVE DATE/TIME    STATUS (.02)                        New
 (sub-file #10.9901)

MARITAL STATUS (#11)   MASTER MARITAL STATUS (#90)         New

MASTER MARITAL STATUS  REPLACED BY VHA STANDARD            New
 (#11.99)               TERM (#99.97)
MASTER MARITAL STATUS  MASTER ENTRY FOR VUID (#99.98)      New
 (#11.99)
MASTER MARITAL STATUS  VUID (#99.99)                       New
 (#11.99)
MASTER MARITAL STATUS  EFFECTIVE DATE/TIME (#99.991)       New
 (#11.99)
EFFECTIVE DATE/TIME    EFFECTIVE DATE/TIME (#.01)          New
 (sub-file #11.9901)
EFFECTIVE DATE/TIME    STATUS (.02)                        New
 (sub-file #11.9901)

RELIGION (#13)         MASTER RELIGION (#13.99)            New

MASTER RELIGION        REPLACED BY VHA STANDARD            New
 (#13.99)               TERM (#99.97)
MASTER RELIGION        MASTER ENTRY FOR VUID (#99.98)      New
 (#13.99)
MASTER RELIGION        VUID (#99.99)                       New
 (#13.99)
RELIGION (#13)         EFFECTIVE DATE/TIME (#99.991)       New
 (#13.99)
EFFECTIVE DATE/TIME    EFFECTIVE DATE/TIME (#.01)          New
 (sub-file #13.9901)
EFFECTIVE DATE/TIME    STATUS (.01)                        New
 (sub-file #13.9901)
```

24.2 Modified and New Routines

Routine Information:

The second line of each of these routines now looks like:

```
;;5.3;Registration;**[Patch List]**;Aug 13, 1993;Build 33
```

The checksums below are new checksums, and can be checked with CHECK1^XTSUMBLD.

```
Routine Name: DG933PO
    Before:       n/a   After: B27885525  **933**
Routine Name: DGMFA10
```

```
    Before:       n/a   After: B14104060  **933**
Routine Name: DGMFA11
    Before:       n/a   After: B14590448  **933**
Routine Name: DGMFA13
   Before:       n/a   After: B13906961  **933**
Routine Name: DGMFASS
    Before:       n/a   After:  B3776607  **933**
Routine Name: DGMFR10
    Before:       n/a   After: B72687376  **933**
Routine Name: DGMFR11
    Before:       n/a   After: B68721321  **933**
Routine Name: DGMFR13
    Before:       n/a   After: B62970443  **933**
Routine Name: DGMFRPT
    Before:       n/a   After:  B3969553  **933**
Routine Name: DGNDSU
    Before:       n/a   After: B33380048  **933**
Routine Name: DGZRT
    Before:       n/a   After: B36061811  **933**
```

25 Glossary

For more glossary terms and acronyms, please refer to OI Master Glossary and the National Acronym Directory.

Table 129: Glossary

TERM	DESCRIPTION
ADD-ONS	Patients who have been scheduled for a visit after routing slips for a particular date have been printed.
ALOS	Average Length of Stay
AMIS	Automated Management Information System
ANCILLARY	A test added to an existing appointment (i.e. lab, x-ray, EKG) test
API	Application Program Interface
BILLINGS	Bills sent to veteran
BRD	Business Requirements Document
CLINIC PULL LIST	A list of patients whose radiology/MAS records should be pulled from the file room for use in conjunction with scheduled clinic visits
COLLATERAL	A visit by a non-veteran patient whose appointment is related to or visit associated with a service-connected patient's treatment.
Computerized Patient Record System (CPRS)	An integrated, comprehensive suite of clinical applications in VistA that work together to create a longitudinal view of the veteran's Electronic Medical Record (EMR). CPRS capabilities include a Real Time Order Checking System, a Notification System to alert clinicians of clinically significant events, Consult/Request tracking and a Clinical Reminder System. CPRS provides access to most components of the patient chart.
CPRS	Computerized Patient Record System
CPT	Current Procedural Terminology
CR	Clinical Reminders
DBIA	Database Integration Agreement
DRG	Diagnostic Related Group
GMTS	Health Summary namespace
GUI	Graphic User Interface
HL7	Health Level Seven
ICR	Integration Control Reference
IRT	Incomplete Records Tracking
IVMH	Improve Veteran Mental Health
MEANS TEST	A financial report upon which certain patients' eligibility for care is based

TERM	DESCRIPTION
Mental Health Treatment Coordinator (MHTC)	The liaison between the patient and the mental health system at a VA site. There is only one Mental Health treatment coordinator per patient and they are the key coordinator for behavioral health services care. For more information about the MH treatment coordinator's responsibilities, see VHA Handbook 1160.1, "Uniform Mental Health Services in VA Medical Centers for Clinics," page 3-4. Note: In the handbook, the MHTC is called the Principal Mental Health Provider.
MH	Mental Health
MHA3	Mental Health Assistant 3 package
MHTC	Mental Health Treatment Coordinator
NO SHOW	A person who did not report for a scheduled clinic visit without prior notification to the medical center.
NON-COUNT	A clinic whose visits do not affect AMIS statistics.
NSR	New Service Request
OE/RR	Order Entry/Results Reporting
OPC	Outpatient Clinic
OR	CPRS Order Entry/Results Reporting namespace
PAF	Patient Assessment File; where PAI information is stored until transmission to Austin.
PAI	Patient Assessment Instrument
PCE	Patient Care Encounter
PCMM	Primary Care Management Module
PRF	Patient Record Flag
Principal Mental Health Provider (PMHP)	See MH Treatment Coordinator (MHTC)
PTF	Patient Treatment File
PULL LIST	A list of patients whose radiology/PIMS records should be "pulled" from the file room for scheduled clinic visits
PX	Patient Care Encounter namespace
PXRM	Clinical Reminders package namespace
RAM	Resource Allocation Methodology
Reminder Definitions	These are pre-defined sets of findings that are used to identify patient cohorts and reminder resolutions. The reminder is used for patient care and/or report extracts.

TERM	DESCRIPTION
Reminder Dialogs	These are pre-defined sets of text and findings that provide information to the CPRS GUI for collecting and updating appropriate findings while building a progress note.
Reminder Terms	Terms are used to map local findings to national findings, providing a method to standardize the findings for national use. These are also used for local grouping of findings for easier reference in reminders and are defined in the Reminder Terms file.
ROUTING SLIP	When printed for a specified date, it shows the current appointment time, clinic, location, and stop code. It also shows future appointments.
RPC	Remote Procedure Calls
RSD	Requirements Specification Document
RUG	Resource Utilization Group
SBR	Suicide Behavior Report
SHARING AGREEMENT	Agreement or contract under which patients from other government agencies or private facilities are treated.
SME	Subject Matter Expert
SPECIAL SURVEY	An ongoing survey of care given to patients alleging Agent Orange or Ionizing Radiation exposure. Each visit by such patients must receive "special survey dispositioning" which records whether treatment provided was related to their exposure. This data is used for Congressional reporting purposes.
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.
THIRD PARTY	Billings where a party other than the patient is billed
TIU	Text Integration Utility namespace
TIU	Text Integration Utility
TSR	Treating Specialty Report
VHA	Veterans Health Administration
VistA	Veterans Information System and Technology Architecture

26 Military Time Conversion Table

The table below is a standard to military time conversion resource.

Table 130: Military Time Conversion Table

STANDARD	MILITARY
12:00 MIDNIGHT	2400 HOURS
11:00 PM	2300 HOURS
10:00 PM	2200 HOURS
9:00 PM	2100 HOURS
8:00 PM	2000 HOURS
7:00 PM	1900 HOURS
6:00 PM	1800 HOURS
5:00 PM	1700 HOURS
4:00 PM	1600 HOURS
3:00 PM	1500 HOURS
2:00 PM	1400 HOURS
1:00 PM	1300 HOURS
12:00 NOON	1200 HOURS
11:00 AM	1100 HOURS
10:00 AM	1000 HOURS
9:00 AM	0900 HOURS
8:00 AM	0800 HOURS
7:00 AM	0700 HOURS
6:00 AM	0600 HOURS
5:00 AM	0500 HOURS
4:00 AM	0400 HOURS
3:00 AM	0300 HOURS
2:00 AM	0200 HOURS
1:00 AM	0100 HOURS

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