Patient Information Management System (PIMS) Software Version 5.3

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

Technical Manual

December 2021

Department of Veterans Affairs (VA)

Office of Information and Technology (OIT)

Enterprise Program Management Office (EPMO)

Revision History

Date	Revision	Description	Author
12/2021	0.83	SD*5.3*780 – Added new HL7 records to communicate non-clinic days to TMP	Liberty ITS
12/2021	0.82	SD*5.3*800 - Added new and modified routines to **Patch SD*5.3*800 Routines** Section 3.5.59	GovernmentCIO/ Liberty ITS
11/2021	0.81	DG*5.3*1059 – added modified routines to Patch DG*5.3*1059 Section 3.5.58 and section 4.2 Files: SEXUAL ORIENTIATION TYPES file #47.77, PRONOUN TYPES file #47.78, Section 12.2.1 and 12.2.2 DEM^VADPT and DEMUPD^VADPT updates #13 was missing from documentation, #14 added with patch for Sexual Orientation, Sexual Orienation Description, Pronoun, Pronoun Description, Self-Identified Gender	VA MPI Team
11/2021	0.80	SD*5.3*799 - Added new and modified routines to **Patch SD*5.3*799 Routines** Section 3.5.57	GovernmentCIO/ Liberty ITS
11/2021	0.79	DG*5.3*1065 – Added modified routine DGUAMWS to Section 3.5.56 Patch DG*5.3*1065 Routines.	Liberty ITS
10/2021	0.78	SD*5.3*797 - Added new and modified routines to **Patch SD*5.3*797 Routines** Section 3.5.55	GovernmentCIO/ Liberty ITS
10/2021	0.77	SD*5.3*779 – Updates Added new routines to Section 3.5.54 Patch SD*5.3*779 Routines	Liberty ITS
10/2021	0.76	SD*5.3*773 – Added new **Patch SD*5.3*773** to Routines Section	TMP PMO Team
10/2021	0.75	DG*5.3*1061 Updates: Added Section 3.5.52 Patch DG*5.3*1061 Routines: Modified ICR #10061 for VADPT with new component "CAI" for downstream applications to retrieve the COMPACT Act Indicator. Modified routines DGENELA, DGLOCK1, DGRP7, DGRPD, and VADPT. Also added DG531061P, which added entries into ELIGIBILITY CODE file (#8).	Liberty ITS

Date	Revision	Description	Author
		Added Section 12.2.20 for CAI^VADPT, new callable entry point in VADPT for COMPACT Act eligibility determination.	
10/2021	0.74	SD*5.3*796 - Added new and modified routines to **Patch SD*5.3*796 Routines** Section 3.5.51	GovernmentCIO/ Liberty ITS
09/2021	0.73	DG*5.3*1056 Updates: Changed "patient's permanent address" to "patient's mailing address" and changed "permanent mailing address" to "mailing address" where this address is referenced. Added Section 3.5.50 Patch DG*5.3*1056 Routines.	Liberty ITS
09/2021	0.72	SD*5.3*794 - Added new and modified routines to **Patch SD*5.3*794 Routines** Section 3.5.49	GovernmentCIO/ Liberty ITS
09/2021	0.71	DG*5.3*1045 – Added modified routines DGENUPL7, DGEN, DGENA1A, DGENA6, DGREG, DCRPC, and DGENA2 to Section 3.5.48 Patch DG*5.3*1045 Routines	Liberty ITS
09/2021	0.70	SD*5.3*792 - Added new and modified routines to **Patch SD*5.3*792 Routines** Section 3.5.47	GovernmentCIO/ Liberty ITS
08/2021	0.69	DG*5.3*1047 – Added new and modified routines to **Patch DG*5.3*1047 Routines** Section 3.5.46.	Liberty ITS
08/2021	0.68	SD*5.3*790 - Added new and modified routines to **Patch SD*5.3*790 Routines** Section 3.5.45	GovernmentCIO/ Liberty ITS
07/2021	0.67	SD*5.3*788 - Added new and modified routines to **Patch SD*5.3*788 Routines** Section 3.5.44	GovernmentCIO/ Liberty ITS
07/2021	0.66	SD*5.3*785 – Added new and modified routines to **Patch SD*5.3*785 Routines** Section 3.5.43	GovernmentCIO/ Liberty ITS
06/2021	0.65	DG*5.3*1044 Updates: Changed "AIR FORCE – ACTIVE DUTY" to "USAF, USSF – ACTIVE DUTY" in Section 15.9.24 Table VA11—Period of Service Added Section 3.5.42 Patch DG*5.3*1044 Routines: Modified routines DGRPMS,	Liberty ITS

Date	Revision	Description	Author
		DGRPE, DGRP61 and added post-install routine DG531044P to re-compile templates.	
06/2021	0.64	DG*5.3*1027 Updates: Added new and modified routines to Section 3.5.41 Patch DG*5.3*1027 Routines Modified "ENROLLMENT APPLICATION DATE" to "APPLICATION DATE" in Table 95	Liberty ITS
06/2021	0.63	DG*5.3*1035 – Added new and modified routines to **Patch DG*5.3*1035 Routines** Section 3.5.40	Liberty ITS
06/2021	0.62	SD*5.3*784 – Added new and modified routines to Patch SD*5.3*784 Routines Section 3.5.39	GovernmentCIO/ Liberty ITS
05/2021	0.61	SD*5.3*781 - Added new and modified routines to Patch SD*5.3*781 Routines Section 3.5.38.	GovernmentCIO/ Liberty ITS
04/2021	0.60	DG*5.3*1034 – Added new and modified routines to **Patch DG*5.3*1034 Routines** Section 3.5.37	Liberty ITS
04/2021	0.59	DG*5.3*1018 Updates: • Added BLUE WATER NAVY to Section 15.9.32 Table VA0046 – Agent Orange Exposure Location. Added missing updates related to patch DG*5.3*993: • Added PATIENT REGISTRATION ONLY REASON to Section 4.2 File List • Added Section 15.9.33 Table VA0047 – PATIENT REGISTRATION ONLY REASON	Liberty ITS
03/2021	0.58	DG*5.3*1029 – Added new and modified routines to **Patch DG*5.3*1029** Routines Section 3.5.36.	Liberty ITS

Date	Revision	Description	Author
02/2021	0.57	Added missing patch entries: DG*5.3*1025 – Added new and modified routines to Patch DG*5.3*1025 Routines Section 3.5.35. DG*5.3*1016 – Added new and modified routines to Patch DG*5.3*1016 Routines Section 3.5.34. DG*5.3*977 – Added new and modified routines to Patch DG*5.3*977 Routines Section 3.5.33. DG*5.3*952 – Added new and modified routines to Patch DG*5.3*952 Routines Section 3.5.32.	Liberty ITS
02/2021	0.56	DG*5.3*1046 Updates: Merged duplicate copies of this manual into a single file to serve as a baseline for updates to the document moving forward.	Liberty ITS
12/2020	0.55	DG*5.3*1014 Updates: • Added new routines VAFHLZCE, DGRP1152A, DGRP1152U; DGADDVAL, DGADDLST, and DGUAMWS and modified routines IVMPTRN8, DGENUPL1, DGENUPLB, DGENUPL7, DGRPH, DGDEP, DGDEPE, DGR111, DGR113, DGR1131, DGR114, DGRP1, DGRP11B, DGRP2, DGRP6, DGRP61, DGRP62, DGRPCF, DGRPU, DPTLK, DGRP6EF, DGRP6CL, DGREGAED, DGREGRED, and DGREDTED to Section 3.5.31 Patch DG*5.3*1014 Routines. • Added Section 3.5.31.1 HWSC Configuration.	Liberty ITS
12/2020	0.54	Updates: Merged missing content from the PIMS Technical Manual (i.e., **PIMS_Technical_Manual.docx/.pdf**) into this manual (i.e., **adt_pims_tm.docx/.pdf**) so there will only be one PIMS Technical Manual going forward: • Changed references from VistA Scheduling Enhancement (VSE) to	VDIF Development Team

Date	Revision	Description	Author
		VistA Scheduling Graphical User Interface (VS GUI) throughout. • Added (missing) Section 3.5.30, "Patch SD*5.3*756 Routines." • Added (missing) File #409.88 entry to Table 38 and Table 58. • Added (missing) Patch SD*5.2*756 option entry to Table 43.	
12/2020	0.53	Updates: • Merged two divergent versions of this same document back into a single document to keep all edits/changes in sync. • Updated entire document to follow current documentation standards and style guidelines. • Updated all styles and formatting throughout. • Corrected document to be Section 508 conformant. • Updated organizational references and acronyms. • Renamed this document to match current naming conventions: **adt_pims_tm.docx/.pdf**. This is the *unredacted* version of this document that can be uploaded to internal Anonymous directories, other VA internal repositories, and Intranet sites only accessible behind the VA firewall. • Created a mirror document named **adt_pims_tm_r.docx/.pdf**. In accordance with the current VA Software Document Library (VDL) redaction requirements, all personal identifiable information (PII) and sensitive information (e.g., DFN, IPs, ports, names, Intranet links, etc.) have been replaced with a "REDACTED" placeholder.	VDIF Development Team
12/2020	0.52	Updates for VS GUI R1.7.2.1 with associated VistA patch SD*5.3*756.	Liberty ITS
12/2020	0.51	DG*5.3*1020 Updates:	VDIF Development Team

Date	Revision	Description	Author
		Table 2: Updated name of background job from "**DG PTF ICD CODE NOTIFIER**" to "**DG EVENT NOTIFIER**."	
09/2020	0.50	Updates for numerous VistA patches and releases, as requested by HSP.	AbleVets/ GovernmentCIO Liberty ITS
09/2020	0.49	Approved by HSP for VS GUI R1.7.1. Added updates made in August 2020 (0.45 below) to the correct document version.	Liberty ITS
09/2020	0.48	DG*5.3*1015 Updates: Added modified routines **DGENA2**, **DGENACL2**, and **DGENDD** to Section 3.5.18.	Liberty ITS
08/2020	0.47	DG*5.3*993 Updates: • Added new routine to Section 3.5.17 and to Section 3.5, "New and Modified Routines." • Modified **ZEN**: VA-Specific Enrollment Segment Table 95 to include SEQ 11 – 19.	Liberty ITS
08/2020	0.46	DG*5.3*997 Updates: Added new routines **DGRP11A** and **DGRP11B,** and modified routines **DGRPE**, **DGRPH**, **DGRPP**, **DGRPP1**, **DGRPU**, **DGRPV**, **VAFHLFNC**, and **VAFHLZCT** to Section 3.5.16.	Liberty ITS
08/2020	0.45	Updates for numerous VS GUI releases with their associated VistA patches, as requested by HSP.	AbleVets
06/2020	0.44	DG*5.3*932 Updates: Table 2: Added **DG PTF ICD CODE NOTIFIER** to the list of background jobs.	CPRS VA Tech Writ
05/2020	0.43	DG*5.3*996 Updates: • Added modified routine **VADPT** to Section 3.5, "New and Modified Routines." • Added PREFERRED NAME field to Table 59, "Supported References." • Removed **VADM(14)** The PREFERRED NAME of the patient	Liberty IT Solutions

Date	Revision	Description	Author
		(e.g., "PREFERRED NAME") from Section 12.2.1, "DEM^VADPT". • Added Section 12.2.2, "DEMUPD^VADPT." • Added **DEMUPD^VADPT** call to Table 61, "Alpha Subscripts."	
01/2020	0.42	DG*5.3*952 Updates: • Changes for Emergent **OTHER THAN HONORABLE** eligibility patients in Section 12.2.3. • Added **EXPANDED MH CARE NON-ENROLLEE** code to the Table 115. • Added new alpha subscript **VAEL("OTH")** to Table 61.	REDACTED
01/2020	0.41	DG*5.3*985 Updates: Added modified routines **DGR111**, **DGRP1**, **DGRPD1**, **DGRPE**, **DGRPH**, and **DGRPV** to Section 3.5, "New and Modified Routines."	VA OIT
12/2019	0.40	DG*5.3*972 Updates: Added modified routine **DGRPDB** to Section 3.5, "New and Modified Routines."	VA OIT
10/2019	0.39	DG*5.3*982 Updates: Added modified routines **DGENACL2** and **DGENA2** to Section 3.5, "New and Modified Routines."	VA OIT
06/2019	0.38	Reviewed proposed changes.	VA OIT
06/2019	0.37	SD*5.3*707 Updates: • Added Section 3.5.11, "Patch SD*5.3*707 Routines." • Added Section 23. • Updated Pages: 22, 256-265.	VA OIT
05/2019	0.36	DG*5.3*941 Updates: • 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 12.2.6,	VA OIT

Date	Revision	Description	Author
		ADD^VADPT and Table 61, "Alpha Subscripts."	
03/2019	0.35	DG*5.3*951 Updates: • Added Section 3.5.1, "Patch DG*5.3*951 Routines." • Added PRF HL7 REQUEST LOG (#26.22) file to Sections 4.2 and 11.6. • Added Section 22, "HL7 Interface Specification for Patient Record Flags (PRF)."	VA OIT
10/2018	0.34	DG*5.3*958 Updates: Added Section 3.5.2 for a modified routine.	VA OIT
10/2018	0.33	SD*5.3*640 Updates for ACRP and APM HL7 Shutdown • Added notations regarding the ACRP and APM transmissions. • Related menu options that are being disabled. • See pages 2, 3, 172.	VA OIT
09/2018	0.32	DG*5.3*960 Updates: Added Section 3.5.3, "Patch DG*5.3*960 Routines."	VA OIT
02/2018	0.31	DG*5.3*933 Updates: • Demographics Native Domain Standardization. • Added Section 24, "Appendix A."	CTT DM NDS Team
11/2017	0.30	DG*5.3*935 Updates: 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).	VA OIT
03/2017	0.29	DG*5.3*903 - Increase Engagement in My HealtheVet (IEMHV) Updates: • Added Section 3.5.10. • Updated Section 4.1 with **^DGMHV** global. • Updated Section 4.2 with new files 390.01, 390.02, 390.03, and 390.4.	VA OIT

Date	Revision	Description	Author
09/2015	0.28	DG*5.3*884 - ICD-10 PTF Modifications Updates: • 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
07/2015	0.27	SD*5.3*622 Updates: Added Section 3.5.9 for Patch SD*5.3*622 Routines (released in December 2014).	VA OIT
06/2015	0.26	SD*5.3*624 Updates: Removed HL7 instructions due to patch SD*5.3*624 (Table 1 and Sections 15.10-18).	VA OIT
07/2014	0.25	SD*5.3*586 - ICD-10 Remediation Updates: • Updated Title Page and Revision History. • Updated ICD9 reference to generic ICD (p.12). • Updated the DG1 - Diagnosis Information Segment table (p.200).	VA OIT
11/2013	0.24	DG*5.3*869 Updates: • Added Missing Patient, Patient Record Flag (PRF) - Patch Updates section (Section 2.4) and Patch DG*5.3*869 Routines Section 3.5.4. • Added Patch DG*5.3*869 Features page 22. Added List of Tables.	VA OIT
04/2013	0.23	SD*5.3*588 High Risk Mental Health Proactive Report patch Updates; 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: two new **SD** and two modified **SD** options.	VA OIT

Date	Revision	Description	Author
		• 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 (#26.15) file 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. • Updated "Reference Material" section with **SD** and **DG** manual releases. Corrected existing reference manuals names.	
12/2012	0.22	SD*5.3*589 Minor Updates: Added 404.61: MH PCMM STOP CODES file to file list.	VA OIT
05/2012	0.21	Updated API List.	VA OIT
05/2012	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.	VA OIT

Date	Revision	Description	Author
		• 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 routines. • SD MH NO SHOW NIGHTLY BGJ and No Show Nightly Background Job are being added to the Background Job Options. • Glossary of Terms added.	
01/2011	0.19	DG*5.3*754 – ESR 3.1 Updates: Removed the Confidential Address Phone Number from the HL7 PID Segment Tables.	VA OIT
05/2010	0.18	DG*5.3*754 – ESR 3.1 Updates: • Updated "Alpha Subscripts" section. • Added ADD^VADPT (29) & "CPN". • Added OPD^VADPT (8) & "WP".	VA OIT
11/2009	0.17	DG*5.3*754 – ESR 3.1 Updates: • 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
03/2009	0.16	DG*5.3*688 and SD*5.3*441 Updates: • Enrollment VistA Changes Release 2 (EVC R2). • Added additional Value of "**O**" for "**Other**" to Table 129: Table VA0046—Agent Orange Exposure Location. • Removed Unknown value. • Changed Environmental Contaminants to SW Asia Conditions. • 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.	VA OIT

Date	Revision	Description	Author
		• 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.	
01/2009	0.15	Name Change Update: Austin Automation Center (AAC) to Austin Information Technology Center (AITC).	VA OIT
07/2008	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 (VA FileMan Access Codes). • Added **DGEN RD UPLOAD AUDIT PURGE** background job option.	VA OIT
07/2008	0.13	DG*5.3*779 Updates: Added **DGEN NEACL MGT RPT1BK** background job option.	VA OIT
06/2008	0.12	DG*5.3*782 Updates: Updated RELIGION file.	VA OIT
06/2008	0.11	DG*5.3*644 Updates: Home Telehealth enhancements.	VA OIT
01/2008	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 Updates: Added/Updated Scheduling Application Programming Interfaces (APIs) section.	VA OIT
06/2007	0.9	DG*5.3*707 Updates: Added "HL7 Generic PID,EVN,PV1 Segment Builder established by MPI" to the "HL7 Interface Specifications" section.	VA OIT
11/2006	0.8	DG*5.3*650 Updates: Added two new Files - #26.19 and #26.21.	VA OIT
10/2006	0.7	DG*5.3*689 OEF/OIF Enhancements: Updated "SVC^VADPT Variable Segment" section.	VA OIT
04/2006	0.6	DG*5.3*692 Enhancement:	VA OIT

Date	Revision	Description	Author
		Updated HL7 Interface Spec for Transmission of Ambulatory Care Data.	
03/2006	0.5	DG*5.3*687 Maintenance: Removed PTF Archive/Purge function.	VA OIT
08/2005	0.4	DG*5.3*624 - (10-10EZ 3.0) Updates: Deleted **DGRPT 10-10T REGISTRATION** input template in the "Compiled Template Routines" section.	VA OIT
08/2005	0.3	DG*5.3*666 Enhancement: Added Background Job Option.	VA OIT
11/2004	0.2	Manual updated to comply with SOP 192-352 Displaying Sensitive Data.	VA OIT
11/2004	0.1	DG*5.3*415 Updates: Race and Ethnicity Addition to **VADPT** variable section (patch released in 2003, change omitted in error).	VA OIT

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Orientation

On-line 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 appears under the prompt, then the prompt is repeated. For example, at the following prompt:

Figure 1: Sample HELP Text

```
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 lists the possible answers from which to choose. Any time choices appear with numbers, the system usually accepts 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 repeats the prompt.

Acronyms

VA Acronym Lookup website (VA Intranet site)

Reference Materials

The manuals listed in Table 1 are available from the VA Software Document 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

Documentation Name	File Name	Location
Patient Record Flag User Guide	PatRecFlagUG.PDF	VDL Anonymous Directories
Scheduling and Registration Installation and Setup Guide	SDDG_Install_Review.PDF	VDL Anonymous Directories
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 can be displayed for admissions, death discharges, deaths, and unscheduled (1010) visits. The notifications (ADMISSION, DECEASED, and UNSCHEDULED (1010) VISIT) is displayed for patients who are defined as members of a list in the OE/RR LIST (#100.21) file. The recipients of the notifications would need to be defined as

users in the same OE/RR LIST entry. The notifications appear as "alerts" when the user is prompted to select an option from a menu.

>**REF:** For more information concerning OR notifications, see the [CPRS documentation on the VA Software Document Library (VDL)](#).

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 EVENT 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 (#390) file 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	Nightly	NO	Collects workload information and sends it to NPCDB in Austin via HL7 messages.

Option Name	Suggested Run Frequency	Device Required	Remarks
ACRP transmission has been discontinued.			
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.
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 **@ 2 AM**.
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 (#391.71) file.
SDEC IDX REFRESH	Daily	No	This option prepares the **^XTMP("SDEC","IDX"** global and should be scheduled to run **daily @ 2 AM.**

1.2   SACC Exemptions/*Non*-Standard Code

The following are the steps you may take to obtain the Standards and Conventions Committee (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 (PCMM) was developed to assist VA facilities in implementing primary care. It supports 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 needs 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 wants one workstation for each team, one for the PIMS ADPAC, plus one for the manager in charge of primary care. Existing Scheduling functionality continues 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 can be tailored specifically to meet the needs of the various sites. Instructions are 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 functions 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 that do the following:

- Allow for specification of mail groups to receive certain bulletins.

- Definition of devices.

- Designation of transmission routers.

- Entry/Edit of Means Test data.

- Ward setup.

- Clinic setup.

All configurations can be modified at any time as the site's needs change.

The SCHEDULING PARAMETERS (#404.91) file can be used to modify the behavior of PCMM. The USE USR CLASS FUNCTIONALITY? (#801) field 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 defaults to use the user class functionality:

- Sites that have *not* populated the USR CLASS MEMBERSHIP (#8930.3) file for their potential team members should have this parameter set to **NO**.

- Sites that have fully populated the USR CLASS MEMBERSHIP (#8930.3) file should set this parameter to **YES**, because the assignment of staff members to teams is less error-prone and faster than the unscreened selection from the NEW PERSON (#200) file.

The CHECK PC TEAM AT DISCHARGE? (#802) field 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 is prompted to assign the patient to a primary care team.

The ENABLE AUTOLINK FUNCTIONALITY? (#803) field should be turned off until OE/RR is installed. Although there is no harm in allowing users to add/edit auto link data, this is not 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 is the social security number of the patient and the SHORT ID is 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 Office of Information Field Office (OIFO), the PT ID is 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 OIFO. They should *not* be run without Central Office and/or DOD approval/direction.

> **NOTE:** If you feel your site needs to use these options, contact your local OIFO for guidance.

The following is a brief description of each option and its use:

- **PRIMARY ELIGIBILITY ID RESET (ALL PATIENTS)**—This option sets / resets the IDs associated with each patient's primary eligibility code. This utility is called when first installing the new eligibility data structure. It runs 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 is 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.

Figure 2: ELIGIBILITY CODE ENTER/EDIT Option—System Dialogue and User Responses (boldface)

```
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// <Enter>
ABBREVIATION: MC
```
> **Enter abbreviated Eligibility Code name for output in limited space.**

```
PRINT NAME: MARINE CORPS
```
> **Null response for active; 1 - YES for inactive.**

```
INACTIVE: <Enter>
MAS ELIGIBILITY CODE: OTHER FEDERAL AGENCY// <Enter>
ID FORMAT: DOD

AGENCY: ARMY Select SYNONYM: <Enter>
```

- **ID FORMAT ENTER/EDIT**—This option allows the user to enter/edit identification (ID) 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 is 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 is 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 updates 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 is 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 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 is 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) (#389.9) file 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 automatically creates a new entry in this file. New divisions *cannot* 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 can 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 Nightly Report [SD MH NO SHOW NIGHTLY BGJ].	PARAMETER (#8989.5)
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 (#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 (#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 (#8989.51)

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

The new national flag data entry (MISSING PATIENT) is placed in the PRF NATIONAL FLAG (#26.15) file 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 (#26.15) file 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.

REF: For information on this patch update, see 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

Patch DG*5.3*869 features:

- Creates National Category I MISSING PATIENT, Patient Record Flag.

- Creates **DGPF MISSING PT FLAG REVIEW** mail group.

- 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 (***REF:** See the Record Flag Reports Menu section for more details on each report):

  o Assignment Action Not Linked Report

  o Flag Assignment Report

o   Patient Assignments Report

o   Assignments Due For Review Report

o   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.

Callable Routine	Description
ICDINFO^DGAPI	Get ICDs from PTF.
$$SDAPI^SDAMA301	Get Appointments.
GETAPPT^SDAMA201	Get Appointments for a Patient.
NEXTAPPT^SDAMA201	Get Next Appointment (**1** Appointment) for a Patient.
GETPLIST^SDAMA202	Get Appointments for a Clinic.
$$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 Information.
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 VA Data Transmission System (VADATS) Transmission Variables.
VATREDIT	Enter/Edit TRANSMISSION ROUTERS file.
VAUQWK	Quick Lookup for Patient Data.
VAUTOMA	Generic One, Many, All Routine.

REF: For entry points, see the "Callable Routines, Entry Points, and Application Programming Interfaces" section.

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***
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***

File #	Template Name	Routines
	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**
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 can 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

Table 9 lists the new and modified routines exported by patch DG*5.3*951, SHRPE ENHANCEMENTS FOR PATIENT RECORD FLAGS.

> **NOTE:** 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**

New DG Routines	Modified DG Routines
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 with this patch.	**DGOREL1**

3.5.3 Patch DG*5.3*960 Routines

The new and modified routines in Table 11 were exported by patch DG*5.3*960 – PATIENT RECORD FLAG REPORTS.

> **NOTE:** 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

Table 12 lists the new and modified routines that were exported with patch DG*5.3*869, DGPF NEW PATIENT RECORD FLAG – MISSING PATIENT.

> **NOTE:** 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 modified routines with this patch.

3.5.5 Patch SD*5.3*588 Routines

Table 13 lists the new and modified routines that were exported by patch SD*5.3*588, HIGH RISK MENTAL HEALTH PROACTIVE REPORT.

> **NOTE:** 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

Table 14 lists the **DG** routines that were exported with patch DG*5.3*849, DGPF NEW CAT1 FLAG AND CONVERSION.

> **NOTE:** 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	Modified DG Routines
DG53849P	There are no modified routines in this patch.
DGPFCNR	
DGPFCNV	

3.5.7 Patch SD*5.3*578 Routines

Patch SD*5.3*578 includes the following new and modified routines.

> **NOTE:** Not all routines can or should be used. Please refer to the outstanding Integration Agreement before attempting to run these routines.

- **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 displays all patients that did *not* show up for their scheduled appointment for a Mental Health clinic. It lists:
  - o Patient contact information.
  - o Next of Kin.
  - o Emergency contact.
  - o Clinic default provider.
  - o Future scheduled appointments.
  - o Results of attempts to contact the no showed patients.

  The user is asked for:
  - o Various sort criteria
  - o Date range
  - o Divisions to display (one, many, all)
  - o 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 displays all patients that did *not* show up for their scheduled appointment for a Mental Health clinic. It lists the following:
  - o Patient contact information.
  - o Next of Kin.
  - o Emergency contact.
  - o Clinic default provider.
  - o Future scheduled appointments.
  - o Results of attempts to contact the no showed patients.

The user is *not* asked any sort criteria. The report lists for the:

o Day before the background job run.

o All the divisions in the facility and mental health clinics in the facility.

The report is 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 following:

o Patient that no showed for the mental health appointment.

o Date the of the appointment.

o Clinic.

o Stop code

o Patient Contact information .

o Next of Kin.

o Emergency contacts.

o Clinic provider.

o Future scheduled appointments.

o Results of efforts in contacting the patient.

The report is 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

Patch DG*5.3*836, 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. The **DGPFAPIH** routine implements the two application programming interface call points for retrieving Patient Record Flag information:

  o One call point is for a specific patient and record.

  o The second call point is for a list of patients with a specific, active, Patient Record Flag.

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

- **GETLST^DGPFAPIH**—This API retrieves 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 is provided in an array using the target root specified by the user or in the default array variable **DGPFAPI2**. The DATE/TIME (#.02) field of the PRF ASSIGNMENT HISTORY (#26.14) file entry determines 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**—The **DGPFAPIU** routine provides support utilities and functions for the new Application Programming Interface calls.

  This procedure checks 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 (#26.14) file 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**—Checks for valid start and end dates. Sets up the **DGRANGE** parameter with the validated dates and sets **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 (#2) file. If a valid patient is found, the patient name is returned; otherwise, the error text from the **DIQ** call is returned.

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

- **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:

  o If the optional flag category is passed in, only that category is checked for the PRF.

  o If no category is passed in, then first the National category is checked.

3.5.9 Patch SD*5.3*622 Routines

- **START^SDCP**—This API initializes the **SDPRTTOF** variable that is a flag to indicate whether or not to print the Top of Form (TOF) 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 the **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 LOCATION file in addition to TELEPHONE, LOCATION & DEFAULT PROVIDER information from the same file. It checks the PRINT DEFAULT PROVIDER? and PRINT CLINIC LOCATION? fields from the 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 files 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

Patch DG*5.3*903 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 is turned off automatically during the post install for this patch.

The following new routines are being added to support PATCH DG*5.3*903:

- **DG903PST**—Post install routine which does the following:

    o Adds entry 315 in INCONSISTENT DATA ELEMENTS (#38.6) file.

    o Disables Increase Veteran Engagement in My HealtheVet Prompts in the MAS PARAMETERS (#43) file.

- **DGMHV**:

    o **EN API**—Entry Point for Alert, Socialization, and My HealtheVet Engagement field editing screen. This functionality is only executed if the ENABLE MY HEALTHEVET PROMPTS? (#1100.07) field in the MAS PARAMETERS (#43) file is set to **YES** (internal value **1**).

    o **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 used by the other listed routines.

The following existing routines are being updated to support PATCH DG*5.3*903:

- **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

Patch SD*5.3*707 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 does *not* exist on the VistA system.

3.5.12 Patch DG*5.3*982 Routines

Patch DG*5.3*982 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

Patch DG*5.3*972 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

Patch DG*5.3*985 includes modifications and updates to VistA REE related to adding the PREFERRED NAME (#.2405) field 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

Patch DG*5.3*996 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

Patch DG*5.3*997 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

Patch DG*5.3*997 contains modifications to VistA REE to separate patient registration from enrollment of Veterans for VHA healthcare. The questions beginning with the "DO YOU WANT TO ENROLL?" prompt 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 (#2) file. The answer to the "DO YOU WANT TO ENROLL?" prompt is kept in the **DGENRYN** variable 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 **DGENRYN** variable 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 (#.14) field, which is a new field that this patch introduced in the PATIENT ENROLLMENT (#27.11) file.

- **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 (#2) file. 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 (#.14) field.

- **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 the **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:

    o **PT APPPLIED FOR ENROLLMENT?**

    o **REGISTRATION ONLY REASON**

    o **REGISTRATION ONLY DATE**

    o **SOURCE OF REGISTRATION**

    The fields listed are located in the PATIENT ENROLLMENT (#27.11) file.

- **DGENA1**—This routine is modified to retrieve Fields **16** to **19** from **ZEN** segment and store them in the PATIENT (#2) file.

- **DGENA**—This routine is modified to enhance the **DGENR** array to include:

    o **PT APPLIED FOR ENROLLMENT?**

    o **REGISTRATION ONLY REASON**

    o **REGISTRATION ONLY DATE**

    o **SOURCE OF REGISTRATION**

    The fields listed are located in the PATIENT ENROLLMENT (#27.11) file.

3.5.18   Patch DG*5.3*1015 Routines

Patch DG*5.3*1015 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 VA FileMan.

3.5.19 Patch SD*5.3*722 Routines

Patch SD*5.3*722 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, an M **FILEFULL** error results, which stops VistA from working.

Table 15: Patch SD*5.3*722 Routines

New SD Routines	Modified SD Routines
SD722PST	**SDEC01B**
	SDEC02
	SDEC26
	SDEC50
	SDEC55A

3.5.20 Patch SD*5.3*723 Routines

Patch SD*5.3*723 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.

Table 16: Patch SD*5.3*723 Routines

New SD Routines	Modified SD Routines
SDECDATA	**SDEC50**
	SDVSIT2

3.5.21 Patch SD*5.3*731 Routines

Patch SD*5.3*731 enhances the appointment correcting routine used by the following options:

- **Manually Fix Appointments with No Resource** [SDEC NO RES APPT FIX]

- **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].

Table 17: Patch SD*5.3*731 Routines

New SD Routines	Modified SD Routines
There are no new routines with this patch.	**SDECDATA**
	SDECEPT

3.5.22 Patch SD*5.3*734 Routines

Patch SD*5.3*734 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. The fix allows schedulers to cancel VAOS appointments from the VistA Scheduling (VS) graphical user interface (GUI) calendar without error.

Table 18: Patch SD*5.3*734 Routines

New SD Routines	Modified SD Routines
There are no new routines with this patch.	**SDEC55A**

3.5.23 Patch SD*5.3*686 Routines

Patch SD*5.3*686 contains the VistA components necessary to support the VS GUI release 1.6.0.

Table 19: Patch SD*5.3*686 Routines

New SD Routines	Modified SD Routines
SD686PST	**SDAM2**
SDEC01C	**SDCNSLT**
SDEC07C	**SDEC**
SDECAUD	**SDEC07**
	SDEC07A
	SDEC51
	SDEC57
	SDECAR1
	SDECAR1A
	SDECAR2
	SDECCON
	SDECLK
	SDECAR1A

3.5.24 Patch SD*5.3*740 Routines

Patch SD*5.3*740 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.

Table 20: Patch SD*5.3*740 Routines

New SD Routines	Modified SD Routines
There are no new routines with this patch.	**SDEC07**
	SDEC08
	SDEC29
	SDEC31

3.5.25 Patch SD*5.3*744 Routines

Patch SD*5.3*744 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.

Table 21: Patch SD*5.3*744 Routines

New SD Routines	Modified SD Routines
There are no new routines with this patch.	**SDEC07B**
	SDEC08

3.5.26 Patch SD*5.3*737 Routines

Patch SD*5.3*737 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.

Table 22: Patch SD*5.3*737 Routines

New SD Routines	Modified SD Routines
There are no new routines with this patch.	**SDCNSLT**
	SDEC50

3.5.27 Patch SD*5.3*694 Routines

Patch SD*5.3*694 contains the VistA components necessary to support the VS GUI release 1.7.0.

Table 23: Patch SD*5.3*694 Routines

New SD Routines	Modified SD Routines
SD694PO	**SDEC01**
SDECDATE	**SDEC02**
SDECSTNG	**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

New SD Routines	Modified SD Routines
	SDECAR1
	SDECAR2
	SDECCAP
	SDECEP
	SDECEPT
	SDECIDX
	SDECWL
	SDECWL2
	SDM1A
	SDROUT0

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. PATCH SD*5.3*762 updates the version number in the SDEC SETTINGS (#409.98) file to match the GUI version.

Table 24: Patch SD*5.3*762 Routines

New SD Routines	Modified SD Routines
SDEC762P	There are no modified routines with this patch.

3.5.29 Patch SD*5.3*745 Routines

VS GUI Release 1.7.1: PATCH SD*5.3*745 addressed multiple enhancements including:

- Accept a flag to *not* reopen appointment request when flag is "**2**".
- View the CPRS Consult tab details via VS GUI.
- Display contact information on the Request Management Grid on VS GUI.
- New background job to Disposition Open CPRS Return to Clinic (RTC) Orders Scheduled in VistA.
- 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.

Table 25: Patch SD*5.3*745 Routines

New SD Routines	Modified SD Routines
SDEC08A	**SDEC**
SDECRTCF	**SDEC08**
	SDEC50
	SDEC51
	SDEC52
	SDEC52A
	SDEC53
	SDECAR
	SDECAR1
	SDECAR1A
	SDECAR2
	SDECWL
	SDECWL1
	SDECWL2

3.5.30 Patch SD*5.3*756 Routines

Patch SD*5.3*756 supports VS GUI Release 1.7.2 R2. The patch addresses multiple enhancements:

- When a scheduler creates a video appointment, Virtual Care Manager (VCM) launches in a new browser window from the VS GUI.

- New picklist of static comments (hashtags) that can be added to the free text CANCELLATION REMARKS (#17) field in the PATIENT (#2) file.

- New COVID-19 priority column on the Request Management (RM) Grid.

SD*5.3*756 also removes the Electronic Wait List (EWL) menu option in the VS GUI. VA has mandated sunsetting the EWL. This change represents the first step in removing EWL functionality from the VS GUI.

Table 26: Patch SD*5.3*756 Routines

New SD Routines	Modified SD Routines
SDECVVC	**SDEC**
SDEC756P	**SDEC08**
	SDEC08A
	SDEC45
	SDEC51
	SDECAR1A
	SDECSTNG

3.5.31   Patch DG*5.3*1014 Routines

This patch includes new routine VAFHLZCE to build the VA-Specific Community Care Eligibility Segment (ZCE) with five fields. Data is retrieved from the PATIENT (#2) file, subfile (#2.191). Modified routine IVMPTRN8 to include ZCE segments returned from VAFHLZCE in the ORU/ORF-Z07 HL7 message; modified routine DGENUPL1 to take ZCE segment(s) in ORU/ORF-Z11 and initiate validations; modified routine DGENUPLB to parse and validate four fields in the ZCE segments and store the fields in an array for storing in the PATIENT (#2) file; and modified routine DGENUPL7 to store the validated four fields retrieved from the ZCE segments in the PATIENT (#2) file, sub-file (#2.191).

This patch also added new routine DGRP1152A for functionality to add, edit, and remove Community Care Programs, and new routine DGRP1152U for help text. This patch modified routine DGRPH to add functionality for Collateral Programs.

This patch also modified routines to add standardized patient data to screen banners and to add the PREFERRED NAME (#.2405) field from the PATIENT (#2) file to the NAME (#.01) field prompt of the PATIENT (#2) file: DGDEP, DGDEPE, DGR111, DGR113, DGR1131, DGR114, DGRP1, DGRP11B, DGRP2, DGRP6, DGRP61, DGRP62, DGRPCF, DGRPU, DPTLK, DGRP6EF and DGRP6CL.

Routines DGREGAED, DGREGRED, DGREDTED were modified to call the Universal Address Module (UAM) Address Validation code. The UAM Address Validation code is contained in 3 new routines: DGADDVAL, DGADDLST, and DGUAMWS.

DGUAMWS invokes the UAM Address Validation web service and returns any address candidates in an array. DGADDLST uses the list template DGEN ADDR VALID to display the address candidates to the user for selection. DGADDVAL is the driver routine that calls DGUAMWS and, if any results are returned, calls DGADDLST for display and selection of the validated address.

NOTE: When running the ^XINDEX routine, sites will encounter an XINDEX error after the installation of this patch. Routine DGUAMWS uses HealtheVet Web Services Client (HWSC). It calls a Cache Class to parse the eXtensible Markup Language (XML) document returned by the

web service call. A Standards and Exemptions (SAC) Exemption (ID 20200806-01) was approved on 08/06/2020.

The errors reported by XINDEX are:

```
DGUAMWS        * *  198 Lines,  11474 Bytes, Checksum: B105727101
          S DGHTTPREQ.SSLCheckServerIdentity = 0
  EN+24        S - Vendor specific code is restricted.
  EN+24        F - Unrecognized argument in SET command.
  EN+24        F - UNDEFINED COMMAND (rest of line not checked).
          D DGHTTPREQ.EntityBody.Write(DGJSON) ; places the entire json
          string into EntityBody
  EN+28        S - Vendor specific code is restricted.
          F DGHEADER="Accept","ContentType" D
          DGHTTPREQ.SetHeader(DGHEADER,"application/json")
  EN+29        S - Vendor specific code is restricted.
          D DGHTTPREQ.SetHeader("ContentType","application/json")
  EN+30        S - Vendor specific code is restricted.
          S DGHTTPRESP=DGHTTPREQ.HttpResponse
  EN+35        S - Vendor specific code is restricted.
          S DGDATA=DGHTTPRESP.Data.ReadLine() ; reads json string
          response from the data stream.
  EN+36        S - Vendor specific code is restricted.
          Q DGSTAT_"^"_$$RSPMSG(DGHTTPRESP.StatusCode,.DGRESPMSG)
  EN+44        S - Vendor specific code is restricted.
          N DGERRCODE S DGERRCODE=DGRESPERR.code
  ERRRSPMSG+4  S - Vendor specific code is restricted.
```

3.5.31.1 HWSC Configuration

The UAM Address Validation web server DG UAM AV SERVER and two services, DG UAM AV VALIDATE and DG UAM AV CANDIDATE, are configured by a post-install routine. This routine creates entries in the HWSC configuration files to define these.

Example:

```
WEB SERVER MANAGER            AUG 13, 2020@08:31:46         PAGE:    1 OF    1
WEB SERVER MANAGER            AUG 13, 2020@08:31:46         PAGE:    1 OF    1
                      HWSC WEB SERVER MANAGER
                      VERSION: 1.0    BUILD: 9


ID    WEB SERVER NAME           IP ADDRESS OR DOMAIN NAME:PORT
 1    *DG UAM AV SERVER           REDACTED:443 (SSL)
 2    *DST GET ID SERVER          REDACTED:443 (SSL)
 3    *PCMMR                      REDACTED:80
 4    *PCMMR TEST                 REDACTED:10100
 5     PSO WEB SERVER             :80
 6    *VIAA VISTA TRIGGER SERVER :REDACTED (SSL)




          LEGEND:   *ENABLED
AS   ADD SERVER                        TS   (TEST SERVER)
ES   EDIT SERVER                       WS   WEB SERVICE MANAGER
DS   DELETE SERVER                     CK   CHECK WEB SERVICE AVAILABILITY
EP   EXPAND ENTRY                      LK   LOOKUP KEY MANAGER
SELECT ACTION:QUIT//    WS   WEB SERVICE MANAGER



WEB SERVICE MANAGER            AUG 14, 2020@07:19:44         PAGE:    1 OF    1
                      HWSC WEB SERVICE MANAGER
                      VERSION: 1.0    BUILD: 9


 ID    WEB SERVICE NAME          TYPE    URL CONTEXT ROOT
 1     CDS WEB SERVICE           REST    CDS-WSCLIENT/CDS-SERVICE
 2     DG UAM AV CANDIDATE       REST    SERVICES/ADDRESS_VALIDATION/V2/CAND...
 3     DG UAM AV VALIDATE        REST    SERVICES/ADDRESS_VALIDATION/V1/VALI...
 4     DST GET ID SERVICE        REST    VS/V2/CONSULTFACTOR
 5     PCMM-R GET PC INFO REST   REST    PCMMR_WEB/WS/PATIENTSUMMARY
 6     PSO ERX WEB SERVICE       REST    /INB-ERX/
 7     VIAA VISTA TRIGGER SERVIC REST    ESB/ASSETTRAX/SERVICES/VISTATRIGGER





          ENTER ?? FOR MORE ACTIONS
AS   ADD SERVICE
ES   EDIT SERVICE
DS   DELETE SERVICE
EP   EXPAND ENTRY
SELECT ACTION:QUIT//
SELECT OPTION NAME:
```

If the following errors are seen in the error log when using the UAM Service, the server settings should be reverified. Please refer to the DG_53_P1014.KID Deployment, Installation, Back-out, and Rollback Guide for detailed instructions on verifying that the post-install routine set up the server and associated services correctly.

```
WRONG PORT NUMBER OR ENDPOINT (IP)
PROCESS ID: 1302  (1302)                AUG 26, 2020 08:43:45
UCI/VOL: [DEVVOO:DEVR0TSVR]
$ZA:   0                                $ZB: \013
CURRENT $IO: /DEV/PTS/22                 CURRENT $ZIO: REDACTEDˆ17ˆ44ˆ/DEV/
PTS/22
$ZE= <ENDOFFILE>
LAST GLOBAL REF: ˆ%QCACHEMSG("%OBJECTERRORS","EN",6059)
S @%ZTERRT@("LINE")=$STACK(%2,"MCODE")


WRONG SSL CONFIGURATION OR SERVER NOT SET UP
PROCESS ID: 1302  (1302)                AUG 26, 2020 08:51:10
UCI/VOL: [DEVVOO:DEVR0TSVR]
$ZA:   0                                $ZB: \013
CURRENT $IO: /DEV/PTS/22                 CURRENT $ZIO: REDACTEDˆ17ˆ44ˆ/DEV/
PTS/22
$ZE= <WRITE>ZSEND+186ˆ%NET.HTTPREQUEST.1
LAST GLOBAL REF: ˆ%QCACHEMSG("%OBJECTERRORS","EN",6085)


SERVICES NOT SET UP CORRECTLY
PROCESS ID: 23364  (23364)              AUG 26, 2020 15:07:17
UCI/VOL: [DEVVOO:DEVR0TSVR]
$ZA:   0                                $ZB: \013
CURRENT $IO: /DEV/PTS/12                 CURRENT $ZIO: REDACTEDˆ28ˆ99ˆ/DEV/
PTS/12
$ZE= <ECODETRAP>ZFORCEERROR+3ˆXOBW.ERROR.DIALOGERROR.1
LAST GLOBAL REF: ˆXOB(18.02,"B","MPI_PSIM_EXECUTE",0)
        SET $ECODE=",UXOBW," }
```

3.5.32 Patch DG*5.3*952 Routines

This patch implements VistA modifications to assist the Department of Veterans Affairs (VA) in addressing the high rate of suicides among the nation's Veterans; specifically, former service members that have an administrative discharge of Other Than Honorable (OTH) needing emergent mental healthcare services. The patch implements the special eligibility for the population that falls into the OTH-EMERGENT (OTH-90) category.

The following modified routines are exported by patch DG*5.3*952:

DGENA

DGENA1A

DGENELA

DGENELA1

DGENELA4

DGENU

DGENUPL

DGENUPL1

DGENUPL4

DGENUPL5

DGENUPL7

DGENUPL8

DGENUPLA

DGENUPLB

DGRP7

DGRPC

DGRPC3

DGRPCE

DGRPCE1

DGRPE1

VADPT0

VADPT4

VAFHLZE1

The following new routines are exported by DG*5.3*952:

DGOTHBTN

DGOTHD

DGOTHD1

DGOTHD2

DGOTHEL

DGOTHINQ

DGOTHMG1

DGOTHMG2

DGOTHMGT

DGOTHRP1

DGOTHRP2

DGOTHRP3

DGOTHRP4

DGOTHRP5

DGOTHRP6

DGOTHRPT

DGOTHUT1

VAFHLZTE

3.5.33 Patch DG*5.3*977 Routines

The patch implements the special eligibility for the population that falls into OTH-EXTENDED category and also implements a new PRESUMPTIVE PSYCHOSIS indicator prompt and database field to capture patients seen under the Presumptive Psychosis authority.

The following modified routines are exported by patch DG*5.3*977:

DGENUPL7

DGENUPLB

DGOTHBTN

DGOTHD

DGOTHD1

DGOTHEL

DGOTHMG2

DGOTHRP1

DGOTHRP2

DGOTHRP3

DGOTHRP5

DGOTHRP6

DGOTHRPT

DGRP7

VAFHLZTE

The following new routines are exported by DG*5.3*977:

DGOTHMST

DGPPRP1

DGPPRP2

DGPPRP3

DGPPRP4

DGPPRP5

DGPPSYCH

3.5.34 Patch DG*5.3*1016 Routines

The patch:

- Provides changes for 'Reevaluate Eligibility' Mailman messages that are sent for patients registered as 'OTH' patients.

- Provides a fix to ensure that the Patient Inquiry (OTH) [DG OTH PATIENT INQUIRY] option displays an ACTIVE OTH status if the patient transitions from OTH Emergent to OTH Extended and displays the correct current Primary Eligibility.

The following modified routines are exported by patch DG*5.3*1016:

DGOTHD1

DGOTHINQ

DGOTHMST

DGRP7

3.5.35 Patch DG*5.3*1025 Routines

This patch introduces reports to identify Former Service Members whose Primary Eligibility changed from EXPANDED MH CARE NON-ENROLLEE to a new Primary Eligibility with a verified eligibility status. These patients are no longer treated under the Other Than Honorable (OTH) authority (VHA Directive 1601A.02).

The following new routines are exported by DG*5.3*1025:

DGOTHFS2

DGOTHFSM

3.5.36 Patch DG*5.3*1029 Routines

This patch implements the code to provide data to the CPRS application in order to:

· Identify patients eligible for Presumptive Psychosis (PP) benefits and display details about their status.

· Identify patients with inactive PRF records and list the history of the PRF changes.

The following new routines are exported by DG*5.3*1029:

DGOTHBT2

DGPPAPI

3.5.37 Patch DG*5.3*1034 Routines

This patch includes modifications and updates to Former OTH Patient Eligibility Change Report and Former OTH Patient Detail Reports to include patient's Episodes of Care (Outpatient, Inpatient, and Prescriptions).

Additionally, this patch introduces a new report that would help identify veterans that registered for Presumptive Psychosis benefits.

The following modified routines are exported by DG*5.3*1034:

DGOTHFS2

DGOTHFSM

The following new routines are exported by DG*5.3*1034:

DGFSMOUT

DGOTHFS3

DGOTHFS4

DGPPRRP1

DGPPRRPT

3.5.38 Patch SD*5.3*781 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.5 and patch SD*5.3*781 includes several enhancements and defect corrections.

There is no direct link between VS contact attempts and VS appointment requests. A congressional reporting mandate requires that a direct link be established so that contact attempts can be accurately reported. This patch accomplishes this by linking VS contact attempts to the appointment request.

Also corrected in this patch is the issue occurring in production due to the Data File Number (DFN) being assigned to an external value of the Patient Name. When cancelling an appointment with a note and the patient has only a last name the code updating the note into the patient appointment continually errors out.

The release contains an enhancement to record the system performing scheduling actions (e.g. VistA, VS GUI, VA Online Scheduling (VAOS)) and the software version of that system.

The release also contains an enhancement to Contact Attempts code and lays the backend groundwork for VIDEO VISIT WEB SERVICE (VVS) enhancements.

Defects corrected in the release include correcting an issue where inactivate/reactivated dates were improperly excluding clinics from displaying in the VS GUI; fixes an issue where spaces in clinic group search would cause the VS GUI to crash; corrects a bug in SDEC RECGET; and fixes the login screen so the 's' isn't cut off from 'Affairs'.

Additionally, the release contains various 508 fixes.

The following modified routines are exported by SD*5.3*781:

Table 27: Patch SD*5.3*781 Routines

New SD Routines	Modified SD Routines
	SDEC08
SDECVVS	SDEC1
	SDEC32
	SDEC63
	SDECAR1A
	SDECCON
	SDNACT
	SDNACT1
	SDREACT

3.5.39 Patch SD*5.3*784 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.6 and SD*5.3*784 include various enhancements and defect fixes. The release enables users to make and cancel Video Visit Service (VVS) appointments from the Graphical User Interface (GUI).

Additionally, new Remote Procedure Calls (RPCs) were added to return a smaller subset of data related to open appointment requests. These RPCs will have less overhead and increase the responsiveness of the Vista Scheduling (VS) GUI. The following existing RPCs will be the basis for the new, more streamlined RPCs: SDEC ARGET, SDEC REGET, SDEC RECGET.

It also addresses an issue with the SDECRMG RMG Remote Procedure Call (RPC) code to allow for more than 200 records. There needs to be a new field in the SDEC SETTINGS (#409.98) file to store the max number of appointment requests to be sent to the RM Grid. The MAX RECS ACCUMULATED (#5) was added to the SDEC SETTINGS (#409.98) file.

The patch also adds a following new RPCs:

```
REMOTE PROCEDURE NAME        NEW/MODIFIED/DELETED
--------------------        --------------------
 SDEC GET ICN                      NEW
 SDEC GET PATIENT APPT REQ         NEW
 SDEC GET PATIENT APPT REQ JSON    NEW
 SDEC GET PATIENT CONSULTS         NEW
 SDEC GET PATIENT CONSULTS JSON    NEW
 SDEC GET PATIENT RECALLS          NEW
 SDEC GET PATIENT RECALLS JSON     NEW
```

Furthermore, enhancements to the Request Management (RM) grid were made in the VS GUI, including the ability to disable initial RM grid load in user preferences, and changing the cursor displayed when hovering over the RM grid resize area.

The following modified routines are exported by SD*5.3*784:

Table 28: Patch SD*5.3*784 Routines

New SD Routines	Modified SD Routines
SDEC51B	SDEC1
SDEC52C	SDECIDX
SDEC52CJSON	SDECVVS
SDECAR4	
SDECCONSJSON	

3.5.40 Patch DG*5.3*1035 Routines

This patch includes modifications and updates to the Former OTH Patient Eligibility Change Report, Former OTH Patient Detail Reports, Presumptive Psychosis Reconciliation Report to include prescription Partial Fill.

Additionally, this patch introduces a new report that generates a report of an individual patient treated under Presumptive Psychosis authority within the user specified date range. This would help identify veterans that registered for Presumptive Psychosis benefits.

This patch also adds any localized messaging text to the OTH button in CPRS if it is populated for the patient.

The following modified routines are exported by DG*5.3*1035:

DGFSMOUT

DGOTHBT2

DGOTHBTN

DGOTHFS2

DGOTHFS3

DGOTHFS4

DGOTHFSM

DGPPRRP1

DGPPRRPT

The following new routines are exported by DG*5.3*1035:

DGPPDRP1

DGPPDRPT

DGPPDRX

DGPPOHUT

3.5.41 Patch DG*5.3*1027 Routines

This patch modifies routines DGREG and DGCOL to no longer the display the list of reasons, from the PATIENT REGISTRATION ONLY REASON (#408.43) file, before the SELF-REPORTED REGISTRATION ONLY REASON prompt in the DG REGISTER PATIENT and DG COLLATERAL PATIENT options.

This patch also modifies routine DGEN1 to disable the Enroll Patient (EP) Action protocol DGEN PATIENT ENROLLMENT option. A message is displayed instructing the user to use the Enrollment System to complete the patient's enrollment.

In addition, the following modified routines are exported by patch DG*5.3*1027:

DGCOL

DGDIS

DGEN

DGEN1

DGENA1

DGENA1A

DGENA3

DGENUPL2

DGENUPL7

DGREG

DGRPC

DGRPCF

DGRPP

The following new routines are exported by patch DG*5.3*1027:

DG531027P

DGREGEEWS

3.5.42   Patch DG*5.3*1044 Routines

Patch DG*5.3*1044 adds new branch of service, SPACE FORCE, to the BRANCH OF SERVICE file (#23) and changes the name of the entry AIR FORCE--ACTIVE DUTY in the PERIOD OF SERVICE file (#21) to USAF, USSF – ACTIVE DUTY.

This patch modifies routines CMP^DGRP61, CMP^DGRPE, and VALCOM^DGRPMS to allow all service components to display at the SERVICE COMPONENT: prompt when the Military Service Episode has a BRANCH OF SERVICE of SPACE FORCE.

In addition, the post-install routine, DG531044P, is created to re-compile templates associated with the modification to the NUMBER field (#.001) of the BRANCH OF SERVICE file (#23). This field has been modified to accept an additional entry.

3.5.43 Patch SD*5.3*785 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.7.4 and SD*5.3*785 include various enhancements and defect fixes.

The release includes Remote Procedure Call (RPC) updates to optimize Request Management (RM) grid functionality, pending Return to Clinic (RTC) Order Cleanup Option enhancements, enhancements to PtCSch Workflow, enhancements to APPT workflow, and addresses an issue where recalls being cancelled by the clinic would not return the request to the RM grid.

The release also addresses the patient letter to remove (Mr/Ms) titles and 508 issue fixes.

The patch also adds the following RPCs:

SDEC GET APPT REQ BY IEN JSON
SDEC GET PAT CONSULT BY IEN
SDEC GET PATIENT CONSULT JSON
SDEC GET PATIENT DEMOG
SDEC GET PATIENT RECALL BY IEN
SDEC GET RECALL BY IEN JSON

The patch updates the following existing RPCs:

SDEC GET PATIENT RECALLS
SDEC GET PATIENT RECALLS JSON

The patch adds or updates the following routines:

Table 29: Patch SD*5.3*785 Routines

New SD Routines	Modified SD Routines
SDEC28L	**SDEC07**
SDECRRCLEANUP	**SDCE08**
	SDEC1
	SDEC28
	SDEC40
	SDEC51B
	SDEC52C
	SDEC52CJSON
	SDECAR4
	SDECCON
	SDECCONSJSON
	SDECRTCF
	SDECVVS

3.5.44 Patch SD*5.3*788 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.8.2 and SD*5.3*788 include various enhancements and defect fixes.

Defects corrected in the release include, correcting an issue where the Loading Dialog has duplicate wording, and updating the display icon on the Time Slot Viewer to display correct icons when collapsed and expanded.

Additional fixes include recall and Multiple Return to Clinic (MRTC) fixes,"Waitlist" tool tip fix, formalizing JSON Return Object, and a User Preference fix that will allow the data in the Request Management (RM) Grid to match the User Preference setting.

The patch also adds the following RPCs:

SDES EDIT CHECK-IN STEP
SDES GET APPT
SDES GET APPT CHECK-IN STEP
SDES GET APPT CHECK-IN STEPS
SDES GET APPTS BY CLINIC
SDES GET APPTS BY PATIENT
SDES GET APPTS BY RESOURCE
SDES GET CHECK-IN STEP
SDES GET CHECK-IN STEPS
SDES SET APPT CHECK-IN STEP
SDES SET CHECK-IN STEP

The patch adds or updates the following routines:

Table 30: Patch SD*5.3*788 Routines

New SD Routines	Modified SD Routines
SDECRTCF2	SDEC07
SDES	SDEC52CJSON
SDESAPPT	SDECAR4
SDESAPPTDATA	SDECCONSJSON
SDESCKNSTEP	SDECVVS
SDESCLINICDATA	
SDESJSON	
SDESPATIENTDATA	

3.5.45 Patch SD*5.3*790 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.9 and SD*5.3*790 include various enhancements and defect fixes.

This release addresses several defects, including parent Multiple Return to Clinics (MRTCs) returning to the Request Management (RM) grid when a user closes a child request, the GUI crashing when taking an action on an appointment with no resource, the Patient Indicated Date (PID) not updating appropriately when changed during Cancel by Patient, clinic name truncation on clinic search for clinics with an abbreviation that matches the clinic name, and issues with Contact Attempt (CA) calculation for reopened Patient Center Scheduling (PtCSch) requests.

This release also begins Veterans Scheduling Interoperability Platform (VSIP) changes in VS GUI and VSE for clinical staff. Additionally, the release ensures that appointments cannot be created without a resource, and that requests are only reopened when certain cancellation reasons are used.

Lastly, the release includes several Remote Procedure Call (RPC) updates to improve efficiency and provide returns in JSON format.

The patch also adds the following RPCs:

SDEC GET RECALLRMV BY DFN JSON
SDES CLINIC RSC SEARCH JSON

The patch updates the following existing RPCs:

SDEC APPDEL

The patch adds or updates the following routines:

Table 31: Patch SD*5.3*790 Routines

New SD Routines	Modified SD Routines
SDEC52CRMVJSON	**SDEC**
SDECRECREQ	**SDEC07**
SDES01C	**SDEC08**
SDES25	**SDEC50**
SDES30	**SDEC55A**
SDESAPPTUTIL	**SDECUTL**
SDESSEARCH	**SDECVVS**
	SDES
	SDESCKNSTEP
	SDRRCLR

3.5.46 Patch DG*5.3*1047 Routines

This patch includes modifications and updates to the billing of Former Other Than Honorable (OTH) Patient Eligibility Change Report to include the Military Sexual Trauma (MST) column and Presumptive Psychosis Detail Report to update the header of the released prescription section.

This patch introduces the new report Potential Presumptive Psychosis Patient Report [DG POTEN PRESUMPT PSYCHOSIS] to identify patients who have been registered in VistA using the Presumptive Psychosis (PP) 'workaround' process since 38 United States Code (USC) 1702 was passed on 3/14/2013. The report is to be used by Registration/Enrollment users to identify PP patients without PP category and select the PP category for them.

Additionally, this patch implements two modifications to support benefits provided by the Deborah Sampson Act for all Former Service Members (FSM) including those eligible for OTH benefits. Per the Deborah Sampson Act, FSMs who experienced MST are eligible for the full range of MST-related care, both mental health and other medical care.

The following modified routines are exported by DG*5.3*1047:

DGOTHBT2

DGOTHBTN

DGOTHFS4

DGOTHFSM

DGPPDRX

The following new routines are exported by DG*5.3*1047:

DGPOTEN

3.5.47 Patch SD*5.3*792 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.10 and SD*5.3*792 include various enhancements and defect fixes, including fixes for: comments and provider information not correctly being carried over from a canceled/no-showed recall appointment to the new appointment request, the appointment type displaying incorrectly when viewing a new appointment request from a cancelled/no-showed recall appointment, an issue with Contact Attempt (CA) coloring on appointment requests created from cancelled/no-showed recall appointments, and an issue where the user would need to manually refresh the GUI after undoing 'no-show' to get the appointment back to 'scheduled'.

Additional defects resolved include column order not being kept in the User Preferences, and an error in the Create Video Visit window where the required field Patient Integration Control Number (ICN) was missing in pre-production environments.

Enhancements in this release include updates to the code to reopen an appointment request only when certain cancellation reasons are used, open an appointment request when a recall appointment is no-showed, disable the 'Create video visit' button when a Video Visit Service (VVS) appointment already exists, disable the edit button when a VVS appointment does not exist, add 'Failure to Respond' as a disposition reason for SDEC requests, and display most recent CheckIn step status in the pending appointments list and time slot viewer in VS GUI. Patch SD*5.3*792 contains a post-install routine to correct Recall appointments with the incorrect provider, and updates Scheduling code so that appointments cannot be created without a resource.

The patch adds the following RPC:

SDES GET INSURANCE VERIFY REQ

The patch updates the following existing RPCs:

SDES CLINIC RSC SEARCH JSON
SDES EDIT CHECK-IN STEP
SDES GET APPT
SDES GET APPT CHECK-IN STEP
SDES GET APPT CHECK-IN STEPS
SDES GET APPTS BY CLINIC
SDES GET APPTS BY PATIENT

SDES GET APPTS BY RESOURCE
SDES GET CHECK-IN STEP
SDES GET CHECK-IN STEPS
SDES SET APPT CHECK-IN STEP
SDES SET CHECK-IN STEP

The patch adds or updates the following routines:

Table 32: Patch SD*5.3*792 Routines

New SD Routines	Modified SD Routines
SDESPATRPC	**SDEC08**
	SDEC28
	SDEC31
	SDEC50
	SDECAR
	SDECRECREQ
	SDECVVS
	SDES
	SDESCKNSTEP
	SDM1A

3.5.48 Patch DG*5.3*1045 Routines

Patch DG*5.3*1045 modifies the routine DGENUPL7 to not trigger an ORU-Z07 HL7 message when the ENROLLMENT STATUS (#.04) field in the PATIENT ENROLLMENT (#27.11) file is NOT ELIGIBLE;INELIGIBLE DATE and the SOURCE OF ENROLLMENT (#.03) field in the PATIENT ENROLLMENT (#27.11) file is VAMC.

Routine DGEN is modified to retrieve the Ineligible Reason and set the Enrollment Status to 20 (NOT ELIGIBLE;INELIGIBLE DATE) if the Ineligible Date and Ineligible Reason are populated in the patient record. DGENA1A is modified to set the Enrollment Status to 20 for Registration Only Patients when the Ineligible Date is blank. DGENA6 is modified to set the Enrollment Status to "Registration Only" when the Ineligible Date is blank. DGREG is modified with logic to correctly create a patient enrollment record for Ineligible Date.

The consistency checker routine DGRPC is modified to set the Appointment Request fields to null if there is no Ineligible Date.

Routine DGENA2 is modified to retain the existing value for the PT APPLIED FOR ENROLLMENT? (#.14) field in the PATIENT ENROLLMENT (#27.11) file when a new enrollment record is created.

3.5.49 Patch SD*5.3*794 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.11 includes several defect corrections and enhancements. This version fixes an issue where undoing a 'no-show' on a Consult was leaving the request in the Request Management (RM) grid, improves the RM grid so that requests with bad or missing data are excluded when loading requests to the RM grid, rather than ALL appointment requests in the case that one of the requests has missing or bad data, resolves a benign error that occurs when canceling a consult, and addresses an issue with redundant data on no-show for consults/procedures. This release also adds check-in steps

completed to the Expand Entry view of an appointment, and adds logic so that if there are two cancelled appointments at the same date/time for the same patient, only the newest cancelled appointment will have Expand Entry available, and if there is a cancelled and scheduled appointment at the same date and time, then only the scheduled appointment will have Expand Entry available.

The patch adds the following RPCs:

SDES DISPOSITION APPT REQ
SDES GET APPT REQ BY IEN
SDES GET APPT REQ BY PATIENT
SDES SET APPT REQ CREATE
SDES SET APPT REQ UPDATE

The patch updates the following existing RPCs:

SDEC EP DEMOGRAPHICS

The patch adds or updates the following routines:

Table 33: Patch SD*5.3*794 Routines

New SD Routines	Modified SD Routines
SDESAPTREQSET	**SDEC31**
SDESARCLOSE	**SDECEPT**
SDESARGET	**SDES**
	SDESJSON

3.5.50 Patch DG*5.3*1056 Routines

Patch DG*5.3*1056 removes the word "permanent" from the following fields of the PATIENT file (#2): COUNTRY field (# .1173), TEMPORARY PHONE NUMBER field (# .1219), and CONFIDENTIAL ADDR COUNTRY field (# .14116).

DG*5.3*1056 updates the DG ADDRESS UPDATE entry in the OPTION file (#19) to replace "(P) permanent address" with "(M) mailing address".

DG*5.3*1056 removes the word "permanent" from displays and prompts in the following routines: DGADDUT2, DGADDUTL, DGFFPLM1, DGREGCP1, DGRP1, DGRPCADD, DGRPD, DGRPE, DGRPH, DGRSTBAD.

3.5.51 Patch SD*5.3*796 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.12 and SD*5.3*796 includes several defect corrections and enhancements. This release implements a Check-In window and indicators on the Check-In screen to display an insurance change, and pre-Check-In and e-Check-In completion, ensures the "REQUESTOR" field shows "PROVIDER" and the "REQUESTED BY" field shows the Provider Name for "CONSULTS" and "PROCEDURES", a post-install routine to clean up Clinically Indicated Date (CID)/Preferred Date, a post-install

routine correcting the provider on appointments scheduled from requests opened as a result of cancelled Recall appointments, and a post-install routine to clear old User Preferences. The release also ensures the Patient Indicated Date (PID) of appointments completed through VistA Scheduling are the day the appointment is created, so that the PID and associated metrics are accurate. Additionally, the release enables printing of a patient's medication list, modifies so that control characters are excluded from the patient input search field so that the Remote Procedure Call (RPC) works normally, and finally, creates an E-Check-In "Allowed" field in VistA for clinic setup supporting improved Veteran Check-In experience.

This version corrects an issue where the Video Visit Service (VVS) appointment ID field was not deleted from the SDEC APPOINTMENT (#409.84) file when cancelling a VVS appointment, a tabbing fix on Make Appointment (APPT) Request screen resulting in a skipped PID field, and lastly, corrects a defect where the GUI crashes when a user tries to load the clinic schedule of a clinic for a scheduled appointment after the clinic's reactivation date.

The patch adds the following fields to the HOSPITAL LOCATION (#44) file:

```
DATA        NAME           GLOBAL     DATA
ELEMENT     TITLE          LOCATION   TYPE
--------------------------------------------------------------------------------

44,20       E-CHECKIN ALLOWED     0;26 SET (Required)


                '1' FOR YES;
                '0' FOR NO;
        LAST EDITED:    SEP 01, 2021
        HELP-PROMPT:    1 stands for E-Checkin Allowed and 0 stands for
                E-Checkin not allowed.
        DESCRIPTION:    This field will determine if E-Checkin is
                allowed for the clinic.


44,21       PRE-CHECKIN ALLOWED    0;27 SET (Required)


                '1' FOR YES;
                '0' FOR NO;
        LAST EDITED:    SEP 01, 2021
        HELP-PROMPT:    1 stands for PRE-Checkin allowed and 0 stands
                for PRE-Checkin not allowed.
        DESCRIPTION:    This field will determine if PRE-Checkin is
                allowed for this clinic.
```
The patch updates the following Input Template for the HOSPITAL LOCATION (#44) file: SDB.

The patch updates the following routines:

Table 34: Patch SD*5.3*796 Routines

New SD Routines	Modified SD Routines
	SDEC08
	SDEC32
	SDEC52B
	SDM0

3.5.52   Patch DG*5.3*1061 Routines

Patch DG*5.3*1061 modifies ICR #10061 for VADPT to include a new component "CAI" for downstream applications to retrieve the COMPACT Act Indicator. The indicator, returned in array VA("CAI"), is "1" (COMPACT Act Eligible) if the patient is enrolled or if the patient record contains the COMPACT ACT ELIGIBLE eligibility.

The patch also adds 'SPECIAL TX AUTHORITY CARE' and 'COMPACT ACT ELIGIBLE' to the MAS ELIGIBILITY CODE file (#8.1).

The following modified routines are exported by patch DG*5.3*1061:

- **DGENELA**
- **DGLOCK1**
- **DGRP7**
- **DGRPD**
- **VADPT**

In addition, the post-install routine, DG531061P, is created to add 'SPECIAL TX AUTHORITY CARE' and 'COMPACT ACT ELIGIBLE' to the ELIGIBILITY CODE file (#8).

3.5.53 Patch SD*5.3*773 Routines

The Telehealth Management Platform (TMP) project employs patch SD*5.3*773 to apply enhancements and defect corrections.

This patch includes two enhancements for time zone computation.

- Time zones are now always computed from the Institution (#4) file.
- If a specific Clinic points to an Institution entry that does not contain time zone information, the time zone will be derived from the Parent Facility of that Institution.

When Telehealth Management Platform (TMP) sends an appointment transaction to Vista, Vista will not send that transaction back to TMP as a new transaction.

This patch exports the new menu, Telehealth Management Toolbox [SD TELE TOOLS] which contains the below new options. The new menu can be found under the Supervisor Menu [SDSUP] menu.

- Telehealth Inquiries [SD TELE INQ]. This option allows the user to inquire using the Clinic, Medical Center Division, Institution, Patient, List Telehealth Stop Codes, and Telehealth Stop Code Lookup.

- Telehealth Stop Code Add/Edit [SD TELE STOP CODE]. This is a rename to the existing option, EDIT TELE HEALTH STOP CODES [SD EDIT TELE HEALTH STOP CODES]. Also, this patch fixes the <UNDEFINED> error generated when trying to exit using the "^" when the stop code already exists in file SD TELE HEALTH STOP CODE FILE (#40.6).

- SD TELE STOP CODE [SD TELE CLN UPDATE]. This option allows sending Clinic Update Health Level 7 (HL7) messages (Message type: MFN~M05) to TMP for clinics with valid tele health stop codes either by finding all clinics having the selected Stop Code or by directly selecting the clinic.

This patch removes the writing of the text "LDP" to the current device while sending Clinic Update HL7 messages.

This patch will correct an issue where the secondary stop code associated with a clinic is not evaluated as a TMP stop code.

The date range for the Return to Clinic(RTC)/Consult HL7 query will be increased from allowing the past 1 year to allowing the past 2 years.

In addition, the following modified routines are exported by patch SD*5.3*773:

SDHL7APT

SDHL7APU

SDHL7CON

SDHLAPT2

SDTMBUS

SDTMPHLA

SDTMPHLB

The following new routines are exported by patch SD*5.3*773:

SDTMPEDT

SDTMPUT0

SDTMPUT1

3.5.54 Patch SD*5.3*779 Routines

The Telehealth Management Platform (TMP) project employs patch SD*5.3*779 to apply enhancements. This patch includes the following features:

- This patch displays the DEFAULT PROVIDER field (#16) and the PROVIDER multiple (#2600) of the HOSPITAL LOCATION file (#44) under Clinic inquire of the Telehealth Inquiries [SD TELE INQ] option

- This patch includes a new option called the Provider Add/Edit [SD PROVIDER ADD/EDIT] to allow editing of the default provider and provider multiple fields which are needed in Telehealth management platform. The new option will be located under the Telehealth Management Toolbox [SD TELE TOOLS] menu.

- This patch adds the description field for the following menu options which was exported by SD*5.3*773 patch:
    - Telehealth Management Toolbox [SD TELE TOOLS]
    - Telehealth Inquiries [SD TELE INQ]
    - VistA-Telehealth Clinic Update [SD TELE CLN UPDATE]

In addition, the following modified routines are exported by patch SD*5.3*779:

SDTMPEDT

SDTMPUT0

3.5.55 Patch SD*5.3*797 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.13 and SD*5.3*797 includes several defect corrections and enhancements. The release updates the SDES Remote Procedure Call (RPCs) to follow standard naming convention and creates a new RPC based on SDEC SEARCH Video Visit Service (VVS) PROVIDERS RPC to return JSON. Additionally, the release creates a "Block and Move" RPC and adds a "Block and Move" cancellation reason in preparation for future Block and Move functionality, updates routine SDECAR to allow accepting either the old Disposition code (1 or 2 characters) or the new Disposition pointer value and improves GUI handling of bad JSON returns and logs more data about the error that occurred for better debugging.

This release also addresses several defects including an issue with tabbing on the Patient Centered Scheduling (PtCSch) Request window where it skips the Clinic field and the PtCSch Provider field name, and fixes a defect when a provider has a -1 in their phone number (e.g. 304123-1234) resulting in the provider not showing up in the Provider Search when making a VVS appointment.

The patch adds the following RPCs:
SDEC GETVVSMAKEINFO JSON

SDEC SEARCH VVS PROVIDERS JSON
SDES MAKE APPT BLOCK AND MOVE

The patch updates the following existing RPCs:
SDES SEARCH CLINIC

The patch updates the following routines:

Table 35: Patch SD*5.3*797 Routines

New SD Routines	Modified SD Routines
SDECPRVSRCHJSON	SDEC08
SDECVVSJSON	SDEC1
SDESBLKANDMOVE	SDEC32
	SDEC52B
	SDECAR
	SDES
	SDESJSON
	SDM0

3.5.56 Patch DG*5.3*1065 Routines

Patch DG*5.3*1065 modifies routine DGUAMWS, which invokes the UAM Address Validation Service, to retrieve the API Key from the DG UAM API KEY parameter instance in the PARAMETERS file (#8989.5) and place the key in the message header.

3.5.57 Patch SD*5.3*799 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.14.1 and SD*5.3*799 includes several defect corrections and enhancements. This release adds a Demographics indicator on the VS GUI check-in window that will be exposed in a future release, adds new Remote Procedure Calls (RPC) to Add, Modify, View/Get, and Remove a clinic from HOSPITAL LOCATION file (44), a new PRC to return patient demographics with residential address and cell phone, with city and state separated, in JSON format, and adds clinic name and Internal Entry Number (IEN) to Video Visit Service (VVS) create/edit requests. Additionally, the release modifies SDES RPCs to accept an Enterprise Appointment Scheduling (EAS) transaction ID, adds EAS Tracking number field to SDEC files, improves Single Sign-On Internal (SSOi) certificate selection on login, fixes an issue where no-showing an Multiple Return to Clinic (MRTC) appointment resulted in a "stuck" MRTC child request, and fixes an issue on initial Request Management (RM) Grid load where requests were displayed with missing data, corrects a data issue causing an error message for certain appointment requests.

This release also corrects an issue where no-showing MRTC appointment resulted in a "stuck" MRTC child request.

The patch adds the following RPCs:
SDES CREATE CLINIC
SDES EDIT CLINIC
SDES GET CLINIC INFO
SDES GET PATIENT REGISTRATION: 1606-LAB
SDES INACTIVATE/ZZ CLINIC

The patch updates the following existing RPCs:
SDEC APPADD:VSE-1581
SDEC APPDEL
SDEC RECSET
SDES DISPOSITION APPT REQ
SDES MAKE APPT BLOCK AND MOVE
SDES SET APPT REQ CREATE
SDES SET APPT REQ UPDATE

The patch updates the following routines:

Table 36: Patch SD*5.3*799 Routines

New SD Routines	Modified SD Routines
SDESCLINICSET	SDEC
SDESCLINICSET2	SDEC07
SDESGETREGA	SDEC08
SDESINACTCLINIC	SDEC52A
SDESRTVCLN	SDEC52CJSON
	SDEC52CRMVJSON
	SDECAR2
	SDES
	SDESAPTREQSET
	SDESARCLOSE
	SDESARGET
	SDESBLKANDMOVE
	SDESJSON
	SDRRISRU

3.5.58 Patch DG*5.3*1059 Routines

The VA MPI team in support of Identity Management released patch DG*5.3*1059 with the following enhancements:

1. Two new files in support of the new fields in the PATIENT file (#2). These two files came with data entries:

   .SEXUAL ORIENTATION TYPES (#47.77)

   .PRONOUN TYPES (#47.78)

2. Five new fields being added to the PATIENT file (#2):

   SEXUAL ORIENTATION (#.025) - Multiple / AVAFC202501 (Pointer to NEW File #47.77)
   SEXUAL ORIENTATION DESCRIPTION (#.0251) - Free Text / AVAFC0251
   PRONOUN (#.2406) - Multiple / AVAFC2240601 (Pointer to NEW File #47.78)
   PRONOUN DESCRIPTION (#.24061) - Free Text / AVAFC24061
   INDIVIDUAL TAX ID (#991.11) - NUMBER (900000000 - 999999999) / AVAFC99111

3. Adding new 'AVAFC' X-REF to now allow MVI to monitor theses existing fields for changes:

.RESIDENTIAL ADDRESS [LINE 1] (#.1151) - AVAFC1151
.RESIDENTIAL ADDRESS [LINE 2] (#.1152) - AVAFC1152
.RESIDENTIAL ADDRESS [LINE 3] (#.1153) - AVAFC1153
.RESIDENTIAL CITY   (#.1154) - AVAFC1154
.RESIDENTIAL STATE   (#.1155) - AVAFC1155
.RESIDENTIAL ZIP+4   (#.1156) - AVAFC1156
.RESIDENTIAL PROVINCE   (#.11571) - AVAFC11571
.RESIDENTIAL POSTAL CODE   (#.11572) - AVAFC11572
.RESIDENTIAL COUNTRY   (#.11573) - AVAFC11573

4. Modification of the DEMUPD^VADPT and DEM^VADPT to include the new fields related to sexual orientation and gender identity (SOGI).
5. Modification of the Patient Inquiry [DG PATIENT INQUIRY] option to always display gender and label residential and correspondence address fields correctly.
6. Modification of the Remote Procedure calls [VAFC REMOTE PDAT] and [VAFC REMOTE AUDIT]to ensure that lines exceeding 255 characters are not being truncated,
7. Enhancement to the HL7 version 2.4 PID and OBX segment builders to handle the new fields added in this patient, as well as both residential and correspondence address fields

Routines modified in DG*5.3*1059:
    DGRPD
    VADPT0
    VADPT1
    VAFCHFS
    VAFCPDAT
    VAFCPTED
    VAFCQRY
    VAFCQRY1
    VAFCSB
    VAFCTR

3.5.59 Patch SD*5.3*800 Routines

VistA Scheduling (VS) Graphical User Interface (GUI) Release 1.7.15 and SD*5.3*800 includes several defect corrections and enhancements. This release includes new Remote Procedure Calls (RPCs) to Add, View/Get, and Delete clinic availability in the HOSPITAL LOCATION file (44), a new SDEC RPC for Patient Registration, implements new JSON mapping model on APPT request Low-code Software Development (LSD) services, includes a change to wrap Veteran Point of Service (VPS) Patient Registration PRC in SDEC RPC, and includes a front-end fix for orphaned child Multiple Return to Clinics (MRTC).

Additionally, this release adds Title to VVS Provider Search results, addresses Provider Search dialog cosmetic cleanup, updates SDEC Settings VA Video Connect (VVC) stop codes to include 648 and 679, and remove 225, and updates VVS Provider Search to display email addresses. The release also ensures patients are checked in if e-check-in is complete, updates Video Visit Service (VVS) provider search to display email address, updates EAS tracking ID to

Check-in RPCs to accept and store EAS Transaction ID for each check-in step, and remediates 508 issues.

Lastly, the release corrects a defect where providers with matching names returned incorrect data in VVS provider search, and corrects a defect so that eligibility displays for appointments in currently inactive clinics.

The patch adds the following RPCs:
 SDEC EDIT PAT PRE-REGISTRATION
 SDES CANCEL CLIN AVAILABILITY
 SDES CREATE CLIN AVAILABILITY
 SDES GET CLIN AVAILABILITY

The patch updates the following existing RPCs:
 SDES MAKE APPT BLOCK AND MOVE
 SDES SET APPT CHECK-IN STEP

The patch updates the following routines:

Table 37: Patch SD*5.3*800 Routines

New SD Routines	Modified SD Routines
SDECUPDPATPREREG	**SDEC1**
SDESBLKANDMOVE1	**SDEC25**
SDESCCAVAIL	**SDECPRVSRCHJSON**
SDESCLINICAVAIL	**SDECVVS**
SDESCLNSETAVAIL	**SDES**
	SDESBLKANDMOVE
	SDESCKNSTEP
	SDESJSON

3.5.60 Patch SD*5.3*780 Routines

1.   If the secondary stop code for the clinic is equal to 444, 445, 446 or 447, the APPOINTMENT TYPE (#9.5) field in the PATIENT (#2) file will be set equal to 1 (Compensation & Pension). Currently, the Appointment Type defaults to 9 (Regular) for all appointments.

2.   This patch includes functionality to send holidays, non-clinic days and blocked hours from VistA to TMP. TMP users will see unavailable clinic days and hours in TMP without having to refer to VistA.

3.　　　In addition, this patch adds the capability to restore cancelled clinic availability for both cancelled days and cancelled hours. If clinic availability is restored in VistA, TMP will see that the availability has been restored in TMP without having to refer to VistA.

4.　　　This patch moves the location of Telehealth Management Toolbox [SD TELE TOOLS] menu from the Supervisor Menu [SDSUP] to the Scheduling Manager's Menu [SDMGR] so that the SDSUP key is not required to access it. A new key, SDTOOL, is added to secure these items in the Telehealth Management Toolbox menu: Telehealth Stop Code Add/Edit [SD TELE STOP CODE], VistA-Telehealth Clinic Update [SD TELE CLN UPDATE] and Provider Add/Edit [SD PROVIDER ADD/EDIT] .

5.　　　This patch adds a prompt for the clinic default provider email address in Telehealth Management Toolbox - Provider Add/Edit menu option.

6.　　　This patch adds the STATION NUMBER (#99) field from the INSTITUTION (#4) file for a clinic to the HL7 record for a new or cancelled appointment and blocked days and blocked hours. This information improves identification of the correct clinic.

7.　　　The HL7 system converts special characters to escape sequences at the TMP side. This caused a replacement of ("|", "~", "\", "&") with (\F\, \R\, \E\, \T\) respectively in the clinic name. This patch fixes this issue. Example: If the clinic name is (RAVI 692 & 442), this would have been received at the TMP side as (RAVI 692 \T\ 442). Now it will be received correctly as (RAVI 692 & 442).

Table 36: Patch SD*5.3*780 Routines

New SD Routines	Modified SD Routines
SD53P780	SDC
SDTMPHLC	SDD0
	SDHL7APT
	SDHL7APU
	SDTMPEDT
	SDTMPHLA
	SDUNC

4 Files

This section provides a list of the software files. For each file, include the following:

- File number.
- File name.
- List of any special templates (print, sort, input, edit) that come with the file.
- 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 (#2)
- PATIENT MOVEMENT (#405)
- MAS MOVEMENT TYPE (#405.2)
- PTF (#45)
- CENSUS (#41.9)
- WARD LOCATION (#42)
- HOSPITAL LOCATION (#44)

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

<p align="center">**Table 38: File List**</p>

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,
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,

File Number	File Name	Global
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,
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,

File Number	File Name	Global
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,
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,

File Number	File Name	Global
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,
47.77	SEXUAL ORIENTATION TYPES	^DG(47.77
47.78	PRONOUN TYPES	^DG(47.78
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,
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,

File Number	File Name	Global
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,
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,

File Number	File Name	Global
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,
408.43	PATIENT REGISTRATION ONLY REASON	^DG(408.43,
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 STOP CODE EXCEPTION	^SD(409.45,
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,
409.68	OUTPATIENT ENCOUNTER	^SCE(
409.73	TRANSMITTED OUTPATIENT ENCOUNTER	^SD(409.73,

File Number	File Name	Global
409.74	DELETED OUTPATIENT ENCOUNTER	^SD(409.74,
409.75	TRANSMITTED OUTPATIENT ENCOUNTER ERROR	^SD(409.75,
409.76**	TRANSMITTED OUTPATIENT ENCOUNTER ERROR CODE	^SD(409.76,
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,
409.88	SDEC CANCELLATION COMMENTS	^SDEC(409.88,
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 that overwrites 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 #number or range of File numbers.

5. Select Listing Format: **Standard**.

6. You see what files point to the selected file. To see what files to which the selected file points, 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**.

   Start with name:

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

5. Within name, sort by: **<Enter>**.

6. First print field: Name

5.3   VA FileMan Functions

Included with the ACRP Reports Menu is the VA FileMan function, **SCRPWDATA**. This function can be used from within the OUTPATIENT ENCOUNTER file to provide any of the data elements in Table 39 as data within VA 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 want to return. For example, if you want to sort or print a patient's current GAF score, the function could be used as follows.

Figure 3: Printing SCRPWDATA Function Data

```
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 (e.g., procedure codes, diagnoses, etc.) are returned as a single semicolon delimited string, which can be as long as 245 characters. Some data of these elements can be omitted due to truncation to stay within this limit.

Table 39 lists VA FileMan function data elements and their associated acronyms that can be specified as arguments to the **SCRPWDATA** function.

Table 39: 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

Data Element	Acronym
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
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

Data Element	Acronym
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
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 **O.DG** Manager Menu (ADT).

    o **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:

    o **DG** to **DGZ**, **VA** to **VAZ** (ADT).

    o **SD** to **SDZ**, **SC** to **SCZ** (Scheduling).

- Within name, sort by: **<Enter>**.

- 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:

  o **DG** to **DGZ**, **VA** to **VAZ** (ADT).

  o **SD** to **SDZ**, **SC** to **SCZ** (Scheduling).

- Within name, sort by: **<Enter>**.

- 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:

  o **DG** to **DGZ**, **VA** to **VAZ** (ADT).

  o **SD** to **SDZ**, **SC** to **SCZ** (Scheduling).

- Within name, sort by: **<Enter>**.

- 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***.

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

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

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 40: Exported Scheduling Options

New Scheduling Options	Menu Assignments
High Risk MH Proactive Adhoc Report [SD MH PROACTIVE AD HOC REPORT] Option	Standalone Option
High Risk MH Proactive Nightly Report [SD MH PROACTIVE BGJ REPORT] Run Routine	Standalone Option

Table 41: Modified Scheduling Options

Modified Scheduling Options	Menu Assignments
High Risk MH No-Show Adhoc Report [SD MH NO SHOW AD HOC REPORT] option	Standalone Option
High Risk MH No-Show Nightly Report [SD MH NO SHOW NIGHTLY BGJ] Run Routine	Standalone 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 42: New DG Option

New Dg Option	Menu Assignment
Convert Local HRMH PRF to National Action [DGPF LOCAL TO NATIONAL CONVERT] option	Standalone Option

6.8.3 New Options

Table 43 lists several new options and are listed by Patch ID. These options are 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 43: Exported VistA Scheduling (VS) Options

Option	Description
Patch SD*5.3*723	
SDEC NO RES APPT AUTO FIX	This option automatically processes entries in the SDEC APPOINTMENT (#409.84) file 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 (#409.84) file that do *not* have a pointer to an SDEC RESOURCE (#409.831) and find the correct resource for the link.
SDEC NULL RESOURCE	This option scans the SDEC APPOINTMENT (#409.84) file 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.

Option	Description
SDEC APPOINTMENT INQUIRY	Option performs VA FileMan inquiry in the APPOINTMENT (#409.84) file.
SDEC ENCOUNTER INQUIRY	VA FileMan encounter inquiry for users without access to VA 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 VA FileMan inquiry into the RESOURCE (#409.831) file.
Patch SD*5.3*731	
SDEC NO RES APPT REPORT	Identifies appointments that do *not* have the RESOURCE (#409.831) field populated.
Patch SD*5.3*737	
SDEC APPT-ENC STATUS LIST	Lists all patient appointment-encounter-appointment file triples that match user selected status values for each file.
Patch SD*5.3*686	
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.
Patch SD*5.3*694	
SDEC HELP PANE EDIT (LOCAL)	Use this option to enter/edit hyperlinks displayed in the VS GUI help pane.
SDEC SETTINGS REMOTE UPDATE	Used to process changes to the SDEC SETTINGS (#409.98) file.
Patch SD*5.3*756	
SDEC CANCEL COMMENTS - LOCAL	New option to enter/edit standard appointment cancellation comments used by VS GUI. Comments consist of hash tags (abbreviations) and their associated textual equivalent.

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.

> **NOTE:** For details, see the Release Notes.

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 44: 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 that can be deleted is 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 **Purge Message Text File Entries** [HL PURGE TRANSMISSIONS] option be scheduled to run every day or every other day.

8 Callable Routines, Entry Points, and Application Programming Interfaces

This section lists the callable routines, entry points, and Application Programming 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 displays all patients that did *not* show up for their scheduled appointment for a Mental Health clinic. It lists the following:

- Patient contact information.
- Next of Kin.
- Emergency contact.
- Clinic default provider.
- Future scheduled appointments.
- Mental Health Treatment Coordinator.
- Care team.
- Results of attempts to contact the no showed patients.

The user is asked for various sort criteria:

- Date range
- Divisions to display (one, many, all)
- Sort by Clinic, Reminder Location, or Stop Codes (one, many, all).

Table 45: ^SDMHAD Routine

Routine Name	^SDMHAD			
Enhancement Category	☒ New	☐ Modify	☐ Delete	☐ No Change
SRS Traceability				
Related Options	**High Risk MH No-Show Adhoc 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	

Routine Name	^SDMHAD
	LOCLIST^PXRMLOCF $$RANGE^SDAMQ ASK2^SDDIV ^SDMHAD1 ^SDMHNS1 ^VADATE PID^VADPT6 FIRST^VAUTOMA PATIENT^VAUTOMA
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.

Routine Name	^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, 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**" cross-reference to see if the patient has an appointment.
In the date range **^SC(clinic,"S",date**.

- If there is a match, set up the **^TMP("SDNS", SORT (clinic, reminder location or stop code)** global.

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 following:

- Patient that no showed for the mental health appointment.

- Date the of the appointment.

- Clinic.

- Stop code.

- Contact information for the patient.

- Next of Kin.

- Emergency contacts.

- Clinic provider.

- Future scheduled appointments.

- Mental Health Treatment Coordinator.

- Care team.

- Results of efforts in contacting the patient.

Table 46: ^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 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)					
The code loops through the **^TMP("SDNS", SORT (clinic, reminder location or stop code)** global.					

Routine Name	^SDMHAD1

- A header prints for each division (alphabetical), which includes the following information:
- **The second line designates how the report is 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: ANYSITE1
```

If the sort is by the reminder location the following prints:

```
        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: ANYSITE1/VA-MH QUERI PC CLINIC STOPS
```

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

For each patient listed, the following information if available prints:
- 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 prints with no records available.

Routine Name	^SDMHAD1

```
                    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 displays all patients that did *not* show up for their scheduled appointment for a Mental Health clinic. It lists the following:

- Patient contact information

- Next of Kin

- Emergency contact

- Clinic default provider

- Future scheduled appointments

- Mental Health Treatment Coordinator

- Care team

- Results of attempts to contact the no showed patients.

The user is *not* asked any sort criteria; the report lists for the day before the background job run, for all the divisions in the facility and mental health clinics in the facility. The report is sent to members of the **SD MH NO SHOW NOTIFICATION** mail group.

Table 47: ^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	

Routine Name	^SDMHNS
	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 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)

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

Routine Name	^SDMHNS

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**" cross-reference to see if the patient has an appointment.

In the date range **^SC(clinic,"S",date**.

- If there is a match, set up the **^TMP("SDNS", SORT (clinic, reminder location or stop code)** global.

Call to **^SDMHNS1** routine to set up the **^TMP("SDNS",$J, LINE NUMBER,0)** global that hold the data for sending an email message to all persons in the **SD MH NO SHOW NOTIFICATION** email group.

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 can print out the email message to a printer for a hard copy through MailMan.

The report is almost identical to the AD HOC report, except it has 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 following:

- Patient that no showed for the mental health appointment.

- Date the of the appointment.

- Clinic.

- Stop code.

- Clinic provider.

- Future scheduled appointments for the patient up to **30 days** out.

The report is sent to members of the **SD MH NO SHOW NOTIFICATION** mail group.

Table 48: ^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 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)	
The code loops through the **^TMP("SDNS", Clinic**, global.	

Routine Name	^SDMHNS1

- A header is set into the **^TMP("SDNS",$J,LINE #,0)** global for each division (alphabetical), which includes the following information:
- **The second line designates how the report is sorted and printed. The background job only prints 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: ANYSITE1
```

For each patient listed, the following information, if available, is 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 prints 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 49: ^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"**	
Data Dictionary References	N/A			
Related Protocols	N/A			
Related Integration Agreements	N/A			
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

```
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
```

Routine Name	^SDAMQ

```
        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
        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

The **EN^SDMHPRO** routine is the front-end of the proactive background job report and sets up the data to be printed.

Table 50: 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	

Routine Name	EN^SDMHPRO	
		^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

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**" cross-reference to see if the patient has an appointment.

Routine Name	EN^SDMHPRO

In the date range **^SC(clinic,"S",date**.

- If there is a match, set up the **^TMP("SDPRO1", SORT (clinic, reminder location or stop code)** global.

Call to **^SDMHPRO1** routine to set up the **^TMP("SDMHP",$J, LINE NUMBER,0)** global that holds the data for sending an email message to all persons in the **SD MH NO SHOW NOTIFICATION** email group.

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 can print out the email message to a printer for a hard copy through MailMan.

The report is identical to the AD HOC report, except it has MailMan designation in the heading.

8.7   ^SDMHPRO1

The ^**SDMHPRO1** routine is called by the **SDMHPRO** routine and is the routine that prints out the **Proactive Background Job** report.

Table 51: 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	

Routine Name	EN^SDMHPRO1
	$$SETSTR^SDUL1 PID^VADPT6 $$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

None

Modified Logic (Changes are in bold)

The code loops through the **^TMP("SDPRO1"** global.

- A totals page prints out of the unique patients at the beginning of the report.
- A header prints for each division (alphabetical), which includes the following information:
- The second line designates how the report is 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: ANYSITE1


1  Schedulingpatient, One    0000     10/3/2011 9:00 am   D-PSYCHXXXXXXXXXX



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: ANYSITE2



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: ANYSITE3


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

ANYSITE1                                            1
ANYSITE2                                            2
ANYSITE3                                            2
```

If there are no patients, the heading prints 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

The **EN^SDMHAP** routine is the front-end of the **Proactive Ad Hoc Report** and sets up the data to be printed.

Table 52: 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 Adhoc 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 FIRST^VAUTOMA $$FMTE^XLFDT		

Routine Name	EN^SDMHAP
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 sorts by clinic.

User are 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 chooses 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.

Routine Name	EN^SDMHAP

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.

Within that loop, check the Hospital Location "**S**" cross-reference to see if the patient has an appointment.

In the date range **^SC(clinic,"S",date**.

- If there is a match, set up the **^TMP("SDPRO1", SORT by clinic** global.

Call **^SDMHAP1** routine to print the report.

8.9 EN^SDMHAP1

The **EN^SDMHAP1** routine is called by the **SDMHAP** routine and is the routine that prints out the **Proactive Ad Hoc Report**.

Table 53: 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 Adhoc 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	

Routine Name	EN^SDMHAP1
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

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 loops through the **^TMP("SDPRO1"** global.

- A header prints for each division (alphabetical), which includes the following information:
- The second line designates how the report is sorted and printed. This example, sorts by clinic.
- The patient name, ID, date of appointment, and clinic.
- A totals page prints 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: ANYSITE1
1    TESTPATIENT,ONEXXXXX T1111  4/4/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXXX
                                 4/5/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXXX
                                 4/8/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXXX
                                 4/9/2013@08:00   D-PSYCHXXXXXXXXXXXXXXXXXXXXXX
                                 4/10/2013@08:00  D-PSYCHXXXXXXXXXXXXXXXXXXXXXX
                                 4/11/2013@08:00  D-PSYCHXXXXXXXXXXXXXXXXXXXXXX
                                 4/12/2013@08:00  D-PSYCHXXXXXXXXXXXXXXXXXXXXXX


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: ANYSITE2
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
                                 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: ANYSITE3

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

ANYSITE1                                               1
ANYSITE2                                               1
ANYSITE3                                               1
```

Routine Name	EN^SDMHAP1

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)

For more detailed information on or to see a list of VistA Scheduling (VS) Remote Procedure Calls (RPCs), refer to either of the following:

- VS GUI Technical Manuals for any release. VS Technical Manuals can be found on the Scheduling app on the VA Software Document Library.

- REMOTE PROCEDURE (#8994) file within any VistA environment. Searching for "**SDEC**" within the REMOTE PROCEDURE (#8994) file returns the list of RPCs used by VistA Scheduling (VS).

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 21.0 (and higher)
- Kernel 8.0
- Kernel Toolkit 7.3
- VA MailMan 7.1 (and higher)
- CPRS V. 28 (and higher)
- PXRM 2.0.18
- PCE 1.0
- IB 2.0
- IFCAP V. 3.0
- DRG Grouper V. 13.0
- HL7 V. 1.6
- 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 packages listed in Table 54, you *must* be running the listed version or higher.

Table 54: Minimum Version Baseline

Package	Minimum Version
AMIE	None
CPRS (OR V. 3.0*280)	1.0
Dental	1.2
Dietetics	4.33
Inpatient Meds	None
IVM	2.0
Laboratory	5.2
Mental Health	5.0
Nursing	2.2
Occurrence Screening	2.0
Outpatient Pharmacy	7.0
Patient Funds	3.0
Radiology/Nuclear Medicine	4.5
Record Tracking	2.0
Social Work	3.0
Utilization Review	1.06

> **NOTE:** If you are *not* running one of the packages in Table 54, you do *not* need to install it.

You *must* have all current patches for the following applications installed prior to the installation of PCMM (SD*5.3*41, DG*5.3*84):

- Kernel V. 8.0
- Kernel Toolkit V. 7.3
- VA FileMan V. 21.0 (or higher)
- RPC Broker V. 1.0 (or higher)
- PIMS V. 5.3

You *must* have KIDS Patch 44 (XU*8.0*44) installed prior to loading the VIC software.

CPRS uses the PCMM files and GUI interface.

Table 55 lists all elements that are checked for installation of Ambulatory Care Reporting Project.

Table 55: 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
REDACTED in DOMAIN (#4.2) file	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 (#216) field in the MAS PARAMETER (#43) file	Contains valid Mail Group	No

NOTE: This domain was distributed by patch XM*DBA*99.
Not installing this patch results in the loss of workload credit.
Not installing this patch results 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 that is a menu option should be able to run independently provided the user has the appropriate keys and VA 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

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 (#2) file.

Documentation can also be found in the routine.

Figure 4: $$OUTPTPR^SDUTL3—Routine Documentation

```
$$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.
```

Figure 5: $$OUTPTTM^SDUTL3—Routine Documentation

```
$$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.
```

Figure 6: $$OUTPTAP^SDUTL3—Routine Documentation

```
$$OUTPTAP^SDUTL3(PARM 1, PARM 2)
Input       PARM 1 The internal entry of the PATIENT file.
Input       PARM 2 The relevant data.
Output                  Pointer to File 200^external value of the name.
$$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.

Figure 7: INPTPR^SDUTL3—Routine Documentation

```
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
```

Figure 8: INPTTM^SDUTL3—Routine Documentation

```
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

10.5.2.1 Integration Agreement Applicable

Figure 9: 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^REDACTED DGARR("OWNER") - Site which
            currently "Owns" this flag (Relevant to National flags only)
```

```
                    i.e. 500^REDACTED 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

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

Figure 10: Inquire to an Integration Control Registration

```
Select INTEGRATION CONTROL REGISTRATIONS Option: INQ <Enter> Inquire to an
Integration Control Registration
Select INTEGRATION REFERENCES: DGPFAPIU <Enter>
5491     REGISTRATION    Controlled Subscription    PATIENT RECORD FLAG VARIABLE
POINTER     DGPFAPIU
DEVICE: ;;999 <Enter> 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:
```

10.5.2.2 DGPFAPIH

Table 56: DGPFAPIH APIs

API	Description
GETINF^DGPFAPIH (Increment 1) **DGPFAPIH** is both a routine and an API/Integration agreement (#4903)	**DGPFAPIH**: This routine implements the two Application Programming Interface (API) call points for retrieving Patient Record Flag (PRF) 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 obtains the Patient Record Flag assignment information and status for the specified patient, patient record flag and date range. The return data is provided in an array using the **target_root** specified by the user or in the default array variable **DGPFAPI1**. The DATE/TIME (#.02) field of the PRF ASSIGNMENT HISTORY (#26.14) file entry determines whether the entry falls within the specified date range. If no date range is specified, all entries are returned.
GETLST^DGPFAPIH (Increment 1)	This API retrieves 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 is provided in an array using the **target_root** specified by the user or in the default array variable **DGPFAPI2**. The DATE/TIME (#.02) field of the PRF ASSIGNMENT HISTORY (#26.14) file entry determines whether the entry falls within the specified date range.

10.5.2.3 DGPFAPIU

Table 57: DGPFAPIU API

API	Description
DGPFAPIU (Increment 1)	This routine provides support utilities and functions for the new Application Programming Interface calls. This procedure checks 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 (#26.14) file 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. **REF:** 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 is checked for the PRF. If no category is passed in, then first the National category is checked in the integration Agreement # 5491.

10.6 VAUTOMA

VAUTOMA is a routine that does a one/many/all prompt; returning the chosen values in a subscripted variable specified by the calling programmer.

Input Variables

- **VAUTSTR**—String that 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 Developer's Guide*).

Output Variables

As defined in **VAUTVB**.

10.7   VAFMON

VAFMON is a routine that returns income or dependent information on a patient.

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

- PARM 1—The internal entry of the PATIENT (#2) file.
- PARM 2—The date for which the income is calculated.

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

- PARM 1—The internal entry of the PATIENT (#2) file.
- PARM 2—The date for which the income is calculated.

10.8   AIT

See the Ambulatory Care Reporting Project Interface Toolkit (AIT). 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.

Online 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, can be generated by using several Kernel and VA FileMan options.

These include but are not limited to:

- **XINDEX**

- Menu Management: **Inquire Option File**

- **Print Option File**

- VA FileMan: **List File Attributes**

Entering question marks at the "Select ... Option:" prompt can also provide users with valuable technical information. For example:

- A single question mark (**?**) lists all options that 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.

- An option name preceded by a question mark (**?OPTION**) shows extended help, if available, for that option.

> **REF:** For a more exhaustive option listing and further information about other utilities that supply online technical information, consult the VistA *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*.

11.1 XINDEX

The **XINDEX** option analyzes the structure of a routine(s) to determine in part if the routine(s) adheres to VistA Programming Standards. The **XINDEX** output can include the following components:

- Compiled list of errors and warnings

- Routine listing

- Local variables

- Global variables

- Naked globals

- Label references

- 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 that 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 that 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

The **Inquire to Option File** menu manager option provides the following information about a specified option(s):

- Option name

- Menu text

- Option description

- Type of option

- Lock (if any)

In addition, all items on the menu are listed for each menu option.

- **DPT**—Patient File Look-up, Patient Sensitivity

- **SD** and **SC**—Scheduling

- **VA**—Generic utility processing

11.3   Print Options File

The **Print Options File** utility generates a listing of options from the OPTION (#19) file. The user can 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**

11.4   List File Attributes

This VA FileMan **List File Attributes** option allows the user to generate documentation pertaining to files and file structure. Use of this option via the "Standard" format yields 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 that point to the file specified
- Input templates
- Print templates
- 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
- Notes

Using the "**Global Map**" format of this option generates an output that lists the following:

- All cross-references for the file selected
- Global location of each field in the file
- Input templates
- Print templates
- Sort templates

11.5 Security

11.5.1 General Security

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

11.5.2 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):
        o **SDECZMGR**
        o **SDECZMENU**
        o **SDECZ REQUEST**
        o **SDOB**
        o **SDMOB**
        o **PROVIDER**
        o **PSORPH**
        o **ORES**

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

11.5.3 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.

11.6 VA FileMan Access Codes

lists the *recommended* VA FileMan Access Codes associated with each file contained in the PIMS package. This list can be used to assist in assigning users appropriate VA FileMan Access Codes.

Table 58: VA 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	@	@	@
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	@	@	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
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	@	@	@
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	@	@	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
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
41.43	PRE-REGISTRATION CALL LOG	@	d	D	D	D
41.9	CENSUS	@	d	@	@	@
42	WARD LOCATION	@	d	D	@	D
42.4	SPECIALTY	@	d	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
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	@	@	@
45.68	FACILITY SUFFIX	@	d	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
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	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
391.31	HOME TELEHEALTH PATIENT	@	@	@	@	@
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	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
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	@	@	@
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

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
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	@	@	@
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	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
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	@	@	@
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	@	@	@	@	@

File Number	File Name	DD Access	RD Access	WR Access	DEL Access	LAYGO Access
409.88	SDEC CANCELLATION	@		@	@	@
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 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

Table 59 lists references to patient information (PATIENT [#2] file) that are supported without an integration agreement. All nationally distributed cross-references on these fields are also supported.

Table 59: 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

Field Name	Field #	Global Location	Type of Access
PLACE OF BIRTH [STATE]	(#.093)	0;12	Read
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

Description

This entry point returns demographic information for a patient.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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, Department of Defense (DOD), or Indian Health Service (IHS) through the eligibility. If this variable is *not* defined or the eligibility does *not* exist, the VA patient IDs are 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 is returned with numeric subscripts:

  o **1**—Return the output array with alpha subscripts; see "Description

  o Returns the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  o **0**—Veteran is not COMPACT eligible

  o **1**—Veteran is COMPACT eligible

  o Alpha Subscripts" section [e.g., **VADM(1)** would be **VADM("NM")**].

  o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VADM",$J,1)**].

  o **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"**).

OUTPUT

- **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 is 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).

- **VADM(11,1..n)**—The 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)**—The 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)**].

- **VADM(13)** – The current active entry from the LANGUAGE DATE/TIME (#.207) multiple in fileman format ^ human readable format [e.g. 3210924.1426^SEP 24,2021@14:26]

- **VADM(13,1) -** Current value for PREFERRED LANGUAGE for the patient in internal^external format [e.g. **1^ENGLISH**]

- **VADM(14) –** set to null to avoid issues with groups that are only looking for root nodes

- **VADM(14,1**) – The number of entries found in the SEXUAL ORIENTATION multiple (e.g., **2**).

- **VADM(14,1**..n) – The nth repetition of SEXUAL ORIENTATION for the patient in external^internal format (e.g., **"Bisexual^BIS"**).

- **VADM(14,2**) – The SEXUAL ORIENTATION DESCRIPTION for the patient free text format (e.g., **"I have many sexual orientations"**).

- **VADM(14,3**) – The number of entries found in the PRONOUN multiple (e.g., **2**).

- **VADM(14,4**..n) – The nth repetition of PRONOUN for the patient in external^internal format (e.g., **" Ze/Zir/Zirs^ZIR"**).

- **VADM(14,4**) – The PRONOUN DESCRIPTION for the patient free text format (e.g., **"I have many pronouns I would like used"**).

- **VADM(14,5) –** The SELF IDENTIFIED GENDER for the patient in internal^external format (e.g., Other^O")

- **VA("PID")**—The PRIMARY LONG ID for a patient. The format of this variable depends 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 depends on the type of patient if **VAPTYP** is set (e.g., **6789**).

- **VAERR**—The error flag has one of the following values:

  o **0**—No errors encountered.

  o **1**—Error encountered: DFN or **^DPT(DFN,0)** is *not* defined.

12.2.2 DEMUPD^VADPT

Description

This entry point returns demographic information for a patient.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 are 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 is returned with numeric subscripts:

  o **1**—Return the output array with alpha subscripts; see "[Description](#)

  o [Returns](#) the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  o **0**—Veteran is not COMPACT eligible

  o **1**—Veteran is COMPACT eligible

  o Alpha Subscripts" section [e.g., **VADEMO(1)** would be **VADEMO("NM")**].

  o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VADEMO",$J,1)**].

  o **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"**).

Output

- **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 is 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 information).

- **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)**—The 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)**—The 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)**].

- **VADEMO(12)**—Number of entries found in the RACE INFORMATION multiple (e.g., **1**).

- **VADEMO(12,1..n)**—The 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)**].

- **VADEMO(13)** - The current active entry from the LANGUAGE DATE/TIME (#.207) MULTIPLE IN FILEMAN FORMAT ^ HUMAN READABLE FORMAT [E.G. 3210924.1426^SEP 24,2021@14:26]

- VADEMO(13,1) - Current value for PREFERRED LANGUAGE for the patient in internal^external format [e.g. 1^ENGLISH]

- **VADEMO(14,1**) – The number of entries found in the SEXUAL ORIENTATION multiple (e.g., **2**).

- **VADEMO(14,1..n)** – The *n*th repetition of SEXUAL ORIENTATION for the patient in external^internal format (e.g., **"Bisexual^BIS"**).

- **VADEMO(14,2)** – The SEXUAL ORIENTATION DESCRIPTION for the patient free text format (e.g., **"I have many sexual orientations"**).

- **VADEMO(14,3)** – The number of entries found in the PRONOUN multiple (e.g., **2**).

- **VADEMO(14,3..n)** – The *n*th repetition of PRONOUN for the patient in external^internal format (e.g., **" Ze/Zir/Zirs^ZIR"**).

- **VADEMO(14,4)** – The PRONOUN DESCRIPTION for the patient free text format (e.g., **"I have many pronouns I would like used"**).

- **VADEMO(14,5)** – The SELF IDENTIFIED GENDER for the patient in internal^external format (e.g., Other^O")

- **VAERR**—The error flag has one of the following values:

  o **0**—No errors encountered.

  o **1**—Error encountered: DFN or **^DPT(DFN,0)** is *not* defined.

12.2.3 ELIG^VADPT

Description

This entry point returns eligibility information for a patient.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:

  o **1**—Return the output array with alpha subscripts; see "[Description](#)"

  o [Returns](#) the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  o **0**—Veteran is not COMPACT eligible

  o **1**—Veteran is COMPACT eligible

- o Alpha Subscripts" section [e.g., **VAEL(1)** would be **VAEL("EL")**].
  - o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VAEL",$J,1)**].
  - o **12**—Return the output in the **^UTILITY** global with alpha subscripts [e.g., **^UTILITY("VAEL",$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"**).

Output

- **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**" is returned in the first piece; otherwise, a "**0**" is returned. If service connected, the SERVICE CONNECTED PERCENTAGE field is returned in the second piece (e.g., **1^70**).

- **VAEL(4)**—If the VETERAN (Y/N)? field is YES, a "**1**" is returned; otherwise, a "**0**" is returned (e.g., **1**).

- **VAEL(5)**—If an INELIGIBLE DATE exists, a "**0**" is returned indicating the patient is ineligible; otherwise, a "**1**" is 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., **ANYSITE1**).

- **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**).

- **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 has one of the following values:

  o **0**—No errors encountered.

  o **1**—Error encountered: DFN or **^DPT(DFN,0)** is *not* defined.

12.2.4 MB^VADPT

Description

This entry point returns monetary benefit information for a patient.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:

  o **1**—Return the output array with alpha subscripts; see "Description

  o Returns the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  o **0**—Veteran is not COMPACT eligible

  o **1**—Veteran is COMPACT eligible

  o Alpha Subscripts" section [e.g., **VAMB(1)** would be **VAMB("AA")**].

  o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VAMB",$J,1)**].

  o **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"**).

Output

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

- **VAMB(2)**—If the RECEIVING HOUSEBOUND BENEFITS? field is **YES**, a "**1**" is returned in the first piece; otherwise, a "**0**" is returned. If receiving housebound benefits, the TOTAL ANNUAL VA CHECK AMOUNT is returned in the second piece (e.g., **1^0**).

- **VAMB(3)**—If the RECEIVING SOCIAL SECURITY field is **YES**, a "**1**" is returned in the first piece; otherwise, a "**0**" is returned. If receiving social security, the AMOUNT OF SOCIAL SECURITY is returned in the second piece (e.g., **0**).

- **VAMB(4)**—If the RECEIVING A VA PENSION? field is **YES**, a "**1**" is returned in the first piece; otherwise, a "**0**" is returned. If receiving a VA pension, the TOTAL ANNUAL VA CHECK AMOUNT is returned in the second piece (e.g., **1^563.23**).

- **VAMB(5)**—If the RECEIVING MILITARY RETIREMENT? field is **YES**, a "**1**" is returned in the first piece; otherwise, a "**0**" is returned. If receiving military retirement, the AMOUNT OF MILITARY RETIRE-MENT is 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**" is returned in the first piece; otherwise, a "**0**" is returned. If receiving VA disability, the TOTAL ANNUAL VA CHECK AMOUNT is returned in the second piece (e.g., **0**).

- **VAMB(8)**—If the TYPE OF OTHER RETIRE-MENT field is filled in, a "**1**" is returned in the first piece; otherwise, a "**0**" is returned. If receiving other retirement, the AMOUNT OF OTHER RETIREMENT is returned in the second piece (e.g., **1^2500.12**).

- **VAMB(9)**—If the GI INSURANCE POLICY? field is **YES**, a "**1**" is returned in the first piece; otherwise, a "**0**" is returned. If receiving GI insurance, the AMOUNT OF GI INSURANCE is returned in the second piece (e.g., **1^100000**).

- **VAERR**—The error flag has 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

Description

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**

- **8^VADPT**

The ICR for **VADPT** is **10061**. More details can be found in FORUM, in the documentation of ICR 10061.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:

   - **1**—Return the output array with alpha subscripts; see "Description

   - Returns the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

   - **0**—Veteran is not COMPACT eligible

   - **1**—Veteran is COMPACT eligible

   - Alpha Subscripts" section [e.g., **VASV(1)** would be **VASV("VN")**].

   - **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"**).

Output

- **VASV(1)**—If the VIETNAM SERVICE INDICATED field is **YES**, a "**1**" is returned; otherwise, a "**0**" is 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**" is returned; otherwise, a "**0**" is 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**" is returned; otherwise, a "**0**" is 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**" is returned; otherwise, a "**0**" is 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**).

- **VASV(5)**—If the COMBAT SERVICE INDICATED field is **YES**, a "**1**" is returned; otherwise, a "**0**" is 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**" is returned in the first piece; otherwise, a "**0**" is 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**" is returned; otherwise, a "**0**" is 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**" is returned; otherwise, a "**0**" is returned (e.g., **0**).

- **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**" is returned; otherwise, a "**0**" is 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 number 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**). Where "*n*" is the number 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**). Where "*n*" is the number 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**). Where "*n*" is the number used to provide a unique number for each OIF conflict being returned.

- **VASV(12)**—The number 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**). Where "*n*" is the number 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**). Where "*n*" is the number used to provide a unique number for each OEF conflict being returned.

- **VASV(12,n,3)**—OEF/OIF TO DATE (#2.3215; .03) internal format ^external format (e.g., **3060101^MAR 1, 2006**). Where "*n*" is the number used to provide a unique number for each OEF conflict being returned.

- **VASV(13)**—The number 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**). Where "*n*" is the number 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**). Where "*n*" is the number 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**). Where "*n*" is the number 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**" is returned; otherwise, a "**0**" is 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 has 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

Description

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

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:
  - **1**—Return the output array with alpha subscripts; see "Description

o [Returns](#) the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  o **0**—Veteran is not COMPACT eligible

  o **1**—Veteran is COMPACT eligible

  o Alpha Subscripts" section [e.g., **VAPA(1)** would be **VAPA("L1")**].

  o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VAPA", $J,1)**].

  o **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"**).

- **VAPA("P")**—This optional variable can be set to force the return of the patient's mailing address. The mailing address array is 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 FileMan 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 FileMan 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**].

Output

- **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., **ANYSITE1**).

- **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 **O**—Inactive

  o **1**—Active).

- **VAPA(13)**—The first line of the Confidential Street Address.

- **VAPA(14)**—The second line of the Confidential Street Address.

- **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^ANYSITE1**).

- **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 Mailing or Temporary Province (if temp address is current and active, it's temp).

- **VAPA(24)**—The Mailing or Temporary Postal Code (if temp address is current and active, it's temp).

- **VAPA(25)**—The Mailing 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 has 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

Description

This entry point returns other specific address information.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:
  - **1**—Return the output array with alpha subscripts; see "Description

o [Returns](#) the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  o **0**—Veteran is not COMPACT eligible

  o **1**—Veteran is COMPACT eligible

  o Alpha Subscripts" section [e.g., **VAOA(1)** would be **VAOA("L1")**].

  o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VAOA",$J,1)**].

  o **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 is returned; otherwise, the following are returned based on information desired:

  o **VAOA("A")=1**—Primary emergency contact.

  o **VAOA("A")=2**—Designee for personal effects.

  o **VAOA("A")=3**—Secondary next-of-kin.

  o **VAOA("A")=4**—Secondary emergency contact.

  o **VAOA("A")=5**—Patient employer.

  o **VAOA("A")=6**—Spouse's employer.

Output

- **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**).

- **VAOA(8)**—The PHONE NUMBER of the contact/employer [e.g., **(000) 555-1234**].

- **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 has 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

Description

This entry point returns data related to an inpatient episode.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:
  - **1**—Return the output array with alpha subscripts; see "Description"
  - Returns the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status
  - **0**—Veteran is not COMPACT eligible
  - **1**—Veteran is COMPACT eligible

- o Alpha Subscripts" section [e.g., **VAIN(1)** would be **VAIN("AN")**].

- o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VAIN",$J,1)**].

- o **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 FileMan date/time format. If time is *not* passed, it assumes anytime during that day. If this variable is *not* defined, it assumes now as the date/time (e.g., **2880101.08**).

Output

- **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 are 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^ADTPROVIDER,ONE 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 returns a "**1**" in the first piece if the patient is in a bed status; otherwise, a "**0**" is 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 contains 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 has 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

Description

This entry point returns data related to an inpatient episode.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:

  - **1**—Return the output array with alpha subscripts; see "Description

  - Returns the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  - **0**—Veteran is not COMPACT eligible

  - **1**—Veteran is COMPACT eligible

  - 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 FileMan date in internal format. If the patient was an inpatient at the date/time passed, movement data pertaining to that date/time is 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 returns movement data if patient was an inpatient at any time during the day on the date that was passed.

  - **VAIP("D")**—If *not* passed, returns 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 is based on the *admission* movement associated with the movement date/time passed.

  - **VAIP("M")=1**—The array returned is based on the *last* movement associated with the date/time passed.

Output

- **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**)

- **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 returns a **"1"** in the first piece if the patient is in a bed status; otherwise, a **"0"** is 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 contains 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 returns 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^ADTPROVIDER, ONE 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**).

- **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^ADTPROVIDER, ONE 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 in internal^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**).

- **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 in internal^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)**—It contains 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 has one of the following values:

  o **0**—No errors encountered.

  o **1**—Error encountered: DFN or **^DPT(DFN,0)** is *not* defined.

12.2.10   OPD^VADPT

Description

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

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 is returned with numeric subscripts:

  o **1**—Return the output array with alpha subscripts; see "Description

  o Returns the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status

  o **0**—Veteran is not COMPACT eligible

  o **1**—Veteran is COMPACT eligible

  o Alpha Subscripts" section [e.g., **VAPD(1)** would be **VAPD("BC")**].

  o **2**—Return the output in the **^UTILITY** global with numeric subscripts [e.g., **^UTILITY("VAPD",$J,1)**].

  o **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"**).

Output

- **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**).

- **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 has one of the following values:

  o **0**—No errors encountered.

  o **1**—Error encountered - DFN or **^DPT(DFN,0)** is *not* defined.

12.2.11   REG^VADPT

Description

Returns REGISTRATION/DISPOSITION data.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 FileMan 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 FileMan date. If neither **VARP("F")** nor **VARP("T")** are defined, all registrations are 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** returns the **five** most recent).

Output

- **^UTILITY("VARP",$J,#,"I")**—Internal format.

- **^UTILITY("VARP",$J,#,"E")**—External format:

  o **Piece 1**—Registration Date/Time

  o **Piece 2**—Status

  o **Piece 3**—Type of Benefit applied for

  o **Piece 4**—Facility Applying to

  o **Piece 5**—Who Registered

  o **Piece 6**—Log out (disposition) date/time

- o **Piece 7**—Disposition Type
- o **Piece 8**—Who Dispositioned

VAERR—The error flag has 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

Description

Returns ACTIVE clinic enrollments for a patient.

Input

DFN—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **^UTILITY("VAEN",$J,#,"I")**—Internal format.
- **^UTILITY("VAEN",$J,#,"E")**—External format:
  - o **Piece 1**—Clinic Enrolled in
  - o **Piece 2**—Enrollment Date
  - o **Piece 3**—OPT or AC

VAERR—The error flag has 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

Description

Returns APPOINTMENT DATE/TIME data for a patient.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

- **VASD("T")**—Can be defined as the "to" date for which registrations are desired. This *must* be passed as a valid VA FileMan date. If neither **VASD("F")** nor **VASD("T")** are defined, all future appointments are returned.

- **VASD("F")**—Can be defined as the "from" date for which appointments are desired. This *must* be passed as a valid VA FileMan date. If *not* defined, it is assumed only future appointments should be returned.

- **VASD("W")**—Can be passed as the specific STATUS desired in the following format. If *not* passed, only those appointments that are still scheduled (or kept in the event of a past date) for both inpatients and outpatients are returned.

  If **VASD("W")** Contains a value these appointments 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 that you would like to see appointments for this particular patient.

  You can define this array with just one clinic or with many. If you do *not* define this variable, it is assumed that you want appointments for this patient in all clinics returned.

Output

- **^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 has 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

Description

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

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) 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 are returned.

Output

- **VA("PID")**—The long patient identifier (e.g., **000-22-3333P**).
- **VA("BID")**—The short patient identifier (e.g., **3333P**).
- **VAERR**—The error flag has one of the following values:
  - **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 PID^VADPT call, but eliminates the unnecessary processing time required calling PID^VADPT.

12.2.16   ADM^VADPT2

Description

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

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

- **VAINDT**—This optional variable can be set to a past date/time for which the programmer wants to know the patient's inpatient status. This *must* be passed as an internal VA FileMan date/time format (e.g., 2880101.08).

Output

- **VADMVT**—Returns the internal file number of the admission movement.

- **VAERR**—The error flag has 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 use this call to remove the arrays that were returned by **VADPT**.

12.2.18   KVA^VADPT

This call is used as the KVAR^VADPT call and also kills the **VA("BID")** and **VA("PID")** variables.

12.2.19   Combinations

The following calls can 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 (#2) file. See specific call in Table 60 for other variable input.

Table 60: Call Combinations

Output: CALL	Demographic VADM	Eligibility VAEL	Inpatient VAIN	Inpatient VAIP	Address VAPA	Service VASV	Monetary VAMB	Registration UTILITY("VARP")	Enrollment UTILITY("VAEN")	Appointment 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						
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

12.2.20 CAI^VADPT

Description

Returns the Comprehensive Prevention, Access to Care, and Treatment (COMPACT) indicator for enrolled Veterans and non-enrolled Veterans.

Input

- **DFN**—This required variable is the internal entry number in the PATIENT (#2) file.

Output

- **VACOM("CAI")**—Returns the Veteran's COMPACT eligibility status
    - **0**—Veteran is not COMPACT eligible
    - **1**—Veteran is COMPACT eligible

12.3 Alpha Subscripts

Table 61: 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")
	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")

Call	Variable	Alpha Translation
	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")
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",#)

Call	Variable	Alpha Translation
	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")
	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")

Call	Variable	Alpha Translation
	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")
	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")

Call	Variable	Alpha Translation
	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")
	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")

Call	Variable	Alpha Translation
	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 Programming 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 (#2.98) Sub-file and the HOSPITAL LOCATION (#44.001, 44.003) Sub-files 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

- Oracle Database

Existing direct global references to Scheduling globals, as well as VA FileMan 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 can 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 can 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 remains 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 is 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 that may be returned to applications; therefore, it is also important to design error handling. If this is implemented now, it is *not* necessary to add it later when the data is retrieved from the remote database.

13.1 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.

> **REF:** For a complete list of available appointment filters, see "Available Data Filters."

The Scheduling Replacement API is an encapsulation API and has special features.

- **Flexibility**—This API can be implemented now without re-programming later, because it retrieves the same information from either database (FM globals or SQL tables). Each field in Table 62 has been assigned an independent identifying number that is used in the input parameter of the API.

> **REF:** For a more detailed list of the available data fields, see "SDAPI—Data Fields."

Table 62: 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

Number	Feature
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
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.

13.2   Error Codes

Table 63 lists the possible error codes returned by the Scheduling Replacement API.

Table 63: Scheduling Replacement API Error Codes

Error Code	Description
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. **REF:** For a complete list of all API error codes, see "SDAPI—Error Codes."
116	The API returns error code 116 when the data returned from the RSA database does *not* match the data on VistA. An example of this would be if the RSA returns an IEN that does *not* exist on VistA. Applications *must* be re-programmed to handle this condition. **REF:** For a complete list of all API error codes, see "SDAPI—Error Codes."
117	The API returns error code **117** when the other error codes do *not* apply. This error code incorporates any additional errors that may be included or returned in the future. Adding this error code prevents re-coding of current applications, as these new error codes are introduced. **REF:** For a complete list of all API error codes, see "SDAPI—Error Codes."

13.3   External Data Source

The Scheduling Replacement 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 (#44.001, 44.003) Sub-files and the PATIENT (#2.98) Sub-file to perform the business logic of the application, separating the data layer from the business layer.

13.3.1 Example

The process of encapsulation involves, in part, replacing direct global references in routines with APIs. As an example, consider the following piece of code (Figure 11). This code is designed to retrieve the following:

- Appointment date/time

- Patient DFN

- Name

- Length of appointment for all **DGCLN** clinic appointments up to **DGLAST** date.

Figure 11: Sample Code

```
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 can be changed as follows:

Figure 12: Sample Code Using the API: Data Layer

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

Figure 13: Sample Code Using the API: Business Layer

```
;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")
```

13.4 Application Programming Interface—SDAPI

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 namespaced by the calling application, containing the following parameters:

  o **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.

     REF: For a complete list of available appointment fields and their associated IDs, see "Table 65."

     For a description and valid values of this array entry, see "Table 67."

  o **Filters**—Optional.

     REF: For a complete list of available appointment filters and their input array format, see "Available Data Filters."

  o **Max Appts**—Optional, **ARRAY("MAX")**. Maximum appointments requested.

     REF: For a description and valid values of this array entry, see "Table 67."

  o **Sort**—Optional, **ARRAY("SORT")**. Allows the output to be sorted by patient DFN, instead of by Patient and Clinic IENs.

     REF: For a description and valid values of this array entry, see "Table 67."

o **Purged**—Optional, **ARRAY("PURGED")**. Output includes *non*-canceled appointments that were purged from the Hospital Location file yet still exist on the PATIENT (#2) file.

> **REF:** For a description and valid values of this array entry, see "Table 67."

If this optional array entry is passed into the API, there are two other conditions that *must* be met, else error **115** is generated:

- **ARRAY(4)** *must* be populated.
- Several fields are *not* 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**.

> **REF:** For a description of those fields, see "SDAPI—Data Fields."

Return Values

From the extrinsic call, this API 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 is *not* generated.

If appointments are found that match the filter criteria, Fields **1** through **5** and **7** through **26** of the appointments are 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 Table 64, 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** is always **NULL**, because if Field #6 (APPOINTMENT COMMENTS) is requested, the comments appear on the subscript ("**C**") of the global reference:
>
> ```
> ^TMP($J,"SDAMA301",SORT1,SORT2,APPT DATE/TIME,"C")=field 6.
> ```

Fields **28** through **33** are returned in:

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

Table 64: 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 that can be set to alter the output. If **ARRAY("SORT")="P"**, then the output only includes the subscript patient DFN and *not* the clinic IEN, overriding the sort values described in Table 64.

```
^TMP($J,"SDAMA301",DFN,APPT DATE/TIME)=field1^field2
```

NOTE: As mentioned above, Field #6 is always **NULL**, and if Field #6 (APPOINTMENT COMMENTS) is requested, the comments appear on the next subscript ("**C**") of the global reference:

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

If an error occurs, the error codes and messages are returned in:

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

REF: For a list of error codes and messages, see "SDAPI—Error Codes."

When processing has completed, kill the temporary array:

^TMP($J,"SDAMA301")

REF: For constraints, see "SDAPI—Constraints."

13.4.1 SDAPI—Examples

13.4.1.1 By Clinic

Get all appointments for clinic 501 on 01/05/04. Get patient DFN, name, and appointment status.

> **NOTE:** The output is sorted first by clinic, then patient, and then appointment date/time. Clinic is the first sort, because the patient filter is *not* populated.

Figure 14: SDAPI Example—By Clinic

```
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")
```

13.4.1.2 By Patient

Get the next (after today) scheduled/regular appointment for patient 100. Get the appointment date/time, clinic IEN, name, and appointment status.

> **NOTE:** The output is sorted first by patient, then clinic, and then appointment date/time. Patient is the first sort, because it is populated.

Figure 15: SDAPI Example—By Patient

```
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")
```

13.4.1.3 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:** The output is sorted first by patient, then clinic, and then appointment date/time. Patient is the first sort, because it is populated.

Figure 16: SDAPI Example—By Patient and Clinic

```
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")
```

13.4.1.4 By Neither Patient Nor Clinic

Get all appointments for primary stop code **300**, for **January 2004**. Get the appointment status.

> **NOTE:** The output is sorted first by clinic, then patient, and then appointment date/time. Clinic is the first sort, because the patient filter is *not* populated.

Figure 17: SDAPI Example—By Neither Patient Nor Clinic

```
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 results in a lengthy query (time and data).

13.4.1.5 By Clinic with "Sort" Filter Defined

13.4.1.5.1   Example 1

Get all appointments for clinic **501** on **01/05/04**. Get patient DFN, name, and appointment status.

> **NOTE:** The output is sorted first by patient, and then appointment date/time. Patient is the only sort, because the SORT filter is populated.

Figure 18: SDAPI Example—By Clinic with "Sort" Filter Defined: Get Patient DFN, Name, and Appointment Status

```
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")
```

13.4.1.5.2   Example 2

Get all appointments for Clinic **501** on **01/05/04**. Get patient DFN, name, and appointment comments.

> **NOTE:** The output is sorted first by patient, and then appointment date/time; the comments appear on the next reference with the subscript "**C**". Patient is the only sort, because the SORT filter is populated.

Figure 19: SDAPI Example—By Clinic with "Sort" Filter Defined: Get Patient DFN, Name, and Appointment Comments

```
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
```

13.4.2 SDAPI—Data Fields

Table 65 lists the available appointment data fields:

Table 65: 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	Valid Values: • **R—**Scheduled/Kept • **I—**Inpatient • **NS—**No-Show • **NSR—**No-Show, Rescheduled • **CP—**Cancelled by Patient • **CPR—**Cancelled by Patient, Rescheduled	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

ID	Field Name	Data Type	Format/Valid Values	Description	Examples of Returned Data
			• **CC—**Cancelled by Clinic • **CCR—**Cancelled by Clinic, Rescheduled • **NT—**No Action Taken		CCR;CANCELLED BY CLINIC & RESCHEDULED NT;NO ACTION TAKEN
4	PATIENT DFN and NAME	TEXT	DFN;name	Patient DFN and patient name.	34877;DGPATIENT,ONE 455;DGPATIENT,TWO
5	LENGTH OF APPOINTMENT	TEXT	NNN	The scheduled length of appointment, in minutes.	20 60
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 and 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

ID	Field Name	Data Type	Format/Valid Values	Description	Examples of Returned Data
					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
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 the 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	3031215.083

ID	Field Name	Data Type	Format/Valid Values	Description	Examples of Returned Data
				EKG tests in conjunction with this appointment.	
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, Checked Out Date/Time, and Admission Movement IFN	Status Information for the Visit.	8;INPATIENT APPOINTMENT;INPATIENT/CHECKED OUT;;3030218.1548;145844
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 is **NULL** for	34983

ID	Field Name	Data Type	Format/Valid Values	Description	Examples of Returned Data
				appointments in legacy VistA.	
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
32	CANCELLATION 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.

13.4.3 Available Data Filters

The **six** fields listed in [Table 66](#) allow a filter. All **six** fields can be filtered in one API call. A **NULL**/undefined filter results in all values being returned.

Table 66: Available Data Filters

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 in VA 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 in 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:	`S ARRAY(3)="I"`
			`S ARRAY(3)="R;I;NT"`
			`S ARRAY(3)="CC;CCR;CP;CPR"`

Appointment Data to be Filtered	Array Entry	Format	Examples of M Code to Set Array with Filter 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.`	

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 in PATIENT (#2) 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"","`

Appointment Data to be Filtered	Array Entry	Format	Examples of M Code to Set Array with Filter Values
PRIMARY STOP CODE	ARRAY(13)	List of valid Primary Stop Code values (not IENs). It *must* be a valid AMIS REPORTING STOP CODE (#1) field in the CLINIC STOP (#40.7) file. `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 VA 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)

13.4.4 Input—Other Array Entries

Table 67: 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.
		
		REF: 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. It *must* be a whole number *not* equal to **0**. ARRAY("MAX")=value • If value **> 0** or value="", return first "*n*" appointments. • 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. It *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`

Description	Array Entry	Format	Examples of Array with Filter
		`ARRAY("PURGED")=1`	

The Field List array entry *must* be populated, or else error **115** is generated.

> **REF:** For a complete list of all API error codes, see "SDAPI—Error Codes."

The Maximum Appointments array entry is best used to retrieve the next or last "*n*" appointments for one patient and/or one 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 one patient and/or more than one clinic are passed to the API, or if no patient and clinic is passed to the API, the error **115** is generated.

> **REF:** For a complete list of all API error codes, see "SDAPI—Error Codes."

Figure 20: Sample of Other Array Entries

```
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 the PATIENT (#2) file.

Figure 21: Sample PATIENT DFN, ARRAY(4)

```
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). It *must* be a valid AMIS REPORTING STOP CODE (#1) field on the CLINIC STOP (#40.7) file.

Figure 22: Sample PRIMARY STOP CODE, ARRAY(13)

```
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 VA FileMan format:

YYYMMDD

> **NOTE:** Time is *not* allowed.

Figure 23: Sample DATE APPOINTMENT MADE, ARRAY(16)

```
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)
```

13.4.5 Other Array Entries

Table 68: 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. • Or, if all fields are required, then set array to "**ALL**" (case is irrelevant). **REF:** For the list of appointment field IDs, see "Data Fields."

Figure 24: Sample ARRAY("FLDS")

```
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 appointments 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** is generated.

    REF: For a complete list of error codes and messages, see "SDAPI—Error Codes."

- The Maximum Appointments array entry is best used to retrieve the next or last "*n*" appointments for one patient and/or one 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 one patient and/or more than one clinic are passed to the API, or if no patient and clinic is passed to the API, the error **115** is generated.

    REF: For a complete list of error codes and messages, see "SDAPI—Error Codes."

13.4.6 SDAPI—Error Codes

Table 69 lists the SDAPI error codes and associated messages:

Table 69: 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.

NOTE: Error codes **101**, **116**, and **117** do *not* occur until the RSA has been implemented. Coding for these error codes needs to be done now so that no other coding changes need to be made in the future. Each application needs to decide how to handle the return of those three error codes.

13.4.7 SDAPI—Constraints

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

Cancelled appointments 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 do *not* want to specify a subset of patients, then set the patient filter **[ARRAY(4)]** equal to ^**DPT(**. This results in canceled appointments being returned.

> **NOTE:** This decreases the performance time of the API as it spins through the entire VistA PATIENT (#2) file looking for appointments in the specified clinics (if filter is populated). However, it does *not* have a negative performance impact when it retrieves appointments from the RSA.

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

Use of the **PURGED** array parameter requires the following two conditions to be met; otherwise, error **115** is returned:

- Patient filter *must* be populated.

- Field list *must not* contain fields **5-9**, **11**, **22**, **28**, **30**, **31**, or **33**.

13.5   Application Programming Interface—GETAPPT

Name

GETAPPT ; Retrieve Appointment Data for a Patient ID

Declaration

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

Description

This API 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).

  For default and valid values, see "Filters."

- **SDSTART:** Start Date (optional, internal VA FileMan format).

- **SDEND:** End Date (optional, internal VA 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 results in ALL appointment data fields being returned.

  REF: For a list of the field numbers and corresponding data available in this API, see "Data Fields."

Return Values

If no errors occur and appointments are found, **SDRESULT** contains the appointment count and the requested data is 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** contains a value of **0** and the **^TMP($J,"SDAMA201","GETAPPT",x,y)** array is *not* generated.

If an error occurs, **SDRESULT** is **–1** and the error codes and messages is returned in **^TMP($J,"SDAMA201","GETAPPT","ERROR",error code) = error message**.

> **REF:** For a list of error codes and messages, see "Error Codes".

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

> **^TMP($J,"SDAMA201","GETAPPT")**

13.5.1 GETAPPT Examples

1. 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"
```

2. Retrieve inpatient and outpatient appointment date/time, clinic ID, appointment status, and comments for patient 99 from 1/1/02 at 8 a.m. 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"
```

13.6   Application Programming Interface—NEXTAPPT

Name:

NEXTAPPT ; Retrieve Next Appointment Data for a Patient ID

Declaration

    $$NEXTAPPT^SDAMA201(SDIEN,SDFIELDS,SDAPSTAT,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 results in NO appointment data fields being returned.

  REF: For a list of the field numbers and corresponding data available in this API, see "Data Fields."

Return Values

This API returns the following:

- **-1**—If an error occurred.

- **0**—If no future appointment is found.

- **1**—If a future appointment was found.

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

If the user enters an optional field list and a future appointment is found, the data for the next appointment is 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 are returned in:

^TMP($J,"SDAMA201","NEXTAPPT","ERROR",error code) = error message

> **REF:** For a list of error codes and messages, see "Error Codes".

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

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

NEXTAPPT Examples

1. 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 into it.

2. 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"
   ```

3. 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)=""
```

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**.

13.7   Application Programming 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 returns appointment information for "regular", "no-show", and "no action taken" appointments only; while the appointment data is located in VistA, cancelled appointments are *not* 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 VA FileMan format).

- **SDEND:** End Date/time (optional, internal VA 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 results in ALL appointment data fields being returned.

    REF: For a list of the field numbers and corresponding data available in this API, see "Data Fields."

Return Values

If no errors occur and appointments are found, **SDRESULT** contains the appointment count and the data is 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** contains a value of **0** and the **^TMP($J,"SDAMA202","GETPLIST",x,y)** array is *not* be generated.

- If an error occurs, **SDRESULT** is **–1** and the error codes and messages are returned in:

    ^TMP($J,"SDAMA202","GETPLIST","ERROR",error code) = error message

    REF: For a list of error codes and messages, see "Error Codes."

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 **8 a.m.** to **10 a.m.**:

```
>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^SDPATIENT,ONE
^TMP(1000,"SDAMA202","GETPLIST",1,5)=60
^TMP(1000,"SDAMA202","GETPLIST",2,1)=3020101.09
^TMP(1000,"SDAMA202","GETPLIST",2,4)=9007^SDPATIENT,TWO
^TMP(1000,"SDAMA202","GETPLIST",2,5)=30
^TMP(1000,"SDAMA202","GETPLIST",3,1)=3020101.093
^TMP(1000,"SDAMA202","GETPLIST",3,4)=24389^SDPATIENT,THREE
^TMP(1000,"SDAMA202","GETPLIST",3,5)=30
^TMP(1000,"SDAMA202","GETPLIST",4,1)=3020101.1
^TMP(1000,"SDAMA202","GETPLIST",4,4)=40374^SDPATIENT,FOUR
^TMP(1000,"SDAMA202","GETPLIST",4,5)=30
```

13.8   Application Programming Interface—PATAPPT

Name

PATAPPT ; Check for existence of any appointment for a patient

Declaration

```
PATAPPT^SDAMA204(SDDFN)
```

Description

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

Argument

SDDFN: Patient IEN (required).

Return Values

Patient scheduling record(s); Value Returned:

- **1**—Appointment(s) on file.

- **0**—No Appointment(s) on file.

- **-1**—Error.

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

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

The format is:

```
W $$PATAPPT^SDAMA204(0) -1
The error information resides 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"
   ```

13.9 Error Codes

Table 70 lists error codes and their associated messages:

Table 70: 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 71: 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. • **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^DGPATIENT, ONE 455^DGPATIENT,TWO
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

ID	Field Name	Data Type	Format or Valid Values	Description	Examples of Returned Data
8	ELIGIBILITY OF VISIT ID and NAME	POINTER and TEXT	ID^name	Eligibility code and name associated with the appointment.	2^AID & ATTENDANCE 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 is **NULL**.	I O ""

14.2 Filters

14.2.1 Valid Appointment Status Filters

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

A **NULL** or undefined value results in all being returned.

Table 72: Valid Appointment Status Filters

Appt Status Filter value	Appointment Status Value(s) Returned
R	**R**—Scheduled / kept
N	**N**—No-show
C	**C**—Cancelled
NT	**N**—No action taken
NULL (default)	ALL appointment status values are 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 results in both being returned.

Table 73: Valid Patient Status Filters

Patient Status Filter value	Description
I	Inpatient.
O	Outpatient.
NULL (default)	Both are returned (inpatient and outpatient).

14.2.3 Valid Patient Status and Appointment Status Filter Combinations

Due to the design of VistA, the PATIENT STATUS (#12; new field) of appointments that are Cancelled, No-Show, or No Action Taken, are *not* available. If the PATIENT STATUS field is requested, a **NULL** value is returned in the **^TMP** output global for this field. Patient status is determined by analyzing the value of the STATUS (#3) field on the PATIENT (#2.98) subfile.

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) causes 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.

Table 74 lists the results of combinations of these two filters:

Table 74: 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**

Patient Status Filter	Appointment Status Filter	Valid/Invalid	Patient Status value in ^TMP (if requested)
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 75: Filter Key

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 Programming 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 **6 a.m.**), then the patient's scheduled appointment date/time for that clinic, today or in the future (or yesterday if current time is before **6 a.m.**), is returned. This API should be called using an extrinsic call.

Arguments

- **SDCLIEN**: Clinic IEN (required)
- **SDDFN**: Patient DFN (required)

Return Values

Table 76: 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 **SDIMO(1)** variable contains the encounter or appointment date/time. If something other than a **1** is returned, the **SDIMO(1)** variable is *not* created.

Other: When processing has completed, the **SDIMO(1)** variable 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, the **Print Patient Label** [DG PRINT PATIENT LABEL] option allows labels to be printed with the patient's protected health information.

The labels contain the following (see Figure 25):

- Patient's name

- Social security number

- Date of birth

- (Optional fourth line) Contains the patient's inpatient location (ward and room#)

Figure 25: Sample Label

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

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*8.0*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 (#3.2055) subfile of the TERMINAL TYPE (#3.2) file.

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 M read access to the CONTROL CODES (#3.2055) subfile of the TERMINAL TYPE (#3.2) file.

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

lists 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 VA FileMan in the CONTROL CODES (#3.2055) subfile in the TERMINAL TYPE (#3.2) file using the names listed in .

Table 77: Patient Label Print Routine 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 (#3.2055) subfile in the TERMINAL TYPE (#3.2) file 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 **1½** by **3½** inch label.

14.5.3 Zebra Label Printer

14.5.3.1 Example 1—Control Codes Setup for Horizontal Labels

Figure 26: Zebra Label Printer Example—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",!
```

14.5.3.2 Example 2—Control Codes Setup for Vertical Labels

Figure 27: Zebra Label Printer Example—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 (#6) field in the TERMINAL TYPE (#3.2) file.

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

- **HINTERM^DGPLBL1** entry point creates a horizontal format label.
- **VINTERM^DGPLBL1** entry point 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 **1½** by **3½** inch label.

14.6.1 Example 1—Control Codes Setup for Horizontal Labels

Figure 28: 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>",!
```

14.6.2 Example 2—Control Codes Setup for Vertical Labels

Figure 29: 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 National Patient Care Database (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 replaces 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 (#870) file.

- 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 is triggered by specific outpatient events that relate to workload credit in VistA. The basic communication protocol is addressed, as well as the information that is made available and how it is obtained.

This application uses an abstract message approach and encoding rules specified by HL7. HL7 is used for communicating data associated with various events that occur in health care

environments. For example, when a check-out occurs in VistA, the event triggers 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 known as the Austin Automation Center [AAC]).

15.1.1 Message Content

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

In order to capture the most information, specific outpatient events generate messages to the AITC systems. This is *not* intended to cover all possible outpatient events, only those events that 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.

> **REF:** For further information on the mode for capturing the outpatient events, see "Data Capture and Transmission."

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 are captured. Any changes made to the VistA database in *non*-standard ways, such as a direct global set by an application or by M code, are *not* captured.

15.1.3 Background Messages

A nightly background job sends HL7 messages for each outpatient encounter event for the day.

15.1.4 Batch Messages and Acknowledgements

Batch messages are used to transmit the outpatient encounter events.

Each batch message sent is acknowledged at the application level. The batch acknowledgment contains acknowledgment messages only for those messages containing errors.

Using this mode, it is possible that an empty batch acknowledgment is sent. This happens 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) is 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 are 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, which:

- Contain logical groupings of data.

- Can be optional or repeatable:

  o A **[ ]** indicates the segment is optional.

  o The **{ }** indicates the segment is repeatable.

For each message category there is 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 following:

- Sequence number (**SEQ**)
- Maximum length (**LEN**)
- Data type (**DT**)
- Required or optional (**R/O**)
- Repeatable (**RP/#**),
- Table number (**TBL #**)
- Element name
- VistA description

Each segment is described in the following sections.

15.5 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 are as specified here, unless otherwise specified in that section.

15.5.1 MSH—Message Header Segments

Table 78 lists the **MSH** sequences:

Table 78: MSH—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	Two Components: • Component 1: See Table 105: Table 0076—Message Type. • Component 2: See Table 100: Table 0003—Event Type Code.
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.

NOTE: *AAC stands for Austin Automation Center. The name of that facility has been changed to Austin Information Technology Center (AITC).

15.5.2 BHS—Batch Header Segment

Table 79 lists the **BHS** sequences:

Table 79: BHS—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

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
							When originating from NPCDB: **200**
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*	Four Components[1]: • Component 1: Not used. • Component 2: **P**. • Component 3: **ADT|Z00**. • Component 4: **2.3**.
10	80	ST				Batch Comment	Two Components[2]: • Component 1: See Table 101: Table 0008—Acknowledgment Code. • Component 2: Text Message.
11	20	ST				Batch Control ID	Automatically generated by VistA HL7 Package.

---

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

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
12	20	ST				Reference Batch Control ID	Batch Control ID of batch message being acknowledged.

NOTE: *AAC stands for Austin Automation Center. The name of that facility has been changed to Austin Information Technology Center (AITC).

15.5.3 BTS—Batch Trailer Segment

Table 80 lists the **BTS** sequences:

Table 80: BTS—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 81 lists the **MSA** sequences:

Table 81: MSA—Message Acknowledgement Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
1	2	ID	R		0008	Acknowledgment Code	**REF:** See Table 101: Table 0008—Acknowledgment Code.
2	20	ST	R			Message Control ID	Message Control ID of message being acknowledged.
3	80	ST			NPCD001	Text Message	Repetitive list of error codes denoting why the message was rejected[3].
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 82 lists the **EVN** sequences:

Table 82: EVN—Event Type Segment

SEQ			LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
1			3	ID	R		0003	Event Type Code	**REF:** See Table 100: Table 0003—Event Type Code.
2			26	TS	R			Date/Time of Event	Date/Time Event Occurred.
3			26	TS				Date/Time Planned Event	Not used.

---

[3] 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
4		3	ID			0062	Event Reason Code	Not used.
5		60	CN			0188	Operator ID	Not used.

15.6   PID—Patient Identification Segment

For information on the Patient Identification (PID) segment, see Section 3.15, "PID-Patient Identification Segment" in the *MPI/PD HL7 Interface Specification* manual found on the VA Software Documentation Library (VDL).

15.6.1 PD1—Patient Additional Demographic Segment

Table 83 lists the **PD1** sequences:

Table 83: PD1—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[4]	Eight 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 (#200) file. • Facility Number. • Not used.

---

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

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
							• Not used.
							• Not used.
							• Not used.
							• Not used.
							• Not used.
							• This is always **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 84 lists the **PV1** sequences:

Table 84: PV1—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 is always **O** (outpatient).
3	12	CM				Assigned Patient Location	Not used.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
4	4	ID			0007	Admission Type	**REF:** See Table 112: 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.
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	**REF:** See Table 102: Table 0023—Admit Source (User Defined).
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 (#409.68) file.
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.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
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.
38	2	ID			0114	Diet Type	Not used.
39	75	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).

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

15.6.3 PV2—Patient Visit - Additional Information Segment

lists the **PV2** sequences:

Table 85: PV2—Patient Visit - 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.
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.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
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.
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 86 lists the **DG1** sequences:

Table 86: DG1—Diagnosis Information Segment

SEQ	LEN	DT	R/O	RP/#	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. **REF:** See Table 103: Table 0051—Diagnosis Code (User Defined) for sample listing of possible values.
4	40	ST				Diagnosis Description	Corresponding diagnosis description from ICD DIAGNOSIS (#80) file. **REF:** See Table 103: Table 0051—Diagnosis Code (User Defined) 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.
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.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
14	4	ST				Grouper Version And Type	Not used.
15	2	NM				Diagnosis Priority	Contains **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 87 lists the **PR1** sequences:

Table 87: PR1—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	Three Components: • 1. Procedure Code. • 2. Corresponding procedure description from CPT (#81) file. • 3. Coding Method (this is always **C4**). **REF:** See Table 106: Table 0088—Procedure Code (User Defined) 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.
7	4	NM				Procedure Minutes	Not used.
8	60	CN				Anesthesiologist	Not used.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
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	Three Components: • 1. Modifier Code. • 2. Corresponding modifier description from CPT MODIFIER (#81.3) file. • 3. Coding Method: ○ **C**—CPT ○ **H**—HCPCS **REF:** See Table 0340 for sample listing of possible modifier codes and descriptions.

15.6.6 ROL—Role Segment

lists the **ROL** sequences:

Table 88: ROL—Role Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
1	60	EI	R			Role Instance ID	Four Components: • Entity Identifier[6] [7]. • Not used. • Not used. • Not used.
2	2	ID	R		0287	Action Code	This is always be **CO** (correct).
3	80	CE	R			Role	Six Components: • Provider Type Code. • Not used. • This is always **VA8932.1** (PERSON CLASS file). • Primary Encounter Provider Designation. • Not used. • This is always **VA01**.
4	80	XCN	R	Y/2		Role Person	14 Components: **Repetition 1:** 2 Sub-Components: • Pointer to entry in NEW PERSON (#200) file. • Facility Number. • Not used. • Not used. • Not used.

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[6] This element is **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).

[7] 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.
							• This is always **VA200** (NEW PERSON file).
							• 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 is always **SSA** (Social Security Administration).
							• 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 89 lists the **ZPD** sequences:

Table 89: ZPD—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[8]
15	3	ID			VA08	RELIGION[9]
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

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

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

15.6.8 ZEL—VA-Specific Patient Eligibility Segment

Table 90 lists the **ZEL** sequences:

Table 90: 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?
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

SEQ	LEN	DT	R/O	RP/#	TBL#	VistA Element Name
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 91 lists the VA-Specific Income segment sequences:

Table 91: 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
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

SEQ	LEN	DT	R/O	RP/#	TBL#	VistA Element Name
12	10	NM				PATIENT INCOME
13	2	ID			VA10	MEANS TEST INDICATOR

15.6.10 ZCL—VA-Specific Outpatient Classification Segment

Table 92 lists the **ZCL** sequences:

Table 92: 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 93 lists the **ZSC** sequences:

Table 93: 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 94 lists the **ZSP** sequences:

Table 94: ZSP—VA-Specific Service Period Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VistA Element Name
1	4	SI	R			SET ID
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 95 lists the **ZEN** sequences:

Table 95: 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				APPLICATION DATE
12	8	DT				ENROLLMENT END DATE
13	1	IS			VA035	ENROLLMENT SUB-GROUP

SEQ	LEN	DT	R/O	RP/#	TBL#	VistA Element Name
14	2	ID				SOURCE DESIGNATION V=VISTA, E = ESR, PA = PCP ACTIVE, PI = PCP INACTIVE
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 uses 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.

15.8.1 Update Patient Information (A08)

The Outpatient Event Driver is 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 triggers an **A08** message to be sent. The receiving system replaces any data that exists with the "new" data that is transmitted with this message.

Table 96: 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

Code	Description
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
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 97: 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 98 lists the **Table 0001—Sex** values:

Table 98: Table 0001—Sex

Value	Description
F	FEMALE
M	MALE
O	OTHER
U	UNKNOWN

15.9.2 Table 0002—Marital Status

Table 99 lists the **Table 0002—Marital Status** values:

Table 99: 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 100 lists the **Table 0003—Event Type Code** values:

Table 100: Table 0003—Event Type Code

Value	Description
A08	UPDATE PATIENT INFORMATION
A23	DELETE PATIENT RECORD

15.9.4 Table 0008—Acknowledgment Code

Table 101 lists the **Table 0008—Acknowledgment Code** values:

Table 101: 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. Table 102 lists **Table 0023—Admit Source** values:

Table 102: Table 0023—Admit Source (User Defined)

Value	Description
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. Table 103 lists **Table 0051—Diagnosis Code** values:

Table 103: Table 0051—Diagnosis Code (User Defined)

Value	Description
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

Value	Description
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 (#42.4) file, PTF Code (#.001). Table 104 lists **Table 0069—Hospital Service** values:

Table 104: Table 0069—Hospital Service (User Defined)

Value	Description
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 INTERMEDIATE 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

Table 105 lists the **Table 0076—Message Type** values:

Table 105: Table 0076—Message Type

Value	Description
ADT	ADT MESSAGE
ACK	GENERAL ACKNOWLEDGMENT

15.9.9 Table 0088—Procedure Code (User Defined)

Table 106 lists **Table 0088—Procedure Code** values:

Table 106: Table 0088—Procedure Code (User Defined)

Value	Description
10141	INCISION AND DRAINAGE OF HEMATOMA; COMPLICATED

15.9.10 Table 0115—Servicing Facility (User Defined)

Table 107 lists **Table 0115—Servicing Facility** values:

Table 107: Table 0115—Servicing Facility (User Defined)

Value	Description
512 9AC	Perry Point (Nursing Home)

15.9.11   Table 0133—Procedure Practitioner Type (User Defined)

Table 108 lists **Table 0133—Procedure Practitioner Type** values:

Table 108: Table 0133—Procedure Practitioner Type (User Defined)

Value	Occupation	Specialty	Subspecialty
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

Table 109 lists **Table 0136—Yes/No Indicator** values:

Table 109: Table 0136—Yes/No Indicator

Value	Description
Y	YES
N	NO

15.9.13 Table SD001—Service Indicator (Stop Code)

Table 110 lists **Table SD001—Service Indicator** values:

Table 110: Table SD001—Service Indicator (Stop Code)

Value	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 111 lists **Table SD008—Outpatient Classification Type** values:

Table 111: Table SD008—Outpatient Classification Type

Value	Description
1	AGENT ORANGE
2	IONIZING RADIATION
3	SERVICE CONNECTED
4	SW ASIA CONDITIONS
5	MILITARY SEXUAL TRAUMA
6	HEAD AND/OR NECK CANCER

Value	Description
7	COMBAT VETERAN
8	PROJECT 112/SHAD

15.9.15   Table SD009—Purpose of Visit

Value denotes a combination of Purpose of Visit & Appointment Type. Table 112 lists **Table SD009—Purpose of Visit** values:

Table 112: Table SD009—Purpose of Visit

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

Value	Purpose Of Visit	Appointment Type
0303	SCHEDULED VISIT	ORGAN DONORS
0304	SCHEDULED VISIT	EMPLOYEE
0305	SCHEDULED VISIT	PRIMA FACIA
0306	SCHEDULED VISIT	RESEARCH
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 113 lists **Table VA01—Yes/No** values:

Table 113: Table VA01—Yes/No

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 in the MEANS TEST STATUS (#408.32) file. Table 114 lists **Table VA02—Current Means Test Status** values:

Table 114: Table VA02—Current Means Test Status

Value	Description
D	DISCRETIONARY
M	MANDATORY
N	NOT APPLICABLE

15.9.18   Table VA04—Eligibility

NAME (#.01) field in the MAS ELIGIBILITY CODE (#8.1) file. Table 115 lists **Table VA04— Eligibility** values:

Table 115: Table VA04—Eligibility

Value	Description
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

Value	Description
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 in the PATIENT (#2) file. Table 116 lists
Table VA05—Disability Retirement from Military values:

Table 116: Table VA05—Disability Retirement from Military

Value	Description
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 in the PATIENT (#2) file. Table 117 lists **Table VA06—
Eligibility Status** values:

Table 117: Table VA06—Eligibility Status

Value	Description
P	PENDING VERIFICATION
R	PENDING RE-VERIFICATION
V	VERIFIED

15.9.21   Table VA07—Race

ABBREVIATION (#2) field in the RACE (#10) file. Table 118 lists **Table VA07—Race** values:

Table 118: Table VA07—Race

Value	Description
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 in the RELIGION (#13) file. Table 119 lists **Table VA08—Religion** values:

Table 119: Table VA08—Religion

Value	Description
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

Value	Description
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

Value	Description
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

Value	Description
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

lists **Table VA10—Means Test Indicator** values:

Table 120: 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
	• Patients receiving care for conditions potentially related to exposure to any of the following:
	  ◦ Agent Orange (Herbicides)
	  ◦ Ionizing Radiation
	  ◦ 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 any of the following: • VA pension • Aid and attendance • Housebound allowance • 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.

Value	Description
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 is 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 does *not* accept the transaction unless the Means Test has been completed.

15.9.24   Table VA11—Period of Service

Table 121 lists **Table VA11—Period of Service** values:

Table 121: Table VA11—Period of Service

Value	Description
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	USAF, USSF - ACTIVE DUTY
D	COAST GUARD - ACTIVE DUTY
E	RETIRED, UNIFORMED FORCES
F	MEDICAL REMEDIAL ENLIST
G	MERCHANT SEAMEN - USPHS

Value	Description
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

Table 122 lists **Table VA12—Type of Insurance** values:

Table 122: Table VA12—Type of Insurance

Value	Description
0	NO INSURANCE
1	MAJOR MEDICAL
2	DENTAL
3	HMO
4	PPO
5	MEDICARE

Value	Description
6	MEDICAID
7	CHAMPUS
8	WORKMAN COMP
9	INDEMNITY
10	PRESCRIPTION
11	MEDICARE SUPPLEMENTAL
12	ALL OTHER

15.9.26   Table VA0015—Enrollment Status

Table 123 lists **Table VA0015—Enrollment Status** values:

Table 123: Table VA0015—Enrollment Status

Value	Description
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

Table 124 lists **Table VA0016—Reason Canceled/Declined** values:

Table 124: Table VA0016—Reason Canceled/Declined

Value	Description
1	DISSATISFIED WITH CARE
2	GEOGRAPHIC ACCESS
3	OTHER INSURANCE

Value	Description
4	OTHER

15.9.28 Table VA0021—Enrollment Priority

Table 125 lists **Table VA0021—Enrollment Priority** values:

Table 125: Table VA0021—Enrollment Priority

Value	Description
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

Table 126 lists **Table VA0022—Radiation Exposure Method** values:

Table 126: Table VA0022—Radiation Exposure Method

Value	Description
2	NAGASAKI - HIROSHIMA
3	NUCLEAR TESTING
4	BOTH

15.9.30   Table VA0023—Prisoner of War Location

Table 127 lists **Table VA0023—Prisoner of War Location** values:

Table 127: Table VA0023—Prisoner of War Location

Value	Description
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

Table 128 lists **Table VA0024—Source of Enrollment** values:

Table 128: Table VA0024—Source of Enrollment

Value	Description
1	VAMC
2	HEC
3	OTHER VAMC

15.9.32   Table VA0046—Agent Orange Exposure Location

Table 129 lists **Table VA0046—Agent Orange Exposure Location** values:

Table 129: Table VA0046—Agent Orange Exposure Location

Value	Description
B	BLUE WATER NAVY
K	KOREAN DMZ
V	VIETNAM
O	OTHER

15.9.33   Table VA0047 — PATIENT REGISTRATION ONLY REASON

Table 130 lists **Table VA0047— PATIENT REGISTRATION ONLY REASON** values

Table 130: Table VA0047— PATIENT REGISTRATION ONLY REASON Values

Value	Description
2	ACTIVE DUTY
12	ART/IVF
8	BENEFICIARY
1	C&P DISABILITY BENEFITS EXAM
18	CAREGIVER
11	COLLATERAL (OTHER)
7	EMPLOYEE
4	EXPOSURE REGISTRY EXAM
6	HUMANITARIAN/EMERGENCY
14	LEGISLATIVE MANDATE
10	MARRIAGE/FAMILY COUNSELING
13	NEWBORN
16	NORTH CHICAGO ACTIVE DUTY
15	OTHER
9	OTHER THAN HONORABLE (OTH)
5	RESEARCH
3	SERVICE CONNECTED ONLY
17	UNANSWERED
19	VHA TRANSPLANT PROGRAM

15.9.34 Table NPCD 001—National Patient Care Database Error Codes

Table 131 lists **Table NPCD 001—National Patient Care Database Error Codes** values:

Table 131: Table NPCD 001—National Patient Care Database Error Codes

Value	Description
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

Table 132 lists **Table 0001—Sex** values:

Table 132: Table 0001—Sex

Value	Description
F	FEMALE
M	MALE
O	OTHER
U	UNKNOWN

17.2 Table 0002—Marital Status

Table 133 lists **Table 0002—Marital Status** values:

Table 133: Table 0002—Marital Status

Value	Description
A	SEPARATED
D	DIVORCED
M	MARRIED
S	SINGLE
W	WIDOWED

17.3 Table 0003—Event Type Code

Table 134 lists **Table 0003—Event Type Code** values:

Table 134: Table 0003—Event Type Code

Value	Description
A08	UPDATE PATIENT INFORMATION

17.4   Table 0005—Race

Table 135 lists **Table 0005—Race** values:

Table 135: Table 0005—Race

Value	Description
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

Table 136 lists **Table 0006—Religion** values:

Table 136: Table 0006—Religion

Value	Description
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

Value	Description
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

Value	Description
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

Value	Description
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

Table 137 lists **Table 0076—Message Type** values:

Table 137: Table 0076—Message Type

Value	Description
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 is 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 is 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 is 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 is addressed, as well as the information that is made available and how it is obtained.

This application uses the abstract message approach and encoding rules specified by HL7. HL7 is used for communicating data associated with various events that 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 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 is limited to the information that is required to uniquely identify the patient and request the VIC card. The data transmitted is limited to available VistA data.

18.3   Data Capture and Transmission

The following event trigger generates 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 M code, is *not* captured.

18.4   VA TCP/IP Lower Level Protocol

The HL7 V. 1.6 TCP/IP lower level protocol (LLP) is 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 are 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, which:

- Contain logical groupings of data.

- May be optional or repeatable:

   o A **[ ]** indicates the segment is optional

   o The **{ }** indicates the segment is repeatable.

For each message category, there is 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 following:

- Sequence number (**SEQ**)

- Maximum length (**LEN**)

- Data type (**DT**)

- Required or optional (**R/O**)

- Repeatable (**RP/#**)

- Table number (**TBL#**)

- Element name

- 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 are as specified here, unless otherwise specified in that section.

18.4.4 MSH—Message Header Segment

Table 138 lists **MSH** sequences:

Table 138: 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: • See Table 105: Table 0076—Message Type. • See Table 100: Table 0003—Event Type Code.
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.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
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.

18.4.5 MSA—Message Acknowledgement Segment

Table 139 lists **MSA** sequences:

Table 139: MSA—Message Acknowledgement Segment

2.3.1	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
1	2	ID	R		0008	Acknowledgment Code	**REF:** See HL7 Table 101: Table 0008—Acknowledgment Code.
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 140 lists **PID** sequences:

<p style="text-align:center">**Table 140: PID—Patient Identification Segment**</p>

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 in the PATIENT (#2) file.
3	20	CM	R	Y		Patient ID (Internal ID)	Integrated Control Number (ICN) field in the PATIENT (#2) 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.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
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.

18.4.7 ORC—Common Order Segment

Table 141 lists **ORC** sequences:

Table 141: ORC—Common Order Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
1	2	ID	R		0119	Order Control	**REF:** See Table 147: Table 0119—Order Control Codes.
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.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
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 142 lists **RQD** sequences:

Table 142: 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.
3	60	CE	C			Item Code – External	NCMD Card ID (#.01) field in the 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 Segment

Table 143 lists **NTE** sequences:

Table 143: NTE—Notes and Comments Segment

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

- **MSH**—Message Header

- **PID**—Patient Identification

- **ORC**—Common Order

- **RQD**—Requisition Detail

- **NTE**—Notes and Comments

18.6.1 Sample Message

Figure 30: Sample ORM~O01 Message Sent to NCMD

```
MSH^~|\&^VIC NCMD SEND^500~REDACTED~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^^ADTPATIENT~ONE^^
19500404^^^^^^^^^^^222334444
ORC^RL
RQD^1^^22233444-ADTPATIENT-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 responds with an **ORR~O02** message:

- **ORR**—Order Response Message

- **MSH**—Message Header

- **MSA**—Message Acknowledgment

18.7.1 Sample Messages

General Order Response (**ORR~O02**) message when the General Order Message (**ORM~O01**) is successful.

Figure 31: General Order Response (ORR~O02) Message—Success: General Order Message (ORM~O01)

```
MSH^~|\&^VIC NCMD RECV^NCMD^VIC NCMD SEND^500~REDACTED~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.

Figure 32: General Order Response (ORR~O02) Message—Failure: General Order Message (ORM~O01**)**

```
MSH^~|\&^VIC NCMD RECV^NCMD^VIC NCMD SEND^500~REDACTED~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

Table 144: Table 0003—Event Type Code

Value	Description
O01	ORM – Order Message
O02	ORR – Order Response

18.8.2 Table 0008—Acknowledgment Code

Table 145: Table 0008—Acknowledgment Code

Value	Description
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

Value	Description
	• 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

Table 146: Table 0076—Message Type

Value	Description
ORM	Order Message
ORR	Order Acknowledgment Message

18.8.4 Table 0119—Order Control Codes

Table 147: Table 0119—Order Control Codes

Value	Description
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 HealtheVet (HeV) VistA.

This document specifies the information needed by applications to use the generic HL7 v2.4 segment builders. In order for applications to use this functionality, they *must* first subscribe to the Integration Agreement #3630 described below.

> **REF:** For more information about the specific data elements included in these segments, see the MPI HL7 v2.4 Interface Specification on the VDL.

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 (#2) file.
- **SEQ:** Variable consisting of sequence numbers delimited by commas that are 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 builds the Version 2.4 **PD1** segment.

Format

```
BLDPD1^VAFCQRY
```

Input Variables

- **DFN:** Internal Entry Number of the patient in the PATIENT (#2) file.
- **SEQ:** Variable consisting of sequence numbers delimited by commas that is 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 builds the Version 2.4 **PID** segment.

Format

```
BLDPID^VAFCQRY
```

Input Variables

- **DFN:** Internal Entry Number of the patient in the PATIENT (#2) file.

- **CNT:** The value to be place in **PID seq#1 (SET ID)**.

- **SEQ:** Variable consisting of sequence numbers delimited by commas that is 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 (HTH) 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 836 creating 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 uses 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 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 is limited to the information that is required to uniquely identify the patient and requested by the HTH vendors. The data transmitted is recorded and available in VistA.

20.3 Data Capture and Transmission

The following event trigger generates 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 the **Patient Sign-Up/Activation** [DGHT PATIENT SIGNUP] menu option.

- The protocol DG HOME TELEHEALTH ADT-A04 CLIENT in PROTOCOL (#101) file is used for the Patient Sign-Up/Activation process.

- The entry DG HOME TELEHEALTH in the HL7 APPLICATION PARAMETER (#771) file is used for processing outgoing HL7 messages from the Home Telehealth vendors.

- The entry **HTAPPL** in the HL7 APPLICATION PARAMETER (#771) file is used for processing incoming HL7 messages from the Home Telehealth vendors.

The following entries in the HL LOGICAL LINK (#870) file 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 generates 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 (#101) file is used for the Patient Inactivation process.

- The entry DG HOME TELEHEALTH in the HL7 APPLICATION PARAMETER (#771) file is used for processing outgoing HL7 messages from the Home Telehealth vendors.

- The entry **HTAPPL** in the HL7 APPLICATION PARAMETER (#771) file is used for processing incoming HL7 messages from the Home Telehealth vendors.

The following entries in the HL LOGICAL LINK (#870) file 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 **DGHTERR** mail group 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 M code, is *not* processed appropriately.

21   VA TCP/IP Lower Level Protocol

The HL7 V. 1.6 TCP/IP lower level protocol (LLP) is 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 are 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, which:

- Contain logical groupings of data.

- May be optional or repeatable:

  o   A **[ ]** indicates the segment is optional.

  o   The **{ }** indicates the segment is repeatable.

For each message category, there is 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 following:

- Sequence number (**SEQ**)

- Maximum length (**LEN**)

- Data type (**DT**)

- Required or optional (**R/O**)

- Repeatable (**RP/#**),

- Table number (**TBL#**)

- Element name
- 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 are as specified here unless otherwise specified in that section.

21.4.1 MSH—Message Header Segment

Table 148 lists the **MSH** sequences:

Table 148: 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.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
9	7	CM	R		0076 0003	Message Type	2 Components: • See Table 105: Table 0076—Message Type. • See Table 100: Table 0003—Event Type Code.
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.

21.4.2 EVN—Event Type Segment

Table 149 lists the **EVN** sequences:

Table 149: 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.
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	Two Components: • See Table 105: Table 0076—Message Type. • See Table 100: Table 0003—Event Type Code.
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.

21.4.3 PID—Patient Identification Segment

Table 150 lists the **PID** sequences:

Table 150: 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 (#2) file.
3	20	CM	R	Y		Patient ID (Internal ID)	Integrated Control Number (ICN) field in the PATIENT (#2) file: • Component 1: ICN w/checksum • Component 2: DFN • 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.

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
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.

21.4.4 PD1—Patient Additional Demographic Segment

Table 151 lists the **PD1** sequences:

Table 151: 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 & 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

21.4.5 PV1—Patient Visit Segment

Table 152 lists the **PV1** sequences:

Table 152: PVI—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
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

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name
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
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

21.4.6 MSA—Message Acknowledgement Segment

Table 153 lists the **MSA** sequences:

Table 153: MSA—Message Acknowledgement Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	Element Name	VistA Description
1	2	ID	R		0008	Acknowledgment Code	**REF:** See HL7 Table 101: Table 0008—Acknowledgment Code.
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)

For HL7 interface specification for Patient Record Flags (PRF) functionality, see the Patient Record Flags HL7 Interface Specification document in the VA Software Document Library Patient Record Flags folder.

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, VS GUI, and other applications.

The formats of the HL7 messages conform to HL7 Version 2.5, Schedule Information Unsolicited (SIU) message type, the message structure is as follows:

- **S12**—Schedule an appointment.

- **S15**—Cancel and appointment.

- **S26**—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. Table 154 lists the **SCH** sequences:

Table 154: SCH—Schedule Activity Information Segment

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.

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	Element Name	VistA Description
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.
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. Table 155 lists the **PID** sequences:

Table 155: PID—Patient Information Segment

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.
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.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
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.
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. Table 156 lists the **PV1** sequences:

Table 156: PV1—Patient Visit Segment

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.
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.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
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.
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.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
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. Table 157 lists the **RGS** sequences:

<div align="center">

Table 157: RGS—Resource Group Segment

</div>

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. Table 158 lists the **AIS** sequences:

<div align="center">

Table 158: AIS—Appointment Information Segment

</div>

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 is **A**. Cancel appointment is **D**.
3	250	CE	R			238	Universal Service Identifier	ICD Code^Provisional Diagnosis.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
4	26	TS	C			1202	Start Date/Time	Appointment start date time in UTC.
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

Table 159 lists the **AIG** sequences:

Table 159: 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.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Data Element
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.
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

Table 160 lists the **AIL** sequences:

Table 160: 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.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	Element Name	VistA Description
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

Table 161 lists the **AIP** sequences:

Table 161: 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
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)

24.1 Introduction

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 in a native format within the existing Veterans Health Information Systems Technology Architecture (VistA):

- RACE (#10)
- MARITAL STATUS (#11)
- RELIGION (#13)

Demographics data is generated in the PATIENT (#2) file in VistA, which is part of the Registration package. This file includes:

- **469** fields
- **88** forward pointers
- **357** backward pointers
- **28** sub-files
- **8** computed fields

Standardization of the VistA RACE (#10), MARITAL STATUS (#11), and RELIGION (#13) files facilitate the broad exchange of health information, which ultimately contributes to the following:

- Improved patient safety
- Healthcare quality
- Efficiency

Mapping tables 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 also facilitates 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.

24.2   New Functionality

The added functional components are:

- The system includes one new field that incorporates code data from their respective Standards Development Organizations (SDO) to the following files:

  o RACE (#10)

  o MARITAL STATUS (#11)

  o RELIGION (#13)

  These new fields are set as a Multiple in order to accommodate the potential need to store multiple codes to define a given term.

- The system includes three new files that incorporate code data from the respective Standards Development Organizations (SDO) for the following files:

  o Race—RACE MASTER (#10.99)

  o Marital Status—MASTER MARITAL STATUS (#11.99)

  o Religion—MASTER RELIGION (#13.99)

- The system includes 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 includes 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 has no impact on Graphic User Interfaces (GUI) within the VA network, and does *not* impact the workflow 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.

24.3 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 **Master File Association** [DGMF AMAIN] and **Master File Reports** [DGMF RMAIN] VistA menu options are accessible via the following menu path:

Figure 33: Accessing the Master File Association [DGMF AMAIN] and Master File Reports [DGMF RMAIN] Options

```
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]
```

Figure 34: Build Components

```
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)
```

24.4 Modified and New Routines

24.4.1 Routine Information

The second line of each of these routines now looks like:

Figure 35: Routine Second Line

```
;;5.3;Registration;**[Patch List]**;Aug 13, 1993;Build 33
```

The checksums in Figure 36 are new checksums, and can be checked with CHECK1^XTSUMBLD:

Figure 36: Checksums

```
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

Also, please refer to the following sites:

- OIT Master Glossary website (VA Intranet)
- VA Acronym Lookup website (VA Intranet)

Table 162: Glossary

Term	Definition
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.

Term	Definition
IVMH	Improve Veteran Mental Health.
MEANS TEST	A financial report upon which certain patients' eligibility for care is based.
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 the 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.

Term	Definition
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.
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

Table 163 is a standard to military time conversion resource:

Table 163: 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

27 Alphabetical Index of PIMS Terms

- ACRP Ad Hoc Report

- ACRP Database Conversion

- Add / Edit a Holiday

- Add / Edit Stop Codes

- Alpha List of Incomplete Encounters

- Append Ancillary Test to Appt.

- Appointment Check-in / Check-out

- Appointment List

- Appointment Management

- Appointment Management Report

- Appointment Status Update

- Appointment Waiting Time Report

- Batch Update Comp Gen Appt Type for C&Ps

- Call List

- Cancel Appointment

- Cancel Clinic Availability

- Cancelled Clinic Report

- Change Patterns to 30-60

- Chart Request

- Check Transmitted Outpatient Encounter Files

- Check-in / Unsched. Visit

- Clinic Appointment Availability Report

- Clinic Assignment Listing

- Clinic Edit Log Report

- Clinic Group Maintenance for Reports

- Clinic List (Day of Week)

- Clinic Next Available Appt. Monitoring Report

- Clinic Profile

- Clinic Utilization Statistical Summary

- Computer Generated Appointment Type Listing

- Convert Patient File Fields to PCMM

- Correct Incomplete Encounters

- Current MAS Release Notes

- Data Transmission Report

- Delete an Ad Hoc Report Template

- Delete Ancillary Test for Appt.

- Discharge from Clinic

- Display Ad Hoc Report Template Parameters

- Display Appointments

- Display Clinic Availability Report

- Edit Appointment Type for Add / Edit Encounters

- Edit Clinic Enrollment Data

- Edit Clinic Stop Code Name- Local Entries Only

- Edit Computer Generated Appointment Type

- Edit Outpatient Encounter

- Enc. by DSS ID / DSS ID by Freq. (OP0, OP1, OP2)

- Enc. by IP DSS ID / DSS ID by Freq. (IP0, IP1, IP2)

- Encounter 'Action Required' Report

- Encounter Activity Report

- Encounters Transmitted with MT Status of U

- Enrollment Review Date Entry

- Enrollments > X Days

- Enter / Edit Letters

- Error Listing

- File Room List

- Find Next Available Appointment

- Future Appointments for Inpatients

- High Risk MH No-Show Adhoc Report

- High Risk MH No-Show Nightly Report

- Inactivate a Clinic

- Incomplete Encounter Error Report

- Incomplete Encounters by Error Code

- Inpatient Appointment List

- Look Up on Clerk Who Made Appointment

- Make Appointment

- Make Consult Appointment

- Management Edit

- Management Report for Ambulatory Procedures

- Means Test / Eligibility / Enrollment Report

- Means Test IP Visits & Unique (IP3, IP4, IP5)

- Means Test Visits & Uniques (OP3, OP4, OP5)

- Most Frequent 20 IP Practitioner Types (IP8)

- Most Frequent 20 Practitioner Types (OP8)

- Most Frequent 50 CPT Codes (OP6)

- Most Frequent 50 ICD-9-CM Codes (OP7)

- Most Frequent 50 IP CPT Codes (IP6)

- Most Frequent 50 IP ICD-9-CM Codes (IP7)

- Multiple Appointment Booking

- Multiple Clinic Display / Book

- Non-Conforming Clinics Stop Code Report

- No-Show Report

- No-Shows

- Outpatient Diagnosis / Procedure Code Search

- Outpatient Diagnosis / Procedure Frequency Report

- Outpatient Encounter Workload Statistics

- Patient Activity by Appointment Frequency

- Patient Appointment Statistics

- Patient Encounter List

- Patient Profile MAS

- Performance Monitor Detailed Report

- Performance Monitor Retransmit Report (AAC)

- Performance Monitor Summary Report

- Print Appointment Status Update (Date Range)

- Print from Ad Hoc Template

- Print Scheduling Letters

- Provider / Diagnosis Report

- Purge Ambulatory Care Reporting files

- Purge Appointment Status Update Log File

- Purge rejections that are past database close-out

- Purge Scheduling Data

- Radiology Pull List

- Reactivate a Clinic

- Remap Clinic

- Restore Clinic Availability

- Retransmit Ambulatory Care Data by Date Range

- Retransmit Selected Error Code

- Retroactive Visits List

- Review of Scheduling / PCE / Problem List Data

- Routing Slips

- SC Veterans Awaiting Appointments

- Scheduling / PCE Bad Pointer Count

- Scheduling Parameters

- Selective Retransmission of NPCDB Rejections

- Set up a Clinic

- Sharing Agreement Category Update

- Stop Code Listing (Computer Generated)

- Summary Report - IEMM

- Team / Position Assignment / Re-Assignment

- Tracking Report

- Transmission History for Patient

- Transmission History Report - Full

- Trend of Facility Uniques by 12 Month Date Ranges

- Veterans Without Activity Since a Specified Date

- View Appointment Status Update Date (Single Date)
- Visit Rpt by Transmitted OPT Encounter
- Visits and Unique IP SSNs by County (IP9)
- Visits and Unique SSNs by County (OP9)
- Workd Report