

**Virtual Patient Record (VPR) 1.0**

Technical Manual

September 2011

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Software Version 1.0

**Official_VA_Seal_RGB[1].TIF**

Department of Veterans Affairs (VA)

Office of Information and Technology (OIT)

VA Health Information Technology

# Revision History

| **Date** | **Patch or Version** | **Page** | **Description** | **Project Manager** | **Author** |
| --- | --- | --- | --- | --- | --- |
| 8/21/2018 | VPR\*1\*7 | 25,31, 32,51,52,60,  63,64,  67,78,  79,80 | Added new data elements to tables | Ken Leonard | Melanie Buechler |
| 8/3/2015 | VPR\*1\*5 | 7, 10,  21-87 | Moved ICRs to end, and data element lists from Routine section to new Appendix A & B | Deb Migliore | Melanie Buechler |
| 6/29/2015 | VPR\*1\*5 | 4-5, 8-9, 11-56 | Removed Patch descriptions; updated Data Domains, ICRs, and Checksums | Deb Migliore | Melanie Buechler |
| 1/16/2015 | VPR\*1.0\*4 | 6, 12, 43, 44 | [Updated the VPR\*1.0\*4](#VPR1_0_4) Data Domain section to include Consults and the Updated Routines section to include VPRDGMRC and VPRDPSO; updated the [External Relationships](#ExternalRel) section with changes to the ^USC(8932.1 ICB number; updated [checksums](#Checksums) for VPRDGMRC and VPRDPSO. | Deb Migliore | Cheryl  Walton |
| 1/7/2015 | VPR\*1.0\*4 | 45 | Updated the checksum for VPRDTST to reflect a last-minute change. | Deb Migliore | Cheryl Walton |
| 1/2/2015–1/6/2015 | VPR\*1.0\*4` | All | Updated dates in page footers and on the cover page. | Deb Migliore | Cheryl Walton |
| 1/2/2015–1/6/2015 | VPR\*1.0\*4` | 4 | Added a prerequisite instruction for [installing](#Installation) VPR\*1.0\*4. | Deb Migliore | Cheryl Walton |
| 1/2/2015–1/6/2015 | VPR\*1.0\*4` | 7, 8 | Added a section describing VPR\*1.0\*4 | Deb Migliore | Cheryl Walton |
| 1/2/2015–1/6/2015 | VPR\*1.0\*4` | 13 | Added two new ICRs to the [External Relationships](#ExternalRel) section | Deb Migliore | Cheryl Walton |
| 1/2/2015–1/6/2015 | VPR\*1.0\*4` | 41 | Added a new routine ([VPRTST](#VPRDTST)) to the routine table. | Deb Migliore | Cheryl Walton |
| 1/2/2015–1/6/2015 | VPR\*1.0\*4` | 45, 46 | Updated [checksums](#Checksums) | Deb Migliore | Cheryl Walton |
| 1/2/2015–1/6/2015 | VPR\*1.0\*4` | 47–50 | Added a new [option](#options) (VPR TEST XML) and new examples for VPR TEST XML and VPR TEST JSON | Deb Migliore | Cheryl Walton |
| 9/11/2013-10/11/2013 | VPR\*1.0\*2 | All | Updated title-page fonts to meet end-user documentation standards; updated revision date; updated footer to include package name (re end-user documentation standards); addressed reviewer suggestions and comments; added an [installation](#Installation) and a [software-availability](#softwareAvailability) section to provide information about how to retrieve software and documentation (re end-user documentation standards); added a [legal-disclaimers](#legalDisclaimers) section (re end-user documentation standards); corrected errors in the [routines](#RoutineList) section; updated [checksums](#Checksums) | Deb Migliore | Cheryl Walton |
| 7/24/2013 | VPR\*1.0\*2 | All | Updated title to reflect new patch  Updated [Overview](#Overview) to add JSON information; added a new ([Formatted Data](#formatteddata)) section to discuss data formatting; added patch information for [VPR\*1.0\*2](#VPR1_0_2); added JSON [remote procedure call](#RPC) information; added [JSON routines](#RoutineList); corrected capitalization in routines table; added a [JSON example](#JSONExample) placeholder; added JSON [checksums](#Checksums); updated the [glossary](#_Glossary) section | Deb Migliore | Cheryl Walton |
| 7/30/2012 | VPR\*1.0\*1 | 27 | Updated [checksum](#Checksums) for VPRDPSOR | Deb Migliore | Ruth Markham |
| 6/13/2012 | VPR\*1.0\*1 | 5-7  11 | Updated Clinical Procedures ICRs in Relationships, renumbered the table, increased row height when necessary; changed revised date;  fixed typo | Deb Migliore | Ruth Markham |
| 5/18/2012 | VPR\*1.0\*1 | 2 | Added a paragraph about the VPR proxy | Deb Migliore | Ruth Markham |
| 5/15/12 | VPR\*1.0\*1 | All | Changed header colors from blue to black;  Corrected formatting issues;  Added hyperlinks to revision history;  Updated [Overview](#_Overview) to reflect changes with NwHIN;  Added new extract routines for [Clinical Observations](#CLiO), [Clinical Procedures](#ClinProc), [Insurance](#Insurance), [Exams](#Exams), [Skin Tests](#SkinTests), [Patient Education](#Education);  Renamed Pharmacy extract [Medications](#Medications);  Renamed Pharmacy Inpatient extract to [Inpatient Meds](#MedsIn);  Renamed Pharmacy Outpatient extract [Outpatient Meds](#MedsOut);  Added [Non-VA Meds](#MedsNonVA) and [IV Fluids/Infusions](#MedsIV) extracts;  Added section for [Implementation & Maintenance](#_Implementation_&_Maintenance);  Added section for [patch description](#_Patch_VPR*1.0*1);  Modified list of new routines;  Updated [Routines List](#_Routine_List) with new and modified extract routines;  Added section for [Security Keys](#_Security_Keys);  Updated [External relationships](#_External_Relationships) table;  Added section for [Files](#_Files);  Updated [Routine List table](#RoutineList) with new/changed routines and reordered elements alphabetically;  Removed elements predecessor, successor, code from [VPRDPL](#Problems) routine because they were never populated; | Deb Migliore | Ruth Markham |
|  |  |  | Added elements acknowledgement [m], provider, and service to [VPRDOR](#Orders) routine;  Added element category to [VPRDPXHF](#HealthFactors);  Added element encounter to [VPRDXIM](#Immunizations) routine; Added elements clinicStop, provider and type to [VPRDSDAM](#Appointments) routine (clinicStop was inadvertently missed in the previous version of this TM);  Added elements category, images and parent to [VPRDTIU](#Documents) routine;  Updated [Checksums](#_Checksums) table;  Added section [Options](#_Options) section;  Added a [Glossary](#_Glossary) section; |  |  |
| 08/08/11 | VPR\*1\*0 |  | VPR version 1.0 Release | Deb Migliore | Ruth Markham |

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# Legal Disclaimers

## Reference Materials

DISCLAIMER: The appearance of external hyperlink references in this manual does not constitute Department of Veterans Affairs (VA) endorsement of the referenced website or of the information, products, or services contained therein. The VA does not exercise editorial control over the information you find at referenced locations. Such links are provided as a courtesy and are consistent with the stated purpose of the VA.

# Overview

This document provides technical information for Virtual Patient Record (VPR) version 1.0.

VPR 1.0 is a foundation software package component of the Health Management Platform (HMP) architecture, which is part of the Health Informatics Initiative’s (hi2’s) scope.

VPR extracts patient data from domains at a local Veterans Health Information Systems and Technology Architecture (VistA) site to provide a cached view of the patient chart. It provides normalized fields with common field names and data structures across domains. VPR includes four remote procedure calls (RPCs): one encompassing routines that extract data from VistA in Extensible Markup Language (XML) format, one encompassing routines that extract VistA data in JavaScript Object Notation (JSON) format, one that calculates checksums for returned data, and one that returns the current VPR version number.

The VPR RPC for XML-formatted data extraction was initially installed in the Nationwide Health Information Network (NwHIN) namespace, which was called NHIN. The NwHIN client used most of the VPR’s extract routines in production to get and share data. After this initial installation, VPR RPCs were installed in the VPR’s own (VPR) namespace and renumbered as VPR version 1.0. NwHIN could continue to use the extract routines in its NHIN namespace, but would need to access VPR 1.0, or subsequent versions, to take advantage of future extract routine enhancements.

**Note**: After the VPR package installed its RPCs in its own (VPR) namespace with VPR 1.0, NwHIN began to use VPR 1.0 to take advantage of future extract-routine enhancements. The Virtual Lifetime Electronic Record (VLER) and Joint Legacy Viewer (JLV) are currently the primary users of the RPCs.

## Formatted Data

VPR provides XML- and JSON-formatted data to support web applications that transmit data between themselves, servers, and users’ browsers.

As its name suggests, XML uses markup to structure and serialize data. This human- and machine-readable format enjoys widespread use as a means of exchanging both text-based documents and structured data. The “[XML Example](#_XML_Example)” section of this document contains a snippet of XML-formatted data.

JSON is also a human- and machine-readable data-interchange format; however, its creator focused on making it a vehicle for transmiting structured data, rather than narrative documents. Although it uses several JavaScript notation rules to represent structured data, JSON is programming-language agnostic: JSON parser libraries are available for programming languages that range from ActionScript to Visual Basic. (You can find a comprehensive list of available parser libraries on the [JSON.org](http://www.json.org) website.)

JSON supports four primitive and two structured data types:

* Primitive data types:
  + Text strings (quotation-mark delimiters)
  + Numbers
  + Booleans
  + Null
* Structured data types:
  + Objects
  + Arrays

These data types provide a fluid (free-form) way to serialize data transmissions. For example, developers can represent objects that encompass arrays and arrays that encompass objects. They can also include non-significant white space around JSON’s structural elements (curly and block brackets, colons, and commas) to enhance human readability. The “[JSON Example](#JSONExample)” section of this document contains a snippet of JSON-formatted data.

Like XML, JSON supports asynchronous JavaScript and XML (Ajax), which allows web applications to send and receive data to and from web pages. As a result, both formats are viable options for data interchanges involving web applications. Two notable cases in point are HMP, which uses JSON-formatted data, and NwHIN, which uses XML-formatted data.

# Implementation and Maintenance

## Software Availability

You can download the latest versions of VPR software and documentation, including this manual, via File Transfer Protocol (FTP) from <ftp://download.vista.med.va.gov/>. This site transmits files from the first available server. You can also download files directly from the following FTP servers:

* Albany ftp.fo-albany.med.va.gov <ftp://ftp.fo-albany.med.va.gov>
* Hines ftp.fo-hines.med.va.gov <ftp://ftp.fo-hines.med.va.gov>
* Salt Lake City ftp.fo-slc.med.va.gov <ftp://ftp.fo-slc.med.va.gov>

Patches to the VPR application are available via the National Patch Module (NPM) on the FORUM mail system.

## Application Proxy

The VPR package contains an application proxy for connecting to the local VistA system; it is currently being used by the HMP and VLER clients. Do not terminate the VPR Application Proxy from file 200, it must remain active. If your site is experiencing connection issues, please check your entry to make sure it looks similar to the following listing:

NAME: VPR,APPLICATION PROXY DATE ENTERED: SEP 08, 2011

SECONDARY MENU OPTIONS: VPR APPLICATION PROXY

User Class: APPLICATION PROXY ISPRIMARY: Yes

PROVIDER KEY (c): 0

## Security Keys

The VPR package contains no security keys.

# Files

No files are released with VPR at this time.

# Parameters

The VPR application includes the following parameters:

| **VPR Parameter** | **Description** |
| --- | --- |
| VPR OBS VIEW TYPE | This parameter names, or names types of, CLiO observation collections that reside in the supplemental pages of flowsheets and group multiple, related observations. The CLiO groupings have no names or descriptions that other applications can display. By naming (or typing) these collections, VPR OBS VIEW TYPE enables applications that are interested in specific groups—such as groups that identify an instance of catheter care (Foley, IV, or drain)—to display the information they contain. |
| VPR SYSTEM NAME | This parameter holds the local VistA system’s name as a hashed hexidecimal (base 16) value. A VPR post-initialization routine calculates this value and places it into the system-level value; it should not be modified. |
| VPR VERSION | This parameter holds the current version number of the VPR data-extract RPCs in the following form: V.PP, where *V* is the package version number and *PP* is the latest patch number. |

# Remote Procedure Calls

The VPR application consists of two data extract RPCs, and two supporting RPCs:

| **Remote Procedure Call** | **M Entry Point** |
| --- | --- |
| VPR GET CHECKSUM | CHECK^VPRDCRC |
| VPR GET PATIENT DATA | GET^VPRD |
| VPR GET PATIENT DATA JSON | GET^VPRDJ |
| VPR DATA VERSION | VERSION^VPRD |

The VPR GET CHECKSUM RPC retrieves data from VistA and calls routine VPRDCRC to perform CRC32 calculations. VPRDCRC then returns the calculations as checksum values.

The VPR DATA VERSION RPC gets the value of the current VPR version and returns it as a string. Any application with the appropriate Integration Control References (ICRs—formerly called Database Integration Agreements, or DBIAs) can use this RPC to extract the version from VPR software.

## VPR GET PATIENT DATA

The VPR GET PATIENT DATA RPC retrieves data from VistA and returns it as XML in a **^TMP** global. Applications with the appropriate ICRs can use this RPC to extract data from VistA. Developers can specify input parameters to determine the types and amounts of data the RPC will extract from VistA. Parameters include:

* Internal entry number (IEN) from PATIENT (#2) file (optionally data file number [DFN] or integration control number [ICN] for remote calls) [required parameter]
* The kinds of data to extract, which may include:
  + Allergies and reactions
  + Appointments
  + Clinical Procedures (medicine and cardiology)
  + Consults
  + Demographics
  + Documents
  + Education topics
  + Exams
  + Flags (Patient Record Flags)
  + Functional Independence Measurements
  + Health Factors
  + Immunizations
  + Insurance policies
  + Labs (by accession, order or panel, or individual result)
  + Medications
  + Observations (CLiO)
  + Orders
  + Problems
  + Procedures (includes Radiology, Surgery, and Clinical Procedures)
  + Radiology exams
  + Skin tests
  + Surgical procedures
  + Visits and encounters
  + Vitals
  + Wellness Reminders
* The date and time from which to begin searching for data [optional]
* The date and time at which to end searching for data [optional]
* The maximum number of items to return per data type [optional]
* The identifier of a single item to return [optional, but TYPE must also be defined when used]
* List of name-value pairs, further refining the search

The output from this RPC is a text array formatted as XML in the temporary global **^TMP("VPR",$J,n)**.

The following text contains a snippet of data returned in response to a VPR GET PATIENT DATA RPC call for vitals measurements for VPRTestPatient,One:

<vital>

<entered value='3050316.115625' />

<facility code='998' name='ABILENE (CAA)' />

<location code='158' name='7A GEN MED' />

<measurements>

<measurement id='14871' vuid='4500634' name='BLOOD PRESSURE' value='168/68' high='210/110' low='100/60' />

<measurement id='14869' vuid='4500636' name='PULSE' value='72' high='120' low='60' >

<qualifiers>

<qualifier name='RADIAL' vuid='4688678' />

</qualifiers>

</measurement>

<measurement id='14872' vuid='4500635' name='PAIN' value='1' />

<measurement id='14870' vuid='4688725' name='RESPIRATION' value='18' high='30' low='8' >

<qualifiers>

<qualifier name='SPONTANEOUS' vuid='4688706' />

</qualifiers>

</measurement>

<measurement id='14868' vuid='4500638' name='TEMPERATURE' value='99' units='F' metricValue='37.2' metricUnits='C' high='102' low='95' >

<qualifiers>

<qualifier name='ORAL' vuid='4500642' />

</qualifiers>

</measurement>

</measurements

<taken value='3050316.1' />

</vital>

## VPR GET PATIENT DATA JSON

The VPR GET PATIENT DATA JSON RPC retrieves data from VistA, and returns it as JSON-formatted documents in a **^TMP** global. Applications with appropriate ICRs can use this RPC to extract data from VistA. Developers can specify input parameters to determine the types and amounts of data the RPC will extract from VistA by entering the parameters as a list of name-value pairs. Some of the most commonly used parameters include:

* IEN from PATIENT (#2) file (optionally DFN; ICN for remote calls) [required]
* The kinds of data to extract, which may include:
  + Allergies and reactions
  + Appointments
  + Clinical Procedures (medicine and cardiology)
  + Consults
  + CPT procedures
  + Demographics
  + Documents
  + Education topics
  + Exams
  + Health Factors
  + Immunizations
  + Lab results
  + Medications
  + Observations (CLiO)
  + Orders
  + Problems
  + Purpose of visit (POV)
  + Radiology exams
  + Skin tests
  + Surgical procedures
  + Visits and admissions
  + Vitals
* The date and time from which to begin searching for data [optional]
* The date and time at which to stop searching for data [optional].
* The maximum number of items to return per data type [optional]
* The identifier of a single item to return [optional, but TYPE must also be defined when used]
* Additional name-value pairs, further refining the search [optional]

The RPC’s output is a text array formatted as JSON in the temporary global **^TMP("VPR",$J,n)**.

The following text contains a snippet of data returned in response to a VPR GET PATIENT DATA JSON RPC call for vitals measurements for VPRTestPatient, One—the same patient and data returned in the XML example:

{"apiVersion":"1.01","params":{"domain":"DEV.HMPDEV.VAINNOVATIONS.US","systemId":"F484"},"data":{"updated":"20130718143517","totalItems":5,"items":[{"displayName":"BP","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high":"210\/110","kind":"Vital Sign","localId":14871,"locationName":"7 WEST MEDICINE",

"locationUid":"urn:va:location:F484:158","low":"100\/60","observed":200503161000,"result":"168\/68","resulted":20050316115625,"summary":"BLOOD PRESSURE 168\/68mm[Hg]","typeCode":"urn:va:vuid:4500634","typeName":"BLOOD PRESSURE","uid":"urn:va:F484:229:vital:14871","units":"mm[Hg]"}

,

{"displayName":"P","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high":120,"kind":"Vital sign","localId":14869,"locationName":"7 WEST MEDICINE","locationUid":"urn:va:location:F484:158","low":60,"observed":200503161000,"qualifiers":[{"name":"RADIAL","vuid":4688678}],"result":72,"resulted":20050316115625,"summary":"PULSE 72 \/min","typeCode":"urn:va:vuid:4500636","typeName":"PULSE","uid":"urn:va:F484:229:vital:14869","units":"\/min"}

,

{"displayName":"PN","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","kind":"Vital Sign","localId":14872,"locationName":"7 WEST MEDICINE","locationUid":"urn:va:location:F484:158","observed":200503161000,"result":1,"resulted":20050316115625,"summary":"PAIN 1 ","typeCode":"urn:va:vuid:4500635","typeName":"PAIN","uid":"urn:va:F484:229:vital:14872","units":""}

,

{"displayName":"R","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high":30,"kind":"Vital Sign","localId":14870,"locationName":"7 WEST MEDICINE","locationUid":"urn:va:location:F484:158","low":8,"observed":200503161000,"qualifiers":[{"name":"SPONTANEOUS","vuid":4688706}],"result":18,"resulted":20050316115625,"summary":"RESPIRATION 18 \/min","typeCode":"urn:va:vuid:4688725","typeName":"RESPIRATION","uid":"urn:va:F484:229:vital:14870","units":"\/min"}

# Routines

The following table contains the routines included in theVPR package:

| **Routine** | **Checksum** |
| --- | --- |
| VPRD | 43397804 |
| VPRDCRC | 46793433 |
| VPRDGMPL | 30131363 |
| VPRDGMRA | 22392321 |
| VPRDGMRC | 10985584 |
| VPRDGMV | 42263746 |
| VPRDGPF | 5569926 |
| VPRDIB | 13733802 |
| VPRDJ | 22186238 |
| VPRDJ0 | 83117538 |
| VPRDJ00 | 58623073 |
| VPRDJ01 | 39474581 |
| VPRDJ02 | 44230094 |
| VPRDJ03 | 49743518 |
| VPRDJ04 | 48088220 |
| VPRDJ04A | 35067136 |
| VPRDJ05 | 76359424 |
| VPRDJ05V | 45875553 |
| VPRDJ06 | 49853799 |
| VPRDJ07 | 19635784 |
| VPRDJ08 | 60175705 |
| VPRDJ08A | 39219672 |
| VPRDJ09 | 36288746 |
| VPRDJT | 9998610 |
| VPRDLR | 29963842 |
| VPRDLRA | 97052919 |
| VPRDLRO | 34279293 |
| VPRDMC | 61607238 |
| VPRDMDC | 58663659 |
| VPRDOR | 27908661 |
| VPRDPROC | 10655010 |
| VPRDPS | 21702415 |
| VPRDPSI | 41207623 |
| VPRDPSO | 16064542 |
| VPRDPSOR | 39578958 |
| VPRDPT | 99429749 |
| VPRDPXAM | 9620825 |
| VPRDPXED | 9831355 |
| VPRDPXHF | 10068928 |
| VPRDPXIM | 29791486 |
| VPRDPXRM | 9085519 |
| VPRDPXSK | 9706647 |
| VPRDRA | 49387414 |
| VPRDRMIM | 24311841 |
| VPRDSDAM | 21167478 |
| VPRDSR | 30721686 |
| VPRDTIU | 90403730 |
| VPRDTST | 32685783 |
| VPRDVSIT | 106014987 |
| VPRJSON | 11235996 |
| VPRJSOND | 63619549 |
| VPRJSONE | 20857447 |
| VPRP2I << post install routine | 236349 |
| VPRPI << post install routine | 300624 |
| VPRUTILS | 9723974 |

# Options

| Name | Description |
| --- | --- |
| VPR APPLICATION PROXY | This option allows the VPR connector proxy access to the VistA system. |
| VPR TEST JSON | This option allows testers to view JSON-formatted results. |
| VPR TEST XML | This option allows testers to view XML-formatted results. |

## VPR TEST JSON

The VPR TEST JSON option loops around its DOMAIN and PATIENT prompts, making it easy for testers to display data for successive patients and domains. The option asks for a start date. If testers provide a start date, it also asks for a stop date. The option’s start and stop parameters enable testers to limit data displays to a time-bound subset of available data. If testers do not provide a start date, the option does not ask for a stop date and displays all available data for the patient and domain testers specify.

Following is an example of the VPR TEST JSON option, showing the data it returns (the results are truncated, with extra spaces removed).

Select OPTION NAME: VPR TEST JSON       View JSON results

View JSON results

Select PATIENT NAME: AVIVAPATIENT,TWENTYONE,TWENTYONE  AVIVAPATIENT,TWENTYONE

     2-14-34    666000001    YES    SC VETERAN    PROVIDER,EIGHTEEN  PRIMARY CARE TEAM2

Enrollment Priority: GROUP 3    Category: IN PROCESS    End Date:

Select DOMAIN: VITAL

Select START DATE: 11-1-2014  (NOV 01, 2014)

Select STOP DATE: 11-1-2014  (NOV 01, 2014)

Select TOTAL #items:

{"apiVersion":"1.03","params":{"domain":"DEV.HMPDEV.VAINNOVATIONS.US","systemId":"F484"},

"data":{"updated":"20150106112207","totalItems":8,"items":[

{"displayName":"BP","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high"

:"210\/110","kind":"Vital Sign","localId":53157,"locationName":"GENERAL MEDICINE

","locationUid":"urn:va:location:F484:23","low":"100\/60","observed":20141101190

3,"result":"128\/66","resulted":20141103143428,"summary":"BLOOD PRESSURE 128\/66

mm[Hg]","typeCode":"urn:va:vuid:4500634","typeName":"BLOOD PRESSURE","uid":"urn

:va:vital:F484:237:53157","units":"mm[Hg]"}

,

{"displayName":"HT","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","kind"

:"Vital Sign","localId":53161,"locationName":"GENERAL MEDICINE","locationUid":"u

rn:va:location:F484:23","metricResult":180.34,"metricUnits":"cm","observed":2014

11011903,"result":71,"resulted":20141103143428,"summary":"HEIGHT 71 in","typeCod

e":"urn:va:vuid:4688724","typeName":"HEIGHT","uid":"urn:va:vital:F484:237:53161"

,"units":"in"}

, {"displayName":"P","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high":

120,"kind":"Vital Sign","localId":53160,"locationName":"GENERAL MEDICINE","locationUid":"urn:va:location:F484:23","low":60,"observed"vital:F484:237:53160","units":"\/min"}

,

{"displayName":"PN","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","kind"

:"Vital Sign","localId":53164,"locationName":"GENERAL MEDICINE","locationUid":"u

rn:va:location:F484:23","observed":201411011903,"result":2,"resulted":2014110314

3428,"summary":"PAIN 2 ","typeCode":"urn:va:vuid:4500635","typeName":"PAIN","uid

":"urn:va:vital:F484:237:53164","units":""}

,

{"displayName":"PO2","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high

":100,"kind":"Vital Sign","localId":53163,"locationName":"GENERAL MEDICINE","loc

ationUid":"urn:va:location:F484:23","low":50,"observed":201411011903,"result":95

,"resulted":20141103143428,"summary":"PULSE OXIMETRY 95 %","typeCode":"urn:va:vu

id:4500637","typeName":"PULSE OXIMETRY","uid":"urn:va:vital:F484:237:53163","uni

ts":"%"}

,

{"displayName":"R","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high":

30,"kind":"Vital Sign","localId":53159,"locationName":"GENERAL MEDICINE","locati

onUid":"urn:va:location:F484:23","low":8,"observed":201411011903,"result":16,"re

sulted":20141103143428,"summary":"RESPIRATION 16 \/min","typeCode":"urn:va:vuid:

4688725","typeName":"RESPIRATION","uid":"urn:va:vital:F484:237:53159","units":"\

/min"}

,

{"displayName":"T","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","high":

102,"kind":"Vital Sign","localId":53158,"locationName":"GENERAL MEDICINE","locat

ionUid":"urn:va:location:F484:23","low":95,"metricResult":36.9,"metricUnits":"C"

,"observed":201411011903,"result":98.5,"resulted":20141103143428,"summary":"TEMP

ERATURE 98.5 F","typeCode":"urn:va:vuid:4500638","typeName":"TEMPERATURE","uid":

"urn:va:vital:F484:237:53158","units":"F"}

,

{"displayName":"WT","facilityCode":"500D","facilityName":"SLC-FO HMP DEV","kind"

:"Vital Sign","localId":53162,"locationName":"GENERAL MEDICINE","locationUid":"u

rn:va:location:F484:23","metricResult":46.36,"metricUnits":"kg","observed":20141

1011903,"result":102,"resulted":20141103143428,"summary":"WEIGHT 102 lb","typeCo

de":"urn:va:vuid:4500639","typeName":"WEIGHT","uid":"urn:va:vital:F484:237:53162

","units":"lb"}

]}}

## VPR TEST XML

The VPR TEST XML option loops around its DOMAIN and PATIENT prompts, making it easy for testers to display data for successive patients and domains. The option asks for a start date, if the data domain supports date filtering; if testers provide a start date, it also asks for a stop date. The option’s start and stop parameters enable testers to limit data displays to a time-bound subset of available data. If testers do not provide a start date, the option does not ask for a stop date and displays all available data for the patient and domain testers specify.

Additional search filters may be entered, for domains that support them. If one of those domains is selected, testers may also see ‘FILTER’ and ‘VALUE’ prompts. An ‘ID’ prompt may also appear, allowing a specific data item to be extracted and displayed. Testers may simply press return through any of these filters they do not wish to apply, and execution will fall through to the extract and display.

Following is an example of the VPR TEST XML option, showing the data it returns (the results are truncated, with extra spaces removed).

Select OPTION NAME: VPR TEST XML View XML results

View XML results

Select PATIENT NAME: AVIVAPATIENT,TWENTYONE 2-14-34 666000001

YES SC VETERAN PROVIDER,EIGHTEEN PRIMARY CARE TEAM2

Enrollment Priority: GROUP 3 Category: IN PROCESS End Date:

Select DOMAIN: VITALS

Select START DATE: 11-1-2014 (NOV 01, 2014)

Select STOP DATE: 11-1-2014 (NOV 01, 2014)

Select TOTAL #items:

<results version='1.02' timeZone='-0700' >

<vitals total='1' >

<vital>

<entered value='3141103.143428' />

<facility code='500D' name='SLC-FO HMP DEV' />

<location code='23' name='GENERAL MEDICINE' />

<measurements>

<measurement id='53157' vuid='4500634' name='BLOOD PRESSURE' value='128/66'

units='mm[Hg]' high='210/110' low='100/60' />

<measurement id='53161' vuid='4688724' name='HEIGHT' value='71' units='in'

metricValue='180.34' metricUnits='cm' />

<measurement id='53160' vuid='4500636' name='PULSE' value='92' units='/min'

high='120' low='60' />

<measurement id='53164' vuid='4500635' name='PAIN' value='2' />

<measurement id='53163' vuid='4500637' name='PULSE OXIMETRY' value='95'

units='%' high='100' low='50' />

<measurement id='53159' vuid='4688725' name='RESPIRATION' value='16'

units='/min' high='30' low='8' />

<measurement id='53158' vuid='4500638' name='TEMPERATURE' value='98.5'

units='F' metricValue'53162' vuid='4500639' name='WEIGHT'

# External Relationships

The following table contains information about which ICRs cover usage of which routines and global references.

| **Reference** | **ICR(DBIA)** | **Package** |
| --- | --- | --- |
| ^AUPNPROB | 5703 | Problem List |
| ^AUPNVSIT | 2028 | PCE Patient Care Encounter |
| ^AUTTHF | 4295 | PCE Patient Care Encounter |
| ^DGPM | 1865 | Registration |
| ^DGS(41.1) | 3796 | Registration |
| ^DGSL(38.1) | 767 | Registration |
| ^DIC(31) | 733 | HINQ |
| ^DIC(40.7) | 557 | Scheduling |
| ^DIC(42) | 723 | Registration |
| ^DPT | 5597 | Registration |
| ^DPT | 5708 | Registration |
| ^GMR(120.5) | 4753 | Gen. Med. Rec. – Vitals |
| ^GMR(120.86) | 3449 | Adverse Reaction Tracking |
| ^LAB(61) | 524 | Laboratory |
| ^LR | 525 | Laboratory |
| ^LRO(68) | 1963 | Laboratory |
| ^LRO(69) | 2407 | Laboratory |
| ^MDC(704.101) | 5748 | Clinical Procedures |
| ^MDC(704.102) | 5809 | Clinical Procedures |
| ^MDC(704.1122) | 5999 | Clinical Procedures |
| ^MDC(704.116) | 5995 | Clinical Procedures |
| ^MDC(704.1161) | 5996 | Clinical Procedures |
| ^MDC(704.117) | 5810 | Clinical Procedures |
| ^MDC(704.118) | 5811 | Clinical Procedures |
| ^OR(100) | 5771 | Order Entry/Results Reporting |
| ^ORA(102.4) | 5769 | Care Management |
| ^ORD(100.98) | 873 | Order Entry/Results Reporting |
| ^ORD(101.43) | 2843 | Order Entry/Results Reporting |
| ^PSB(53.79) | 5909 | Bar Code Med Admin (BCMA) |
| ^PXRMINDX | 4290 | PCE Patient Care Encounter |
| ^RADPT | 2480 | Radiology/Nuclear Medicine |
| ^RARPT | 5605 | Radiology/Nuclear Medicine |
| ^SRF(130) | 5675 | Surgery |
| ^SRO(136) | 4872 | Surgery |
| ^TIU(8925.1) | 2321 | Text Integration Utilities |
| ^TIU(8925.1) | 5677 | Text Integration Utilities |
| ^TIU(8926.1) | 5678 | Text Integration Utilities |
| ^USC(8932.1) | 4984 | Kernel |
| ^USR(8930) | 6088 | Authorization/Subscription Utility |
| ^USR(8930.1) | 6089 | Authorization/Subscription Utility |
| ^WV(790.05) | 5772 | Women’s Health |
| DGACT | 2248 | Registration |
| DGPFAPI | 3860 | Registration |
| GMPLUTL2 | 2741 | Problem List |
| GMRCAPI | 6082 | Consult/Request Tracking |
| GMRCGUIB | 2980 | Consult/Request Tracking |
| GMRCSLM1 | 2740 | Consult/Request Tracking |
| GMRVUT0 | 1446 | Gen. Med. Rec. – Vitals |
| GMVRPCM | 5702 | Gen. Med. Rec. – Vitals |
| ICDEX | 5747 | DRG Grouper |
| LR7OR1 | 2503 | Laboratory |
| LR7OU1 | 2955 | Laboratory |
| LRPXAPI | 4245 | Laboratory |
| LRPXAPIU | 4246 | Laboratory |
| MDPS1 | 4230 | Clinical Procedures |
| ORCD | 5493 | Order Entry/Results Reporting |
| ORQ1 | 3154 | Order Entry/Results Reporting |
| ORQ12 | 5704 | Order Entry/Results Reporting |
| ORX8 [$$OI, $VALUE] | 2467 | Order Entry/Results Reporting |
| ORX8 [$$PKGID] | 3071 | Order Entry/Results Reporting |
| ORX8 [EN] | 871 | Order Entry/Results Reporting |
| PSOORRL | 2400 | Outpatient Pharmacy |
| PXAPI | 1894 | PCE Patient Care Encounter |
| PXPXRM | 4250 | PCE Patient Care Encounter |
| PXRMMHV | 4811 | Clinical Reminders |
| RMIMRP | 4745 | Functional Independence |
| SROESTV | 3533 | Surgery |
| TIUCNSLT | 5546 | Text Integration Utilities |
| TIUCP | 3568 | Text Integration Utilities |
| TIULQ | 2693 | Text Integration Utilities |
| TIULX | 3058 | Text Integration Utilities |
| TIUSROI | 5676 | Text Integration Utilities |
| TIUSRVLO [$$IMGCNT] | 4751 | Text Integration Utilities |
| TIUSRVLO [$$RESOLVE] | 2834 | Text Integration Utilities |
| TIUSRVLO [CONTEXT] | 2865 | Text Integration Utilities |
| TIUSRVR1 | 2944 | Text Integration Utilities |
| TIUVPR | 6077 | Text Integration Utilities |
| USRLM | 2324 | Authorization/Subscription Utility |
| VADPT2 | 325 | Registration |
| XUSAP | 4677 | Kernel |
| XUSTAX | 4911 | Kernel |

# Glossary

| **Term** | **Description** |
| --- | --- |
| CLiO | Clinical Observations |
| CRC | Cyclic Redundancy Check |
| DBIA | Database Integration Agreement |
| EDIS | Emergency Department Integration Software |
| hi2 | Health Informatics Initiative |
| HMP | Health Management Platform |
| ICR | Integration Control Reference |
| IV | Intervenous |
| JLV | Joint Legacy Viewer |
| JSON | JavaScript Object Notation |
| NwHIN | Nationwide Health Information Network |
| PCE | Patient Care Encounter |
| PTF | Patient Treatment File |
| UID | Universal Identifier |
| RPC | Remote Procedure Call |
| VistA | Veterans (Health) Information System Technology Architecture |
| VLER | Virtual Lifetime Electronic Record |
| VPR | Virtual Patient Record |
| XML | Extensible Markup Language |

# Appendix A—XML Tables

Following are tables that list the data elements returned by the VPR GET PATIENT DATA RPC. All input parameters are optional to refine the extract, except for TYPE. All searches are performed reverse-chronologically to return the most recent data, unless otherwise noted.

## Allergy/Adverse Reaction Tracking (GMRA)

Input parameters: TYPE "reactions" [required]

[optional] START VA FileMan date to filter on ‘entered’

STOP VA FileMan date to filter on ‘entered’

MAX Use *not recommended*, as reactions are *not* sorted

ID PATIENT ALLERGIES (#120.8) file ien

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| assessment | value | not done or nka |
| comment \* | id | number |
|  | enteredBy | NEW PERSON (#200) Name |
|  | entered | VA FileMan date.time |
|  | commentType | O or E (observed or error) |
|  | commentText | string |
| drugClass \* | name | VA DRUG CLASS (#50.605) Classification |
|  | vuid | VA DRUG CLASS (#50.605) VUID |
| drugIngredient \* | name | DRUG INGREDIENTS (#50.416) Name |
|  | vuid | DRUG INGREDIENTS (#50.416) VUID |
| entered | value | VA FileMan date.time |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | PATIENT ALLERGIES (#120.8) ien |
| localCode | value | VA FileMan variable pointer |
| mechanism | value | ALLERGY, PHARMACOLOGIC, or UNKNOWN |
| name | value | string |
| reaction \* | name | string |
|  | vuid | number |
| removed | value | boolean (1 or 0) |
| severity | value | MILD, MODERATE, or SEVERE |
| source | value | O or H (observed or historical) |
| type | value | any combination of DFO |
| verified | value | any combination of DRUG,FOOD,OTHER |
| vuid | value | VUID number |

\* = may be multiple

## Clinical Observations (MDC)

Input parameters: TYPE "observations" [required]

[optional] START VA FileMan date to filter on ‘observed’

STOP VA FileMan date to filter on 'observed'

MAX use with caution, as search is performed chronologically

ID OBS (#704.117) file ID (#.01) value

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| bodySite | code | VUID number |
|  | name | string |
| comment | value | string |
| entered | value | VA FileMan date.time |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | OBS (#704.117) ID |
| location | code | HOSPITAL LOCATION (#44) ien |
|  | name | HOSPITAL LOCATION (#44) Name |
| method | code | VUID number |
|  | name | string |
| name | value | string |
| observed | value | VA FileMan date.time |
| position | code | VUID number |
|  | name | string |
| product | code | VUID number |
|  | name | string |
| quality | code | VUID number |
|  | name | string |
| range | value | Unknown, Normal, Out of Bounds Low, Out of Bounds High, Low, High |
| status | value | Verified |
| units | code | VUID number |
|  | name | string |
| value | value | string |
| vuid | value | VUID number |

## Clinical Procedures (MC)

Input parameters: TYPE "clinicalProcedures" [required]

[optional] START VA FileMan date to filter on 'dateTime'

STOP VA FileMan date to filter on 'dateTime'

MAX number of most recent procedures to return

ID variable pointer to CP data file/item

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| category | value | CP |
| consult | value | CONSULT (#123) ien |
| dateTime | value | VA FileMan date.time |
| document \* | id | TIU DOCUMENT (#8925) ien |
|  | localTitle | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid | VUID number |
|  | content | word processing text |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| hasImages | value | boolean (1 or 0) |
| id | value | variable pointer |
| interpretation | value | Normal, Abnormal, Borderline, Incomplete, or Machine Resulted |
| location | code | HOSPITAL LOCATION (#44) ien |
|  | name | HOSPITAL LOCATION (#44) Name |
| name | value | string |
| order | code | ORDER (#100) ien |
|  | name | string |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| requested | value | VA FileMan date.time |
| status | value | string |

\* = may be multiple

## Clinical Reminders (PXRM)

Not all clinical reminders that may appear in CPRS will be available via this extract. Only the nationally exported “wellness” reminders, those marked for Patient usage and shown in MyHealtheVet, are processed and returned at run time.

Input parameters: TYPE "reminders" [required]

[optional] START none

STOP none

MAX none

ID REMINDER DEFINITION (#811.9) file ien

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| class | code | N |
|  | name | NATIONAL |
| detail |  | word-processing text |
| due | value | VA FileMan date.time, DUE NOW, N/A, or CNBD |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | REMINDER DEFINITION (#811.9) ien |
| lastDone | value | VA FileMan date.time, or UNKNOWN |
| name | value | REMINDER DEFINITION (#811.9) Print Name |
| status | value | DUE NOW, DUE SOON, NOT DUE, RESOLVED, or N/A |
| summary |  | word-processing text |

## Consult/Request Tracking (GMRC)

Input parameters: TYPE "consults" [required]

[optional] START VA FileMan date to filter on 'requested'

STOP VA FileMan date to filter on 'requested'

MAX number of most recent consult requests to return

ID REQUEST/CONSULTATION (#123) file ien

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| document \* | id | TIU DOCUMENT (#8925) ien |
|  | localTitle | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid | VUID number |
|  | content | word-processing text |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | REQUEST/CONSULTATION (#123) ien |
| name | value | string |
| orderID | value | ORDERS (#100) ien |
| procedure | value | GMRC Procedure #123.3 Name or ‘Consult’ |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1)1 Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200 Service/Section |
| provDx | code | ICD code |
|  | name | ICD Description |
|  | system | ICD or 10D |
| reason | value | word-processing text |
| requested | value | VA FileMan date.time |
| result | value | string |
| service | value | REQUEST SERVICES (#123.5) Name |
| status | value | ORDER STATUS (#100.01) Name |
| type | value | C or P |
| urgency | value | string |

\* = may be multiple

## Functional Independence Measurements (RMIM)

The assessment scores are often entered by multiple clinicians, but the set as a whole will not be returned until all 18 numeric scores are available; a sub-total for each section of scores will also then be included.

Input parameters: TYPE "functionalMeasurements" [required]

[optional] START VA FileMan date to filter on 'admitted', chronologically

STOP VA FileMan date to filter on 'admitted', chronologically

MAX Use *not recommended*, as measurements are *not* sorted

ID FUNCTIONAL INDEPENDENCE (#783) file ien

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** |  | **Content** |
| --- | --- | --- | --- |
| admitClass | value |  | 1, 2, or 3 |
| admitted | value |  | FileMan |
| assessment \* | type |  | admission, discharge, interim, follow up, or goals |
|  | cognitiveScore |  | number, 5-35 |
|  | motorScore |  | number, 13-91 |
|  | totalScore |  | number, 18-126 |
|  | values | eat | number, 1-7 |
|  |  | groom | number, 1-7 |
|  |  | bath | number, 1-7 |
|  |  | dressUp | number, 1-7 |
|  |  | dressLo | number, 1-7 |
|  |  | toilet | number, 1-7 |
|  |  | bladder | number, 1-7 |
|  |  | bowel | number, 1-7 |
|  |  | transChair | number, 1-7 |
|  |  | transToilet | number, 1-7 |
|  |  | transTub | number, 1-7 |
|  |  | locomWalk | number, 1-7 |
|  |  | locomStair | number, 1-7 |
|  |  | comprehend | number, 1-7 |
|  |  | express | number, 1-7 |
|  |  | interact | number, 1-7 |
|  |  | problem | number, 1-7 |
|  |  | memory | number, 1-7 |
|  |  | walkMode | W, C, or B (walk, wheelchair, or both) |
|  |  | comprehendMode | A, V, or B (auditory, visual, or both) |
|  |  | expressMode | V, N, or B (vocal, non-vocal, or both) |
| care | value |  | CONTINUUM OF CARE, ACUTE, or SUBACUTE |
| case | value |  | number |
| discharged | value |  | VA FileMan date |
| document \* | id |  | TIU DOCUMENT (#8925) ien |
|  | localTitle |  | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle |  | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid |  | VUID number |
|  | content |  | word-processing text |
| facility | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| id | value |  | FUNCTIONAL INDEPENDENCE (#783) ien |
| impairmentGroup | value |  | string |
| interruption \* | transfer |  | VA FileMan date |
|  | return |  | VA FileMan date |
| interruptionCode | value |  | string |
| name | value |  | Functional Independence Measurement |
| onset | value |  | VA FileMan date |

\* = may be multiple

## Integrated Billing (IB)

Input parameters: TYPE "insurancePolicies" [required]

[optional] START none

STOP none

MAX use not recommended, as policies are not sorted

ID none

FILTER("status") desired status codes, see ^IBBDOC for possible values

[default = “**RB**”]

| Elements | Attributes |  | Content |
| --- | --- | --- | --- |
| company | id |  | INSURANCE COMPANY (#36) ien |
|  | name |  | INSURANCE COMPANY (#36) Name |
|  | address | streetLine1 | INSURANCE COMPANY (#36) Street Address [1] |
|  |  | streetLine2 | INSURANCE COMPANY (#36) Street Address [2] |
|  |  | streetLine3 | INSURANCE COMPANY (#36) Street Address [3] |
|  |  | city | INSURANCE COMPANY (#36) City |
|  |  | stateProvince | INSURANCE COMPANY (#36) State |
|  |  | postalCode | INSURANCE COMPANY (#36) Zip |
|  | telecom |  | INSURANCE COMPANY (#36) Phone Number |
| effectiveDate | value |  | VA FileMan date.time |
| expirationDate | value |  | VA FileMan date.time |
| facility | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| groupName | value |  | GROUP PLAN (#355.3) Group Name |
| groupNumber | value |  | string |
| id | value |  | DFN;company id;Group Plan (#355.3) ien |
| insuranceType | code |  | TYPE OF PLAN (#355.1) ien |
|  | name |  | TYPE OF PLAN (#355.1) Name |
| relationship | value |  | PATIENT, SPOUSE, NATURAL CHILD, EMPLOYEE, ORGAN DONOR, INJURED PLAINTIFF, MOTHER, FATHER, SIGNIFICANT OTHER, LIFE PARTNER, or OTHER RELATIONSHIP |
| subscriber | id |  | string |
|  | name |  | string |

## Laboratory (LR)

Input parameters: TYPE "labs" [required]

[optional] START VA FileMan date to filter on 'collected'

STOP VA FileMan date to filter on 'collected'

MAX number of most recent accessions to return

ID LAB DATA (#63) file ien string

FILTER("type") desired ‘type’ code(s) [default = **CH**]

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| collected | value | VA FileMan date.time |
| comment | value | string |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| groupName | value | accession number string |
| high | value | string |
| id | value | LAB DATA (#63) ien string |
| interpretation | value | L, L\*, H, H\* or null |
| labOrderID | value | number |
| localName | value | LAB TEST (#60) Print Name |
| loinc | value | LOINC code |
| low | value | string |
| performingLab | value | string |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| orderID | value | ORDERS (#100) ien |
| result | value | string |
| resulted | value | VA FileMan date.time |
| sample | value | COLLECTION SAMPLE (#62) Name |
| specimen | code | TOPOGRAPHY (#61) SNOMED Code |
|  | name | TOPOGRAPHY (#61) Name |
| status | value | completed or incomplete |
| test | value | LAB TEST (#60) Name |
| type | value | CH or MI |
| units | value | string |
| vuid | value | VUID number |

### Accessions

The same results can also be returned grouped by the accessioned specimen; this is the only Lab domain that will return pathology data, and the recommended domain for retrieving microbiology results.

Input parameters: TYPE "accessions" [required]

[optional] START VA FileMan date to filter on 'collected'

STOP VA FileMan date to filter on 'collected'

MAX Number of most recent accessions to return

ID LAB DATA (#63) file ien string

FILTER("type") desired ‘type’ code(s)

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| collected | value | VA FileMan date.time |
| comment | value | string |
| document \* | id | TIU DOCUMENT (#8925) ien |
|  | localTitle | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid | VUID number |
|  | content | word-processing text |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| groupName | value | accession number string |
| id | value | LAB DATA (#63) ien string |
| labOrderID | value | number |
| name | value | ACCESSION (#68) Area |
| pathologist | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200 Service/Section |
| resulted | value | VA FileMan date.time |
| sample | value | COLLECTION SAMPLE (#62) Name |
| specimen | code | TOPOGRAPHY (#61) SNOMED Code |
|  | name | TOPOGRAPHY (#61) Name |
| status | value | completed or incomplete |
| type | value | CH, MI, CY, EM, SP, or AU |
| value \* | id | LAB DATA (#63) file ien string |
|  | test | LAB TEST (#60) Name |
|  | result | string |
|  | interpretation | L, L\*, H, H\* or null |
|  | units | string |
|  | low | string |
|  | high | string |
|  | localName | LAB TEST (#60) Print Name |
|  | loinc | LOINC code |
|  | vuid | VUID number |
|  | order | ORDERS (#100) ien |
|  | performingLab | string |

\* = may be multiple

### Panels

Results can also be returned grouped by order or panel within an accession. Because Lab can purge its order information, results are found by first searching the ORDERS (#100) file then retrieving the associated results from the LAB DATA (#63) file.

Input parameters: TYPE "panels" [required]

[optional] START FileMan date to filter on date order released

STOP FileMan date to filter on date order released

MAX number of most recent orders to return

ID ORDERS (#100) file IEN

FILTER("type") desired ‘type’ code(s)

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| collected | value | VA FileMan date.time |
| comment | value | string |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| groupName | value | accession number string |
| id | value | ORDERS (#100) ien |
| labOrderID | value | ORDERS (#100) Package Reference string |
| name | value | LAB TEST (#60) Name |
| order | code | ORDERS (#100) ien |
|  | name | LAB TEST (#60) Name |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| resulted | value | VA FileMan date.time |
| sample | value | COLLECTION SAMPLE (#62) Name |
| specimen | code | TOPOGRAPHY (#61) SNOMED Code |
|  | name | TOPOGRAPHY (#61) Name |
| status | value | completed or incomplete |
| type | value | CH or MI |
| value \* | id | LAB DATA (#63) file ien string |
|  | test | LAB TEST (#60) Name |
|  | result | string |
|  | interpretation | L, L\*, H, H\* or null |
|  | units | string |
|  | low | string |
|  | high | string |
|  | localName | LAB TEST (#60) Print Name |
|  | loinc | LOINC code |
|  | vuid | VUID number |
|  | performingLab | string |

\* = may be multiple

## Orders (OR)

Most order views in CPRS include actions on orders as separate items; this extract will return only the current snapshot of each order found, unless the view requested is specific to actions (i.e., unsigned).

Input parameters: TYPE "orders" [required]

[optional] START VA FileMan date to filter on 'released' or ‘entered’

STOP VA FileMan date to filter on 'released' or ‘entered’

MAX number of most recent orders to return

ID ORDERS (#100) file ien string

FILTER("view") desired ‘view’ code, see ^ORQ1 for possible values

[default = 6 (Released Orders), sorted by ‘released’]

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| acknowledgement \* | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | date | VA FileMan date.time |
| codingSystem | code | string (national code) |
|  | name | CPT, NLT, or LNC |
| content |  | word-processing text |
| discontinued | date | VA FileMan date.time |
|  | by | NEW PERSON (#200) ien |
|  | byName | NEW PERSON (#200) Name |
|  | reason | string |
| entered | value | VA FileMan date.time |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| group | value | DISPLAY GROUP (#100.98) Short Name |
| id | value | ORDERS (#100) ien string |
| location | code | HOSPITAL LOCATION (#44) ien |
|  | name | HOSPITAL LOCATION (#44) Name |
| name | code | ORDERABLE ITEMS (#101.43) ien |
|  | name | ORDERABLE ITEMS (#101.43) Name |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| released | value | VA FileMan date.time |
| resultID | value | string (corresponds to ‘id’ in other domains) |
| service | value | PACKAGE (#9.4) Prefix |
| signatureStatus | value | ON CHART w/written orders, ELECTRONIC, NOT SIGNED, NOT REQUIRED, ON CHART w/printed orders, NOT REQUIRED due to cancel/lapse, SERVICE CORRECTION to signed order, DIGITALLY SIGNED, or ON PARENT order |
| signed | value | VA FileMan date.time |
| signer | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| start | value | VA FileMan date.time |
| status | code | ORDER STATUS (#100.01) Abbreviation |
|  | name | ORDER STATUS (#100.01) Name |
|  | vuid | ORDER STATUS (#100.01) VUID |
| stop | value | VA FileMan date.time |
| type | value | DISPLAY GROUP (#100.98) Mixed Name |
| vuid | value | VUID number |

\* = may be multiple

## Patient Care Encounter (PX)

### Exams

Input parameters: TYPE "exams" [required]

[optional] START VA FileMan date to filter on 'dateTime'

STOP VA FileMan date to filter on 'dateTime'

MAX number of most recent exams to return

ID V EXAM (#9000010.13) file ien

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| comment | value | string |
| dateTime | value | VA FileMan date.time |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | V EXAM (#9000010.13) ien |
| name | value | EXAM (#9999999.15) Name |
| result | value | string |

### Education Topics

Input parameters: TYPE "educationTopics" [required]

[optional] START VA FileMan date to filter on 'dateTime'

STOP VA FileMan date to filter on 'dateTime'

MAX number of most recent education instances to return

ID V PATIENT ED (#9000010.16) file ien

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| comment | value | string |
| dateTime | value | VA FileMan date.time |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | V PATIENT ED (#9000010.16) ien |
| name | value | EDUCATION TOPICS (#9999999.09) Name |
| result | value | string |

### Health Factors

Input parameters: TYPE "healthFactors" [required]

[optional] START VA FileMan date to filter on 'recorded'

STOP VA FileMan date to filter on 'recorded'

MAX number of most recent factors to return

ID V HEALTH FACTORS (#9000010.23) file ien

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| category | code | HEALTH FACTORS (#9999999.64) ien |
|  | name | HEALTH FACTORS (#9999999.64) Category |
| comment | value | string |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | V HEALTH FACTORS (#9000010.23) ien |
| name | value | HEALTH FACTORS (#9999999.64) Factor |
| recorded | value | VA FileMan date.time |
| severity | value | MINIMAL, MODERATE, or HEAVY/SEVERE |

### Immunizations

Input parameters: TYPE "immunizations" [required]

[optional] START VA FileMan date to filter on 'administered'

STOP VA FileMan date to filter on 'administered'

MAX Number of most recent immunizations to return

ID V IMMUNIZATION (#9000010.11) file ien

FILTER none

|  |  |  |
| --- | --- | --- |
| Elements | Attributes | Content |
| administered | value | VA FileMan date.time |
| bodySite | code | IMM ADMINISTRATION SITE (#920.3) HL7 Code |
|  | name | IMM ADMINISTRATION SITE (#920.3) Site |
| comment | value | string |
| contraindicated | value | boolean (1 or 0) |
| cpt | code | CPT Code |
|  | name | CPT Short Name |
| cvx | value | CVX Code |
| documentedBy | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
| dose | value | string |
| encounter | value | VISIT (#9000010) ien |
| expirationDate | value | VA FileMan date.time |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | V IMMUNIZATION (#9000010.11) ien |
| location | value | HOSPITAL LOCATION (#44) Name |
| lot | value | IMMUNIZATION LOT (#9999999.41) Lot Number |
| manufacturer | value | IMMUNIZATION LOT (#9999999.41) Manufacturer |
| name | value | IMMUNIZATION (#9999999.14) Name |
| orderingProvider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
| reaction | value | string |
| route | code | IMM ADMINISTRATION ROUTE (#920.2) HL7 Code |
|  | name | IMM ADMINISTRATION ROUTE (#920.2) Route |
| series | value | PARTIALLY COMPLETE, COMPLETE, BOOSTER, SERIES 1-8 |
| source | code | IMMUNIZATION INFO SOURCE (#920) HL7 Code |
|  | name | IMMUNIZATION INFO SOURCE (#920) Source |
| units | value | string |
| vis [m] | date | VA FileMan date |
|  | name | VACCINE INFORMATION STATEMENT (#920) Name |
|  | editionDate | VA FileMan date |
|  | language | string |

### Skin Tests

Input parameters: TYPE "skinTests" [required]

[optional] START VA FileMan date to filter on 'dateTime'

STOP VA FileMan date to filter on 'dateTime'

MAX Number of most recent skin tests to return

ID V SKIN TEST (#9000010.12) file ien

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| comment | value | string |
| dateTime | value | VA FileMan date.time |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | V SKIN TEST (#9000010.12) ien |
| name | value | SKIN TEST (#9999999.28) Name |
| result | value | string |

## Patient Record Flags (DGPF)

Input parameters: TYPE "flags" [required]

[optional] START none

STOP none

MAX none

ID DFN~PRF variable pointer string

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| approvedBy | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
| assigned | value | FileMan date.time |
| category | value | I (NATIONAL) or II (LOCAL) |
| content |  | word-processing text |
| document | code | TIU DOCUMENT (#8925) ien |
|  | name | TIU DOCUMENT DEFINITION (#8925.1) Name |
| id | value | DFN~PRF variable pointer string |
| name | value | PRF NATIONAL FLAG (#26.15) or PRF LOCAL FLAG (#26.11) Name |
| origSite | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| ownSite | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| reviewDue | value | VA FileMan date |
| type | value | PRF TYPE (#26.16) Name |

## Pharmacy (PS)

All meds may be requested by omitting any filters, but more commonly a single type of medications is pulled at a time, as shown in the following tables. The PS API sorts meds by expiration date and will include orders that expire on or after the START value but omit those that do not begin until after the STOP value. As each type is processed in sequence, use of MAX is discouraged with multiple types.

An alternate domain name is available for each med type that will instead run reverse-chronologically on the ORDERS (#100) file, filtering by the ‘ordered’ date without regard to medication type; thus, MAX may be safely used and return the most recent set of orders of the desired type(s). Set TYPE to “pharmacy” to use this method instead.

### Inpatient (Unit Dose) Medications

Input parameters: TYPE "meds" [required]

[optional] START VA FileMan date to filter on 'expires', chronologically

STOP VA FileMan date to filter on 'expires', chronologically

MAX number of most recent inpatient med orders to return

ID ORDERS (#100) file ien

FILTER("vaType") “**I**”

| **Elements** | **Attributes** |  | **Content** |
| --- | --- | --- | --- |
| currentProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| dose \* | dose |  | string |
|  | units |  | string |
|  | unitsPerDose |  | number |
|  | noun |  | string |
|  | route |  | MEDICATION ROUTES (#51.2) Abbreviation |
|  | schedule |  | ADMINISTRATION SCHEDULE (#51.1) Name |
|  | duration |  | string |
|  | conjunction |  | A, T, or E |
|  | doseStart |  | VA FileMan date.time |
|  | doseStop |  | VA FileMan date.time |
|  | order |  | ORDERS (#100) ien |
| facility | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| form | value |  | DOSAGE FORM (#50.606) Name |
| id | value |  | ORDERS (#100) ien |
| IMO | value |  | boolean (1 or 0) |
| location | code |  | HOSPITAL LOCATION (#44) ien |
|  | name |  | HOSPITAL LOCATION (#44) Name |
| medID | value |  | NON-VERIFIED ORDERS (#53.1) ien\_“P;I”, or UNIT DOSE ORDERS (#55.06) subfile ien\_“U;I” |
| name | value |  | PHARMACY ORDERABLE ITEM (#50.7) Name, Form |
| ordered | value |  | VA FileMan date.time |
| orderID | value |  | ORDERS (#100) ien |
| orderingProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| parent | value |  | ORDERS (#100) ien |
| pharmacist | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
| product \* | code |  | DRUG (#50) ien |
|  | name |  | DRUG (#50) Generic Name |
|  | role |  | D |
|  | concentration |  | string |
|  | order |  | ORDERS (#100) ien |
|  | class | code | VA DRUG CLASS (#50.605) Code |
|  |  | name | VA DRUG CLASS (#50.605) Classification |
|  |  | vuid | VA DRUG CLASS (#50.605) VUID |
|  | vaGeneric | code | VA GENERIC (#50.6) ien |
|  |  | name | VA GENERIC (#50.6) Name |
|  |  | vuid | VA GENERIC (#50.6) VUID |
|  | vaProduct | code | VA PRODUCT (#50.68) ien |
|  |  | name | VA PRODUCT (#50.68) Name |
|  |  | vuid | VA PRODUCT (#50.68) VUID |
| sig | value |  | string |
| start | value |  | VA FileMan date.time |
| status | value |  | active, hold, historical, or not active |
| stop | value |  | VA FileMan date.time |
| vaStatus | value |  | ORDER STATUS (#100.01) Name |
| vaType | value |  | I |

\* = may be multiple

### IV Fluids (Infusions)

Input parameters: TYPE "meds" [required]

[optional] START VA FileMan date to filter on 'expires', chronologically

STOP VA FileMan date to filter on 'expires', chronologically

MAX Number of most recent infusion orders to return

ID ORDERS (#100) file ien

FILTER("vaType") “**V**”

| **Elements** | **Attributes** |  | **Content** |
| --- | --- | --- | --- |
| currentProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| dose \* | route |  | MEDICATION ROUTES (#51.2) Abbreviation |
|  | schedule |  | Administration Schedule #51.1 Name |
| facility | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| id | value |  | ORDERS (#100) ien |
| ivLimit | value |  | string |
| location | code |  | HOSPITAL LOCATION (#44) ien |
|  | name |  | HOSPITAL LOCATION (#44) Name |
| medID | value |  | NON-VERIFIED ORDERS (#53.1) ien\_“P;I”, or IV ORDERS (#55.01) subfile ien\_“V;I” |
| name | value |  | Pharmacy Orderable Item #50.7 Name, Form |
| ordered | value |  | VA FileMan date.time |
| orderID | value |  | ORDERS (#100) ien |
| orderingProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| pharmacist | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
| product \* | code |  | DRUG (#50) ien |
|  | name |  | DRUG (#50) Generic Name |
|  | role |  | A or B |
|  | concentration |  | string |
|  | class | code | VA DRUG CLASS (#50.605) Code |
|  |  | name | VA DRUG CLASS (#50.605) Classification |
|  |  | vuid | VA DRUG CLASS (#50.605) VUID |
|  | ordItem | code | PHARMACY ORDERABLE ITEM (#50.7) ien |
|  |  | name | PHARMACY ORDERABLE ITEM (#50.7) Name, Form |
|  | vaGeneric | code | VA GENERIC (#50.6) ien |
|  |  | name | VA GENERIC (#50.6) Name |
|  |  | vuid | VA GENERIC (#50.6) VUID |
|  | vaProduct | code | VA PRODUCT (#50.68) ien |
|  |  | name | VA PRODUCT (#50.68) Name |
|  |  | vuid | VA PRODUCT (#50.68) VUID |
| rate | value |  | string |
| start | value |  | VA FileMan date.time |
| status | value |  | active, hold, historical, or not active |
| stop | value |  | VA FileMan date.time |
| vaStatus | value |  | ORDER STATUS (#100.01) Name |
| vaType | value |  | V |

\* = may be multiple

### Outpatient Medications

Input parameters: TYPE "meds" [required]

[optional] START VA FileMan date to filter on 'expires', chronologically

STOP VA FileMan date to filter on 'expires', chronologically

MAX Number of most recent outpatient med orders to return

ID ORDERS (#100) file ien

FILTER("vaType") “**O**”

| **Elements** | **Attributes** |  | **Content** |
| --- | --- | --- | --- |
| currentProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| daysSupply | value |  | number |
| dose \* | dose |  | string |
|  | units |  | string |
|  | unitsPerDose |  | number |
|  | noun |  | string |
|  | route |  | MEDICATION ROUTES (#51.2) Abbreviation |
|  | schedule |  | ADMINISTRATION SCHEDULE (#51.1) Name |
|  | duration |  | string |
|  | conjunction |  | A, T, or E |
|  | doseStart |  | VA FileMan date.time |
|  | doseStop |  | VA FileMan date.time |
| expires | value |  | VA FileMan date |
| facility | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| fill \* | fillDate |  | VA FileMan date |
|  | fillRouting |  | W, M, or C |
|  | releaseDate |  | VA FileMan date |
|  | fillQuantity |  | number |
|  | fillDaysSupply |  | number |
|  | partial |  | boolean (1 or 0) |
| fillCost | value |  | number |
| fillsAllowed | value |  | number |
| fillsRemaining | value |  | number |
| form | value |  | DOSAGE FORM (#50.606) Name |
| id | value |  | ORDERS (#100) ien |
| lastFilled | value |  | VA FileMan date.time |
| location | code |  | HOSPITAL LOCATION (#44) ien |
|  | name |  | HOSPITAL LOCATION (#44) Name |
| medID | value |  | PENDING OUTPATIENT ORDERS (#52.41) ien\_“P;O”, or PRESCRIPTION (#52) file ien\_“R;O” |
| name | value |  | PHARMACY ORDERABLE ITEM (#50.7) Name, Form |
| ordered | value |  | VA FileMan date.time |
| orderID | value |  | ORDERS (#100) ien |
| orderingProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| pharmacist | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
| prescription | value |  | string |
| product \* | code |  | DRUG (#50) ien |
|  | name |  | DRUG (#50) Generic Name |
|  | role |  | D |
|  | concentration |  | string |
|  | class | code | VA DRUG CLASS (#50.605) Code |
|  |  | name | VA DRUG CLASS (#50.605) Classification |
|  |  | vuid | VA DRUG CLASS (#50.605) VUID |
|  | vaGeneric | code | VA GENERIC (#50.6) ien |
|  |  | name | VA GENERIC (#50.6) Name |
|  |  | vuid | VA GENERIC (#50.6) VUID |
|  | vaProduct | code | VA PRODUCT (#50.68) ien |
|  |  | name | VA PRODUCT (#50.68) Name |
|  |  | vuid | VA PRODUCT (#50.68) VUID |
| ptInstructions | value |  | string |
| quantity | value |  | number |
| routing | value |  | W, M, or C |
| sig | value |  | string |
| start | value |  | VA FileMan date.time |
| status | value |  | active, hold, historical, or not active |
| stop | value |  | VA FileMan date.time |
| supply | value |  | boolean (1 or 0) |
| type | value |  | Prescription |
| vaStatus | value |  | ORDER STATUS (#100.01) Name |
| vaType | value |  | O |

\* = may be multiple

### Non-VA Medications

Input parameters: TYPE "meds" [required]

[optional] START VA FileMan date to filter on 'expires', chronologically

STOP VA FileMan date to filter on 'expires', chronologically

MAX Number of most recent non-VA med orders to return

ID ORDERS (#100) file ien

FILTER("vaType") “**N**”

| **Elements** | **Attributes** |  | **Content** |
| --- | --- | --- | --- |
| currentProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| dose [m] | dose |  | string |
|  | units |  | string |
|  | unitsPerDose |  | number |
|  | noun |  | string |
|  | route |  | MEDICATION ROUTES (#51.2) Abbreviation |
|  | schedule |  | ADMINISTRATION SCHEDULE (#51.1) Name |
| facility | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| form | value |  | DOSAGE FORM (#50.606) Name |
| id | value |  | ORDERS (#100) ien |
| location | code |  | HOSPITAL LOCATION (#44) ien |
|  | name |  | HOSPITAL LOCATION (#44) Name |
| medID | value |  | NON-VA MED ORDERS (#55.05) subfile ien\_“N;O” |
| name | value |  | PHARMACY ORDERABLE ITEM (#50.7) Name, Form |
| ordered | value |  | VA FileMan date.time |
| orderID | value |  | ORDERS (#100) ien |
| orderingProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| product [m] | code |  | DRUG (#50) ien |
|  | name |  | DRUG (#50) Generic Name |
|  | role |  | D |
|  | concentration |  | string |
|  | class | code | VA DRUG CLASS (#50.605) Code |
|  |  | name | VA DRUG CLASS (#50.605) Classification |
|  |  | vuid | VA DRUG CLASS (#50.605) VUID |
|  | vaGeneric | code | VA GENERIC (#50.6) ien |
|  |  | name | VA GENERIC (#50.6) Name |
|  |  | vuid | VA GENERIC (#50.6) VUID |
|  | vaProduct | code | VA PRODUCT (#50.68) ien |
|  |  | name | VA PRODUCT (#50.68) Name |
|  |  | vuid | VA PRODUCT (#50.68) VUID |
| sig |  |  | string |
| start |  |  | VA FileMan date.time |
| status |  |  | active, hold, historical, or not active |
| stop |  |  | VA FileMan date.time |
| type |  |  | OTC |
| vaStatus |  |  | ORDER STATUS (#100.01) Name |
| vaType |  |  | N |

\* = may be multiple

## Problem List (GMPL)

Input parameters: TYPE "problems" [required]

[optional] START VA FileMan date to filter on 'onset'

STOP VA FileMan date to filter on 'onset'

MAX Use *not recommended*, as problems are *not* sorted

ID Problem file #9000011 ien

FILTER("status") desired ‘status’ code

| **Element** | **Attributes** | **Content** |
| --- | --- | --- |
| acuity | code | A or C |
|  | name | ACUTE or CHRONIC |
| codingSystem | value | ICD or 10D |
| comment | id | number |
|  | enteredBy | NEW PERSON (#200) Name |
|  | entered | VA FileMan date |
|  | commentText | string |
| entered | value | date |
| exposure \* | value | AO, IR,PG,HNC,MST,CV,or SHAD |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| icd | value | ICD code |
| icdd | value | ICD Description |
| id | value | PROBLEM (#9000011) ien |
| location | value | HOSPITAL LOCATION (#44) name |
| name | value | PROVIDER NARRATIVE (#9999999.27) Narrative |
| onset | value | VA FileMan date |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
| removed | value | boolean (1 or 0) |
| resolved | value | VA FileMan date |
| sc | value | boolean (1 or 0) |
| sctc | value | SNOMED Concept Code |
| sctd | value | SNOMED Designation Code |
| sctt | value | SNOMED Preferred Text |
| service | value | SERVICE (#49) Name |
| status | code | A or I |
|  | name | ACTIVE or INACTIVE |
| unverified | value | boolean (1 or 0) |
| updated | value | VA FileMan date |

\* = may be multiple

## Radiology/Nuclear Medicine (RA)

Input parameters: TYPE "radiologyExams" [required]

[optional] START VA FileMan date to filter on 'dateTime'

STOP VA FileMan date to filter on 'dateTime'

MAX Number of most recent exams to return

ID EXAMINATIONS (#70.03) sub-file ien string

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| case | value | number |
| category | value | RA |
| dateTime | value | VA FileMan date.time |
| document \* | id | TIU DOCUMENT (#8925) ien |
|  | localTitle | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid | VUID number |
|  | status | Verified, Released/NotVerified, or Electronically Filed |
|  | content | word-processing text |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| hasImages | value | boolean (1 or 0) |
| id | value | EXAMINATIONS (#70.03) subfile ien string |
| imagingType | code | IMAGING TYPE (#79.2) Abbreviation |
|  | name | IMAGING TYPE (#79.2) Type of Imaging |
| interpretation | value | string |
| location | code | HOSPITAL LOCATION (#44) ien |
|  | name | HOSPITAL LOCATION (#44) name |
| modifier \* | code | CPT Modifier |
|  | name | CPT Modifier Name |
| name | value | RAD/NUC MED PROCEDURES (#71) Name |
| order | code | ORDERS (#100) ien |
|  | name | ORDERABLE ITEMS (#101.43) Name |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| radOrderID | value | RAD/NUC MED ORDERS (#75.1) ien |
| status | value | COMPLETE, CANCELLED, EXAMINED, WAITING FOR EXAM, or CALLED FOR EXAM |
| type | code | CPT Code |
|  | name | CPT Description |
| urgency | value | STAT, ASAP, or ROUTINE |

\* = may be multiple

## Registration (DPT)

Input parameters: TYPE "demographics" [required]

[optional] START none

STOP none

MAX none

ID PATIENT (#2) file ien

FILTER none

| **Elements** | **Attributes** |  | **Content** |
| --- | --- | --- | --- |
| address | streetLine1 |  | string |
|  | streetLine2 |  | string |
|  | streetLine3 |  | string |
|  | city |  | string |
|  | stateProvince |  | STATE (#5) Name |
|  | postalCode |  | string |
| admitted | id |  | PATIENT MOVEMENT (#405) ien |
|  | date |  | PATIENT MOVEMENT (#405) Date/Time |
| alias \* | fullName |  | string |
|  | familyName |  | string |
|  | givenNames |  | string |
| attending | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
| bid | value |  | String |
| died | value |  | VA FileMan date |
| disability \* | printName |  | DISABILITY CONDITION (#31) Name |
|  | scPercent |  | number |
|  | sc |  | boolean (1 or 0) |
| dob | value |  | VA FileMan date |
| eligibility \* | name |  | ELIGIBILITY (#8) Name |
|  | primary |  | boolean (1 or 0) |
| eligibilityStatus | value |  | PENDING [RE]VERIFICATION or VERIFIED |
| ethnicity \* | value |  | ETHNICITY (#10.2) HL7 Value |
| exposure \* | value |  | AO, IR, PG, HNC, MST, or CV |
| facility \* | id |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
|  | latestDate |  | VA FileMan date.time |
|  | domain |  | DOMAIN (#4.2) Name |
|  | homeSite |  | boolean (1 or 0) |
| familyName | value |  | string |
| flag \* | name |  | PRF NATIONAL FLAG (#26.15) or PRF LOCAL FLAG (#26.11) Name |
|  | text |  | string |
| fullName | value |  | string |
| gender | value |  | M, F, or UN |
| givenNames | value |  | string |
| icn | value |  | ICN number |
| id | value |  | PATIENT (#2) ien |
| inpatient | value |  | boolean (1 or 0) |
| language | code |  | ISO 639 2-character language code |
|  | name |  | string |
| location | code |  | HOSPITAL LOCATION (#44) ien |
|  | name |  | HOSPITAL LOCATION (#44) Name |
| locSvc | code |  | M, S, P, NH, NE, I, R, SCI, D, B, or NC |
|  | name |  | MEDICINE, SURGERY, PSYCHIATRY, NHCU, NEUROLOGY, INTERMEDIATE MED, REHAB MEDICINE, SPINAL CORD INJURY, DOMICILIARY, BLIND REHAB, or NON-COUNT |
| lrdfn | value |  | number |
| maritalStatus | value |  | D, M, W, S, N, or U |
| meansTest | value |  | MEANS TEST STATUS (#408.32) Name |
| pcAssigned | value |  | VA FileMan date |
| pcProvider | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
|  | address | streetLine1 | string |
|  |  | streetLine2 | string |
|  |  | streetLine3 | string |
|  |  | city | string |
|  |  | stateProvince | STATE (#5) Name |
|  |  | postalCode | string |
| pcTeam | code |  | TEAM (#404.51) ien |
|  | name |  | TEAM (#404.51) Name |
| pcTeamMember | code |  | NEW PERSON (#200) ien |
|  | name |  | NEW PERSON (#200) Name |
|  | officePhone |  | NEW PERSON (#200) Office Phone |
|  | analogPager |  | NEW PERSON (#200) Voice Pager |
|  | fax |  | NEW PERSON (#200) Fax Number |
|  | email |  | NEW PERSON (#200) Email Address |
|  | taxonomyCode |  | PERSON CLASS (#8932.1) X12 Code |
|  | providerType |  | PERSON CLASS (#8932.1) Provider Type |
|  | classification |  | PERSON CLASS (#8932.1) Classification |
|  | specialization |  | PERSON CLASS (#8932.1) Area of Specialization |
|  | service |  | NEW PERSON (#200) Service/Section |
| race \* | value |  | RACE (#10) HL7 Value |
| religion | value |  | RELIGIOUS PREFERENCE (#13) Name |
| roomBed | value |  | string |
| sc | value |  | boolean (1 or 0) |
| scPercent | value |  | number |
| sensitive | value |  | boolean (1 or 0) |
| servicePeriod | value |  | PERIOD OF SERVICE (#21) Name |
| site | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| specialty | code |  | FACILITY TREATING SPECIALTY (#45.7) ien |
|  | name |  | FACILITY TREATING SPECIALTY (#45.7) Name |
| ssn | value |  | string |
| support \* | contactType |  | NOK or ECON |
|  | name |  | string |
|  | relationship |  | string |
|  | address | streetLine1 | string |
|  |  | streetLine2 | string |
|  |  | streetLine3 | string |
|  |  | city | string |
|  |  | stateProvince | STATE (#5) Name |
|  |  | postalCode | string |
|  | telecom | usageType | H, MC, or WP |
|  |  | value | string |
| telecom | usageType |  | H, MC, or WP |
|  | value |  | string |
| veteran | value |  | boolean (1 or 0) |
| ward | code |  | WARD LOCATION (#42) ien |
|  | name |  | WARD LOCATION (#42) Name |

\* = may be multiple

## Scheduling (SDAM)

The Scheduling API sorts appointments by dateTime chronologically; while past appointments are available, the default view is to extract a patient’s future appointments.

Input parameters: TYPE "appointments" [required]

[optional] START VA FileMan date to filter on 'dateTime' [default = TODAY]

STOP VA FileMan date to filter on 'dateTime' [default = all future]

MAX Number of [future] appointments to return

ID Inverse visit string (“**servCatg;date.time;locationIEN**”)

FILTER none

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| apptStatus | value | SCHEDULED/KEPT, INPATIENT, NO-SHOW, CANCELLED BY PATIENT, CANCELLED BY CLINIC, RESCHEDULED, NO ACTION TAKEN |
| clinicStop | code | CLINIC STOP (#40.7) AMIS Stop Code |
|  | name | CLINIC STOP (#40.7)7 Name |
| dateTime | value | VA FileMan date.time |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | serviceCategory code;dateTime;HOSPITAL LOCATION (#44) ien |
| location | value | HOSPITAL LOCATION (#44) Name |
| patientClass | value | AMB, IMP, or EMER |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
| service | value | MEDICINE, SURGERY, PSYCHIATRY, NHCU, NEUROLOGY, INTERMEDIATE MED, REHAB MEDICINE, SPINAL CORD INJURY, DOMICILIARY, BLIND REHAB, or RESPITE CARE |
| serviceCategory | code | A, I, or H |
|  | name | AMBULATORY, INPATIENT VISIT, or HOSPITALIZATION |
| type | code | APPOINTMENT TYPE (#409.1) ien |
|  | name | APPOINTMENT TYPE (#409.1) Name |
| visitString | value | HOSPITAL LOCATION (#44) ien;dateTime; serviceCategory code |

## Surgery (SR)

Input parameters: TYPE "surgeries" [required]

[optional] START VA FileMan date to filter on 'dateTime'

STOP VA FileMan date to filter on 'dateTime'

MAX number of most recent surgical procedures to return

ID SURGERY (#130) file ien

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| category | value | SR |
| dateTime | value | VA FileMan date |
| document \* | id | TIU DOCUMENT (#8925) ien |
|  | localTitle | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid | VUID number |
|  | content | word-processing text |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | SURGERY (#130) ien |
| modifier \* | code | CPT Modifier |
|  | name | CPT Modifier Name |
| name | value | string |
| opReport | id | TIU DOCUMENT (#8925) ien |
|  | localTitle | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid | VUID number |
| otherProcedure \* | code | CPT Code |
|  | name | CPT Description |
| provider | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| status | value | COMPLETED or ABORTED |
| type | code | CPT Code |
|  | name | CPT Description |

## Text Integration Utilities (TIU)

Input parameters: TYPE "documents" [required]

[optional] START VA FileMan date to filter on 'referenceDateTime'

STOP VA FileMan date to filter on 'referenceDateTime'

MAX Number of most recent documents to return

ID TIU DOCUMENTS (#8925) file ien

FILTER("category") desired ‘category’ code

FILTER(“status”) “completed”, “unsigned”, or “all” (for current user)

FILTER(“loinc”) LOINC code (see list below table)

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| category | value | PN, DS, CR, CP, SR, RA, LR, C, W, A, or D |
| clinician [m] | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | role | A, S, or C |
|  | dateTime | VA FileMan date.time |
|  | signatureBlock | string |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| content |  | word-processing text |
| documentClass | value | TIU DOCUMENT DEFINITION (#8925.1) Name |
| encounter | value | VISIT (#9000010) ien |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| id | value | TIU DOCUMENTS (#8925) ien |
| images | value | number |
| localTitle | value | TIU DOCUMENT DEFINITION (#8925.1) Name |
| loinc | value | LOINC code |
| nationalTitle | code | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) VUID |
|  | name | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
| nationalTitleRole | code | TIU LOINC ROLE (#8926.3) VUID |
|  | name | TIU LOINC ROLE (#8926.3) Role |
| nationalTitleService | code | TIU LOINC SERVICE (#8926.5) VUID |
|  | name | TIU LOINC SERVICE (#8926.5) Service |
| nationalTitleSetting | code | TIU LOINC SETTING (#8926.4) VUID |
|  | name | TIU LOINC SETTING (#8926.4) Setting |
| nationalTitleSubject | code | TIU LOINC SUBJ MATTER DOMN (#8926.2) VUID |
|  | name | TIU LOINC SUBJECT MATTER DOMAIN (#8926.2) |
| nationalTitleType | code | TIU LOINC DOCUMENT TYPE (#8926.6) VUID |
|  | name | TIU LOINC DOCUMENT TYPE (#8926.6) Doc Type |
| parent | value | TIU DOCUMENTS (#8925) ien |
| referenceDateTime | value | VA FileMan date.time |
| status | value | TIU STATUS (#8925.6) Name, in lowercase |
| subject | value | string |

LOINC codes currently in use with VLER:

11488-4 Consultation Note

18726-0 Radiology Studies

18842-5 Discharge Summarization Note

26441-6 Cardiology Studies

27895-2 Gastroenterology Endoscopy Studies

27896-0 Pulmonary Studies

27897-8 Neuromuscular Electrophysiology Studies

27898-6 Pathology Studies

28570-0 Procedure Note (unspecified)

28619-5 Ophthalmology Studies

28634-4 Miscellaneous Studies

29752-3 Perioperative Records

34117-2 History & Physical Note

Because there is no direct link in VistA between the TIU titles and LOINC codes, the above list of codes has been manually mapped to existing TIU search capabilities. The ‘loinc’ attribute will only be returned when a group of documents is requested using the loinc filter and will be the same value passed into the extract.

## Visits/PCE (PX)

Input parameters: TYPE "visits" [required]

[optional] START VA FileMan date to filter on 'dateTime'

STOP VA FileMan date to filter on 'dateTime'

MAX Number of most recent visits to return

ID VISIT (#9000010) file ien

FILTER(“text”) **1** or **0**, to include ‘content’ text of report

| **Elements** | **Attributes** | **Content** |
| --- | --- | --- |
| cpt \* | code | CPT Code |
|  | name | CPT Short Name |
| creditStopCode | code | CLINIC STOP (#40.7) AMIS Stop Code |
|  | name | CLINIC STOP (#40.7) Name |
| dateTime | value | VA FileMan date.time |
| document \* | id | TIU DOCUMENT (#8925) ien |
|  | localTitle | TIU DOCUMENT DEFINITION (#8925.1) Name |
|  | nationalTitle | TIU VHA ENTERPRISE STANDARD TITLE (#8926.1) |
|  | vuid | VUID number |
|  | content | word-processing text |
| facility | code | INSTITUTION (#4) Station Number |
|  | name | INSTITUTION (#4) Name |
| icd \* | code | ICD Code |
|  | name | ICD Description |
|  | system | ICD or 10D |
|  | narrative | V POV (#9000010.07) Provider Narrative |
|  | ranking | P or S |
| id | value | VISIT (#9000010) ien |
| location | value | HOSPITAL LOCATION (#44) Name |
| patientClass | value | AMB, IMP, or EMER |
| provider \* | code | NEW PERSON (#200) ien |
|  | name | NEW PERSON (#200) Name |
|  | role | P, S, or A |
|  | primary | boolean (1 or 0) |
|  | officePhone | NEW PERSON (#200) Office Phone |
|  | analogPager | NEW PERSON (#200) Voice Pager |
|  | fax | NEW PERSON (#200) Fax Number |
|  | email | NEW PERSON (#200) Email Address |
|  | taxonomyCode | PERSON CLASS (#8932.1) X12 Code |
|  | providerType | PERSON CLASS (#8932.1) Provider Type |
|  | classification | PERSON CLASS (#8932.1) Classification |
|  | specialization | PERSON CLASS (#8932.1) Area of Specialization |
|  | service | NEW PERSON (#200) Service/Section |
| reason | code | ICD Code |
|  | name | ICD Description |
|  | system | ICD or 10D |
|  | narrative | V POV (#9000010.07) Provider Narrative |
| service | value | MEDICINE, SURGERY, PSYCHIATRY, NHCU, NEUROLOGY, INTERMEDIATE MED, REHAB MEDICINE, SPINAL CORD INJURY, DOMICILIARY, BLIND REHAB, or RESPITE CARE |
| serviceCategory | code | A, H, I, C, N, T, S, O, E, R, D, or X |
|  | name | AMBULATORY, HOSPITALIZATION, IN HOSPITAL, CHART REVIEW, NOT FOUND,  TELECOMMUNICATIONS, DAY SURGERY, OBSERVATION, EVENT (HISTORICAL), NURSING HOME, DAILY HOSPITALIZATION DATA, ANCILLARY PACKAGE DAILY DATA |
| stopCode | code | CLINIC STOP (#40.7) AMIS Stop Code |
|  | name | CLINIC STOP (#40.7) Name |
| type | code | CPT Code |
|  | name | CPT Short Name |
| visitString | value | HOSPITAL LOCATION (#44) ien;dateTime; serviceCategory code |
|  |  |  |
| Included with admissions: |  |  |
| admission |  | PATIENT MOVEMENT (#405) ien |
| arrivalDateTime |  | VA FileMan date.time |
| departureDateTime |  | VA FileMan date.time |
| ptf |  | PTF (#45) ien |
| roomBed |  | string |
| specialty |  | FACILITY TREATING SPECIALTY (#45.7) Name |

\* = may be multiple

## Vital Measurements (GMV)

Input parameters: TYPE "vitals" [required]

[optional] START VA FileMan date to filter on 'taken'

STOP VA FileMan date to filter on 'taken'

MAX Number of measurement sets to return (by ‘taken’)

ID GMRV VITAL MEASUREMENT (#120.5) file ien, or

VA FileMan date.time to match ‘taken’ & return the set

FILTER none

| **Elements** | **Attributes** |  | **Content** |
| --- | --- | --- | --- |
| entered | value |  | VA FileMan date.time |
| facility | code |  | INSTITUTION (#4) Station Number |
|  | name |  | INSTITUTION (#4) Name |
| location | code |  | HOSPITAL LOCATION (#44) ien |
|  | name |  | HOSPITAL LOCATION (#44) Name |
| measurement \* | id |  | GMRV VITAL MEASUREMENT (#120.5) ien |
|  | vuid |  | VUID number |
|  | name |  | GMRV VITAL TYPE (#120.51) Name |
|  | value |  | string |
|  | units |  | string |
|  | metricValue |  | number |
|  | metricUnits |  | C, cm, or kg |
|  | high |  | number |
|  | low |  | number |
|  | bmi |  | number |
|  | qualifier \* | name | GMRV VITAL QUALIFIER (#120.52) Qualifier |
|  |  | vuid | GMRV VITAL QUALIFIER (#120.52) VUID |
| removed \* | value |  | INCORRECT DATE/TIME, INCORRECT READING, INCORRECT PATIENT, INVALID RECORD |
| taken | value |  | VA FileMan date.time |

\* = may be multiple

# Appendix B—JSON Tables

Following are tables that list the data elements returned by the VPR GET PATIENT DATA JSON RPC. All input parameters are optional to refine the extract, except for domain, and are passed in as list subscripts, i.e. FILTER(“parameter”)=value. All searches are performed reverse-chronologically to return the most recent data, unless otherwise noted.

## Allergy/Adverse Reaction Tracking (GMRA)

Input parameters: domain "allergy" [required]

[optional] start VA FileMan date to filter on ‘entered’

stop VA FileMan date to filter on ‘entered’

max Use *not recommended*, as reactions are *not* sorted

id Patient Allergies file #120.8 ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| entered |  |
| facilityCode |  |
| facilityName |  |
| historical |  |
| kind |  |
| localId |  |
| products | name |
|  | vuid |
| reactions \* | name |
|  | vuid |
| reference |  |
| removed |  |
| summary |  |
| uid |  |
| verified |  |

\* = may be multiple

## Clinical Observations (MDC)

Input parameters: domain "obs" [required]

[optional] start VA FileMan date to filter on ‘observed’

stop VA FileMan date to filter on 'observed'

max Use with caution, as search is performed chronologically

id OBS (#704.117) file ID (#.01) value

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| bodySiteCode |  |
| bodySiteName |  |
| comment |  |
| entered |  |
| facilityCode |  |
| facilityName |  |
| interpretationCode |  |
| interpretationName |  |
| localId |  |
| locationName |  |
| locationUid |  |
| methodCode |  |
| methodName |  |
| observed |  |
| qualifiers \* | code |
|  | name |
|  | type |
| result |  |
| setID |  |
| setName |  |
| setStart |  |
| setStop |  |
| setType |  |
| statusCode |  |
| statusName |  |
| typeCode |  |
| typeName |  |
| uid |  |
| units |  |

## Clinical Procedures (MDC)

Input parameters: domain "procedure" [required]

[optional] start VA FileMan date to filter on ‘dateTime’

stop VA FileMan date to filter on dateTime

max Number of most recent procedures to return

id Variable pointer to CP data file/item

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| category |  |
| consultUid |  |
| dateTime |  |
| encounterUid |  |
| facilityCode |  |
| facilityName |  |
| hasImages |  |
| interpretation |  |
| kind |  |
| localId |  |
| name |  |
| orderUid |  |
| providers | providerName |
|  | providerUid |
| requested |  |
| results \* | localTitle |
|  | nationalTitle |
|  | uid |
| statusName |  |
| uid |  |

\* = may be multiple

## Consult/Request Tracking (GMRC)

Input parameters: domain "consult" [required]

[optional] start VA FileMan date to filter on 'dateTime'

stop VA FileMan date to filter on 'dateTime'

max Number of most recent consult requests to return

id REQUEST/CONSULTATION (#123) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| category |  |
| consultProcedure |  |
| dateTime |  |
| facilityCode |  |
| facilityName |  |
| interpretation |  |
| localId |  |
| orderName |  |
| orderUid |  |
| providerName |  |
| providerUid |  |
| provisionalDx | code |
|  | name |
|  | system |
| reason |  |
| results \* | localTitle |
|  | nationalTitle |
|  | uid |
| service |  |
| statusName |  |
| typeName |  |
| uid |  |
| urgency |  |

\* = may be multiple

## Laboratory (LR)

Input parameters: domain "lab" [required]

[optional] start VA FileMan date to filter on 'observed'

stop VA FileMan date to filter on 'observed'

max Number of most recent accessions to return

id LAB DATA (#63) file ien string

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

category CH, MI, or AP [default = all]

| **Elements** | **Attributes** |  |
| --- | --- | --- |
| bactRemarks |  |  |
| categoryCode |  |  |
| categoryName |  |  |
| comment |  |  |
| displayName |  |  |
| facilityCode |  |  |
| facilityName |  |  |
| gramStain \* | result |  |
| groupName |  |  |
| groupUid |  |  |
| high |  |  |
| interpretationCode |  |  |
| interpretationName |  |  |
| labOrderId |  |  |
| localId |  |  |
| low |  |  |
| observed |  |  |
| orderUid |  |  |
| organisms \* | drugs | interp |
|  |  | name |
|  |  | restrict |
|  |  | result |
|  | name |  |
|  | qty |  |
| organizerType |  |  |
| result |  |  |
| resulted |  |  |
| results \* | localTitle |  |
|  | nationalTitle |  |
|  | resultUid |  |
|  | uid |  |
| sample |  |  |
| specimen |  |  |
| statusCode |  |  |
| statusName |  |  |
| typeCode |  |  |
| typeId |  |  |
| typeName |  |  |
| uid |  |  |
| units |  |  |
| urineScreen |  |  |

\* = may be multiple

## Orders (OR)

Input parameters: domain "order" [required]

[optional] start VA FileMan date to filter on date released

stop VA FileMan date to filter on date released

max Number of most recent orders to return

id ORDERS (#100) file ien string

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| adminTimes |  |
| clinicians \* | name |
|  | role |
|  | signedDateTime |
|  | uid |
| content |  |
| displayGroup |  |
| entered |  |
| facilityCode |  |
| facilityName |  |
| localId |  |
| locationName |  |
| locationUid |  |
| name |  |
| oiCode |  |
| oiName |  |
| oiPackageRef |  |
| predecessor |  |
| providerName |  |
| providerUid |  |
| results \* | uid |
| scheduleName |  |
| service |  |
| start |  |
| statusCode |  |
| statusName |  |
| statusVuid |  |
| stop |  |
| successor |  |
| uid |  |

\* = may be multiple

## Patient Care Encounter (PX)

### CPT Procedures

Input parameters: domain "cpt" [required]

[optional] start VA FileMan date to filter on 'entered'

stop VA FileMan date to filter on 'entered'

max number of most recent procedures to return

id V CPT (#9000010.18) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| comment |
| cptCode |
| encounterName |
| encounterUid |
| entered |
| facilityCode |
| facilityName |
| localId |
| locationName |
| locationUid |
| name |
| quantity |
| type |
| uid |

### Exams

Input parameters: domain "exam" [required]

[optional] start VA FileMan date to filter on 'entered'

stop VA FileMan date to filter on 'entered'

max Number of most recent exams to return

id V EXAM (#9000010.13) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| comment |
| encounterName |
| encounterUid |
| entered |
| facilityCode |
| facilityName |
| localId |
| locationName |
| locationUid |
| name |
| result |
| uid |

### Education Topics

Input parameters: domain "education" [required]

[optional] start VA FileMan date to filter on 'entered'

stop VA FileMan date to filter on 'entered'

max Number of most recent education instances to return

id V PATIENT ED (#9000010.16) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| comment |
| encounterName |
| encounterUid |
| entered |
| facilityCode |
| facilityName |
| localId |
| locationName |
| locationUid |
| name |
| result |
| uid |

### Health Factors

Input parameters: domain "factor" [required]

[optional] start VA FileMan date to filter on 'entered'

stop VA FileMan date to filter on 'entered'

max Number of most recent factors to return

id V HEALTH FACTORS (#9000010.23) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| categoryName |
| categoryUid |
| comment |
| display |
| encounterName |
| encounterUid |
| entered |
| facilityCode |
| facilityName |
| kind |
| localId |
| locationName |
| locationUid |
| name |
| severityName |
| severityUid |
| summary |
| uid |

### Immunizations

Input parameters: domain "immunization" [required]

[optional] start VA FileMan date to filter on 'administeredDateTime'

stop VA FileMan date to filter on 'administeredDateTime'

max Number of most recent immunizations to return

id V IMMUNIZATION (#9000010.11) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| administeredDateTime |
| comment |
| contraindicated |
| cptCode |
| cptName |
| encounterName |
| encounterUid |
| facilityCode |
| facilityName |
| localId |
| locationName |
| locationUid |
| name |
| performerName |
| performerUid |
| reactionCode |
| reactionName |
| seriesCode |
| seriesName |
| summary |
| uid |

### Purpose of Visit

Input parameters: domain "pov" [required]

[optional] start VA FileMan date to filter on 'entered'

stop VA FileMan date to filter on 'entered'

max Number of most recent reasons to return

id V POV (#9000010.07) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| comment |
| encounterName |
| encounterUid |
| entered |
| facilityCode |
| facilityName |
| icdCode |
| localId |
| locationName |
| locationUid |
| name |
| type |
| uid |

### Skin Tests

Input parameters: domain "skin" [required]

[optional] start VA FileMan date to filter on 'entered'

stop VA FileMan date to filter on 'entered'

max Number of most recent exams to return

id V SKIN TEST (#9000010.12) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| comment |
| dateRead |
| encounterName |
| encounterUid |
| entered |
| facilityCode |
| facilityName |
| localId |
| locationName |
| locationUid |
| name |
| reading |
| result |
| uid |

## Pharmacy (PS)

### Medications

Input parameters: domain "med" [required]

[optional] start VA FileMan date to filter on date released

stop VA FileMan date to filter on date released

max number of most recent med orders to return

id ORDERS (#100) file ien

vaType I, O, or N

| **Elements** | **Attributes** |
| --- | --- |
| administrations \* | dateTime |
|  | status |
| comment |  |
| dosages \* | adminTimes |
|  | complexConjunction |
|  | complexDuration |
|  | dose |
|  | relatedOrder |
|  | relativeStart |
|  | relativeStop |
|  | routeName |
|  | scheduleFreq |
|  | scheduleName |
|  | scheduleType |
|  | start |
|  | stop |
|  | units |
| facilityCode |  |
| facilityName |  |
| fills \* | daysSupplyDispensed |
|  | dispenseDate |
|  | partial |
|  | releaseDate |
|  | routing |
|  | quantityDispensed |
| IMO |  |
| lastFilled |  |
| localId |  |
| medStatus |  |
| medStatusName |  |
| medType |  |
| name |  |
| orders | daysSupply |
|  | fillCost |
|  | fillsAllowed |
|  | fillsRemaining |
|  | locationName |
|  | locationUid |
|  | ordered |
|  | orderUid |
|  | pharmacistName |
|  | pharmacistUid |
|  | predecessor |
|  | prescriptionId |
|  | providerName |
|  | providerUid |
|  | quantityOrdered |
|  | successor |
|  | vaRouting |
| overallStart |  |
| overallStop |  |
| parent |  |
| patientInstruction |  |
| productFormName |  |
| products \* | drugClassCode |
|  | drugClassName |
|  | ingredientCode |
|  | ingredientCodeName |
|  | ingredientName |
|  | ingredientRole |
|  | relatedOrder |
|  | strength |
|  | suppliedCode |
|  | suppliedName |
| qualifiedName |  |
| sig |  |
| stopped |  |
| supply |  |
| type |  |
| uid |  |
| vaStatus |  |
| vaType |  |

\* = may be multiple

### Infusions

Input parameters: domain "med" [required]

[optional] start VA FileMan date to filter on date released

stop VA FileMan date to filter on date released

max Number of most recent med orders to return

id ORDERS (#100) file ien

vaType "**V**"

| **Elements** | **Attributes** |
| --- | --- |
| administrations \* | dateTime |
|  | status |
| comment |  |
| dosages | adminTimes |
|  | duration |
|  | ivRate |
|  | restriction |
|  | routeName |
|  | scheduleFreq |
|  | scheduleName |
|  | scheduleType |
| facilityCode |  |
| facilityName |  |
| IMO |  |
| localId |  |
| medStatus |  |
| medStatusName |  |
| medType |  |
| name |  |
| orders | locationName |
|  | locationUid |
|  | ordered |
|  | orderUid |
|  | pharmacistName |
|  | pharmacistUid |
|  | predecessor |
|  | providerName |
|  | providerUid |
|  | successor |
| overallStart |  |
| overallStop |  |
| products \* | drugClassCode |
|  | drugClassName |
|  | ingredientCode |
|  | ingredientCodeName |
|  | ingredientName |
|  | ingredientRole |
|  | relatedOrder |
|  | strength |
|  | suppliedCode |
|  | suppliedName |
|  | volume |
| qualifiedName |  |
| stopped |  |
| type |  |
| uid |  |
| vaStatus |  |
| vaType |  |

\* = may be multiple

## Problem List (GMPL)

Input parameters: domain "problem" [required]

[optional] start none

stop none

max Use *not recommended*, as problems are *not* sorted

id Problem file #9000011 ien

status A or I [default = all]

| **Elements** | **Attributes** |
| --- | --- |
| acuityCode |  |
| acuityName |  |
| comments \* | comment |
|  | entered |
|  | enteredByCode |
|  | enteredByName |
| entered |  |
| facilityCode |  |
| facilityName |  |
| icdCode |  |
| icdName |  |
| localId |  |
| locationName |  |
| locationUid |  |
| onset |  |
| problemText |  |
| providerName |  |
| providerUid |  |
| removed |  |
| resolved |  |
| serviceConnected |  |
| statusCode |  |
| statusName |  |
| uid |  |
| unverified |  |
| updated |  |

\* = may be multiple

## PTF (DG)

Input parameters: domain "ptf" [required]

[optional] start VA FileMan date to filter on movement date

stop VA FileMan date to filter on movement date

max Number of most recent treatment codes to return

id PTF (#45) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** |
| --- |
| arrivalDateTime |
| dischargeDateTime |
| encounterName |
| encounterUid |
| facilityCode |
| facilityName |
| icdCode |
| icdName |
| localId |
| principalDx |
| uid |

## Radiology/Nuclear Medicine (RA)

Input parameters: domain "image" [required]

[optional] start VA FileMan date to filter on 'dateTime'

stop VA FileMan date to filter on 'dateTime'

max Number of most recent exams to return

id EXAMINATIONS (#70.03) sub-file ien string

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| case |  |
| category |  |
| dateTime |  |
| diagnosis \* | code |
|  | lexicon |
|  | primary |
| encounterName |  |
| encounterUid |  |
| facilityCode |  |
| facilityName |  |
| hasImages |  |
| imageLocation |  |
| imagingTypeUid |  |
| interpretation |  |
| kind |  |
| localId |  |
| locationName |  |
| locationUid |  |
| name |  |
| orderName |  |
| orderUid |  |
| providers | providerName |
|  | providerUid |
| results | localTitle |
|  | uid |
| statusName |  |
| summary |  |
| typeName |  |
| uid |  |
| verified |  |

\* = may be multiple

## Registration (DPT)

Input parameters: domain "patient" [required]

[optional] start none

stop none

max none

id PATIENT (#2) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |  |
| --- | --- | --- |
| addresses \* | city |  |
|  | postalCode |  |
|  | stateProvince |  |
|  | streetLine1 |  |
|  | streetLine2 |  |
| aliases | familyName |  |
|  | fullName |  |
|  | givenNames |  |
| briefId |  |  |
| dateOfBirth |  |  |
| died |  |  |
| disability \* | disPercent |  |
|  | name |  |
|  | sc |  |
|  | vaCode |  |
| eligibility \* | name |  |
|  | primary |  |
| eligibilityStatus |  |  |
| ethnicities \* | ethnicity |  |
| exposures \* | name |  |
|  | uid |  |
| facilities \* | code |  |
|  | homeSite |  |
|  | latestDate |  |
|  | localPatientId |  |
|  | name |  |
|  | systemId |  |
| familyName |  |  |
| flags \* | name |  |
|  | text |  |
| fullName |  |  |
| genderCode |  |  |
| genderName |  |  |
| givenNames |  |  |
| icn |  |  |
| inpatient |  |  |
| languageCode |  |  |
| languageName |  |  |
| localId |  |  |
| maritalStatuses | code |  |
|  | name |  |
| meansTest |  |  |
| pcProviderName |  |  |
| pcProviderUid |  |  |
| pcTeamMembers \* | name |  |
|  | position |  |
|  | uid |  |
| pcTeamName |  |  |
| pcTeamUid |  |  |
| races \* | race |  |
| religionCode |  |  |
| religionName |  |  |
| sensitive |  |  |
| servicePeriod |  |  |
| ssn |  |  |
| supports \* | addresses \* | city |
|  |  | postalCode |
|  |  | stateProvince |
|  |  | streetLine1 |
|  |  | streetLine2 |
|  | contactTypeCode |  |
|  | contactTypeName |  |
|  | name |  |
|  | relationship |  |
|  | telecomList \* | telecom |
|  |  | usageCode |
|  |  | usageName |
| telecoms \* | telecom |  |
|  | usageCode |  |
|  | usageName |  |
| uid |  |  |
| veteran | isVet |  |
|  | lrdfn |  |
|  | serviceConnected |  |
|  | serviceConnectionPercent |  |

\* = may be multiple

## Scheduling (SDAM)

The Scheduling API sorts appointments by dateTime chronologically; while past appointments are available, the default view is to extract a patient’s future appointments.

Input parameters: domain "appointment" [required]

[optional] start VA FileMan date to filter on 'dateTime' [default = TODAY]

stop VA FileMan date to filter on 'dateTime' [default = all future]

max Number of [future] appointments to return

id Inverse visit string (“servCatg;date.time;locationIEN”)

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| appointmentStatus |  |
| categoryCode |  |
| categoryName |  |
| checkIn |  |
| checkOut |  |
| comment |  |
| dateTime |  |
| facilityCode |  |
| facilityName |  |
| localId |  |
| locationName |  |
| locationUid |  |
| patientClassCode |  |
| patientClassName |  |
| providers | providerName |
|  | providerUid |
| reasonName |  |
| service |  |
| stopCodeName |  |
| stopCodeUid |  |
| summary |  |
| typeCode |  |
| typeName |  |
| uid |  |

\* = may be multiple

## Surgery (SR)

Input parameters: domain "surgery" [required]

[optional] start VA FileMan date to filter on 'dateTime'

stop VA FileMan date to filter on 'dateTime'

max Number of most recent surgical procedures to return

id SURGERY (#130) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| category |  |
| cpt |  |
| dateTime |  |
| encounterName |  |
| encounterUid |  |
| facilityCode |  |
| facilityName |  |
| kind |  |
| localId |  |
| providers \* | providerName |
|  | providerUid |
| results \* | localTitle |
|  | nationalTitle |
|  | uid |
| statusName |  |
| summary |  |
| typeCode |  |
| typeName |  |
| uid |  |

\* = may be multiple

## Text Integration Utilities (TIU)

Input parameters: domain "document" [required]

[optional] start VA FileMan date to filter on 'referenceDateTime'

stop VA FileMan date to filter on 'referenceDateTime'

max Number of most recent documents to return

id TIU DOCUMENTS (#8925) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

category PN, CR, C, W, A, D, DS, SR, CP, LR, or RA

status “completed”, “unsigned”, or “all” (for current user)

text **1** or **0**, to include ‘content’ text of document

| **Elements** | **Attributes** |  |
| --- | --- | --- |
| attendingName |  |  |
| attendingUid |  |  |
| documentClass |  |  |
| documentTypeCode |  |  |
| documentTypeName |  |  |
| encounterName |  |  |
| encounterUid |  |  |
| entered |  |  |
| facilityCode |  |  |
| facilityName |  |  |
| images |  |  |
| localId |  |  |
| localTitle |  |  |
| nationalTitle | title |  |
|  | vuid |  |
| nationalTitleRole | role |  |
|  | vuid |  |
| nationalTitleService | service |  |
|  | vuid |  |
| nationalTitleSetting | setting |  |
|  | vuid |  |
| nationalTitleSubject | subject |  |
|  | vuid |  |
| nationalTitleType | type |  |
|  | vuid |  |
| parent |  |  |
| referenceDateTime |  |  |
| statusName |  |  |
| subject |  |  |
| text \* | clinicians \* | name |
|  |  | role |
|  |  | signature |
|  |  | signedDateTime |
|  |  | uid |
|  | content |  |
|  | dateTime |  |
|  | status |  |
|  | uid |  |
| uid |  |  |
| urgency |  |  |

\* = may be multiple

## Visits/PCE (PX)

Input parameters: domain "visit" [required]

[optional] start VA FileMan date to filter on 'dateTime'

stop VA FileMan date to filter on 'dateTime'

max Number of most recent visits to return

id VISIT (#9000010) file ien

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| categoryCode |  |
| categoryName |  |
| checkOut |  |
| current |  |
| dateTime |  |
| documents \* | localTitle |
|  | nationalTitle |
|  | uid |
| facilityCode |  |
| facilityName |  |
| localId |  |
| locationName |  |
| locationUid |  |
| movements \* | dateTime |
|  | localId |
|  | locationName |
|  | locationUid |
|  | movementType |
|  | providerName |
|  | providerUid |
|  | specialty |
| patientClassCode |  |
| patientClassName |  |
| providers \* | primary |
|  | providerName |
|  | providerUid |
|  | role |
| reasonName |  |
| reasonUid |  |
| roomBed |  |
| service |  |
| specialty |  |
| stay | arrivalDateTime |
|  | dischargeDateTime |
| stopCodeName |  |
| stopCodeUid |  |
| summary |  |
| typeName |  |
| uid |  |

\* = may be multiple

## Vital Measurements (GMV)

Input parameters: domain "vital" [required]

[optional] start VA FileMan date to filter on 'observed'

stop VA FileMan date to filter on 'observed'

max Number of measurement sets to return (by ‘taken’)

id GMRV VITAL MEASUREMENT (#120.5) file ien, or

VA FileMan date.time to match ‘taken’ and return the set

uid Universal ID for item (**urn:va:domain:SYS:DFN:id**)

| **Elements** | **Attributes** |
| --- | --- |
| displayName |  |
| facilityCode |  |
| facilityName |  |
| high |  |
| kind |  |
| localId |  |
| locationName |  |
| locationUid |  |
| low |  |
| metricResult |  |
| metricUnits |  |
| observed |  |
| qualifiers \* | name |
|  | vuid |
| removed |  |
| result |  |
| resulted |  |
| summary |  |
| typeCode |  |
| typeName |  |
| uid |  |
| units |  |

\* = may be multiple