Medsphere OpenVista

Meaningful Use Updates

November 2017

Table of Contents

Table of Figures

Release 2017.2.0 Meaningful Use and eCQM Enhancements

Expand types of refusals that can be stored

An **Other** option added to the **Refusal Type** menu allows for refusal documentation based on any code found in a CQM value set, e.g., SNOMED, CPT, RXNORM, CVX, LOINC, ICD. Some eCQMs (electronic clinical quality measures) require documentation of things that were *not* done for a patient. The **Other** refusal type enables greater flexibility to record, as structured data rather than just text, the details of patient care that was not provided due to patient preference or medical reasons.

On the **Wellness** tab in the **Personal Health** section, select **Add a Refusal** to display the **Enter Service Not Provided/Refusal** with **Other** as an option.

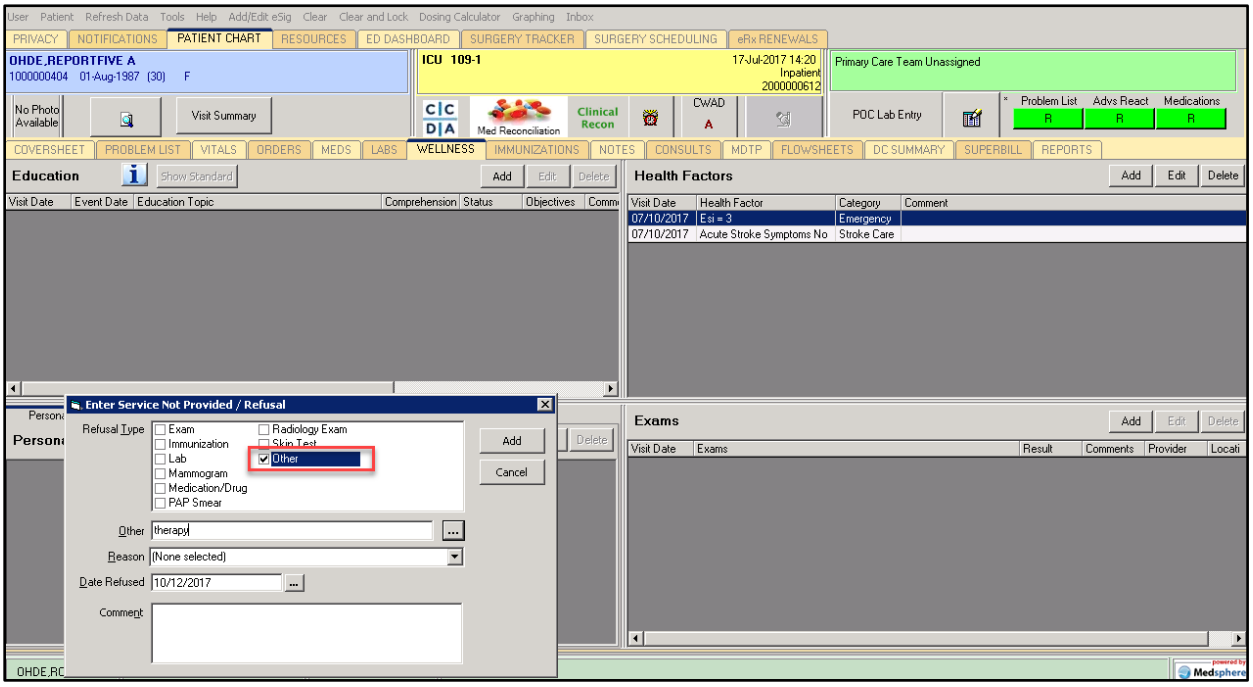

Figure 1: The Enter Service Not Provided dialog on the Wellness tab

Type a search term or known code in the **Other** field and press **Enter** to display a **Search Refusal** dialog with a narrowed list that includes a Description, Code, and Code system determined by the original search term. Alternatively, click on the ellipsis (…) button on the **Enter Service Not Provided/Refusal** dialog to access the **Search Refusals** dialog.

Figure 2: Searching for a term

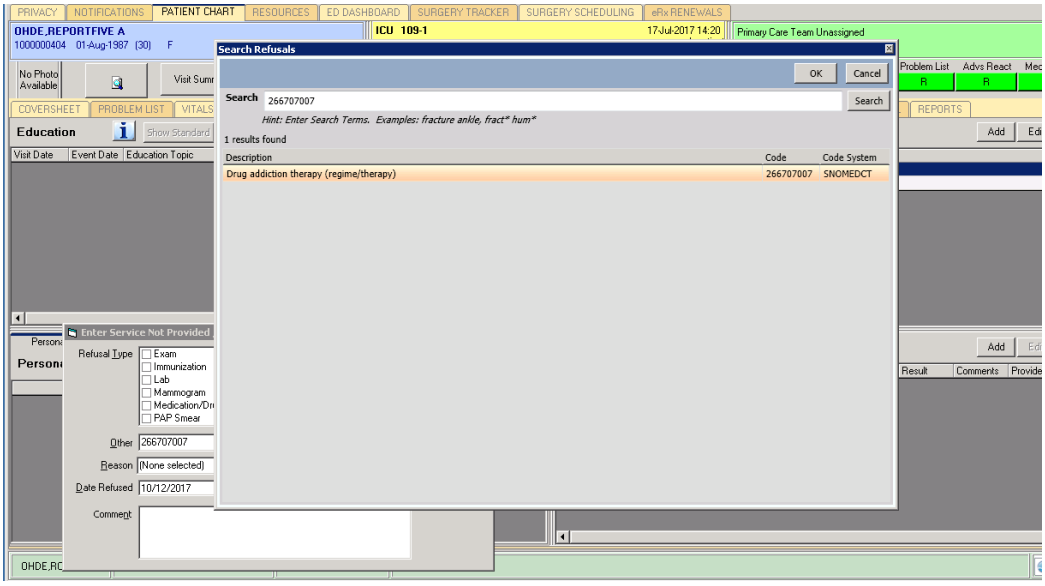

Figure 3: Searching for a code

After selecting the appropriate item, enter the **Reason** for the refusal and **Date Refused** in those fields, and add the item to the **Personal Health Refusals** list.

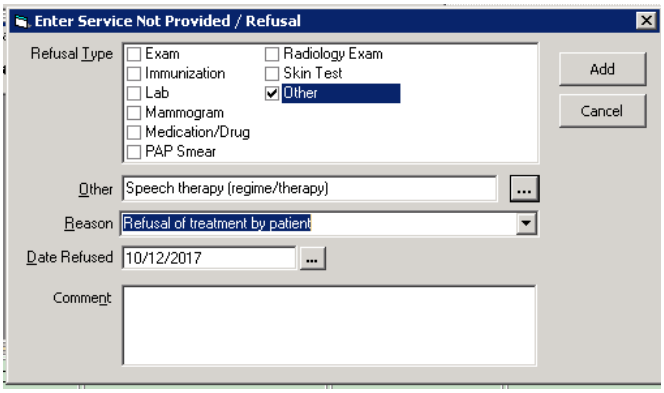

Figure 4: Reason for refusal and Date Refused

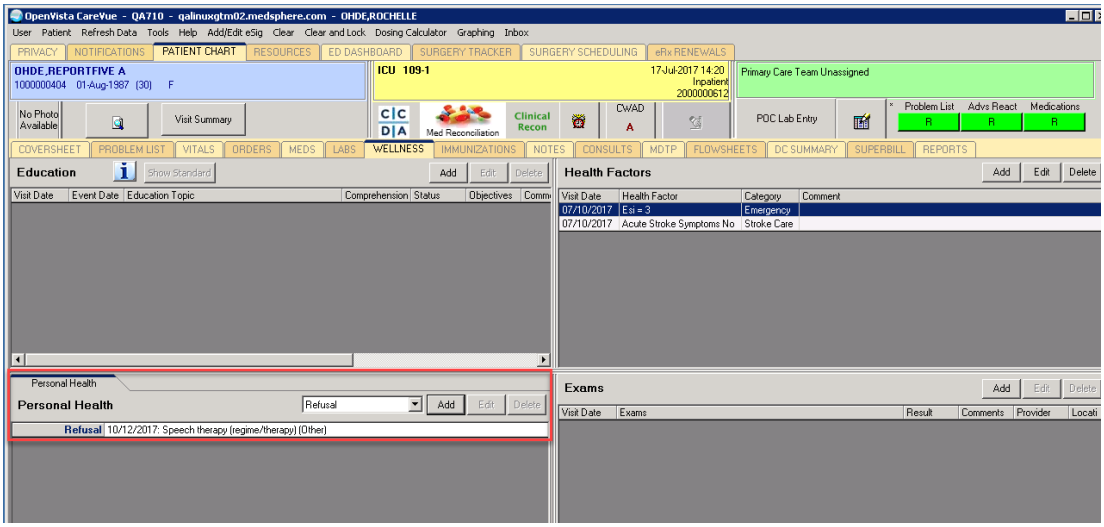

Figure 5: Reason added to Personal Health Refusals list

Required action: Test in your normal workflow for the Personal Health/Refusals component.

Suggested additional testing: Add a new **Other** refusal type, then perform searches and add **Refusals** based on codes found in CQM value sets.

Related artifact: 20974

Medication List in CCD includes meds for date range

Users can now create a **CCD** or **Discharge Note** type of CCDA that includes all medications. The **CCD** and **DISCHARGE SUMMARY** documents include medications with any status ordered within the visit date range, unless they are marked as entered in error.

This change enables a more accurate CCDA created for a past visit. Previously, a CCDA created for a previous visit would show only medications that were still active when the CCDA was created.

Related artifact: 21286

News way to calculate SHA-2 Hash of documents in Clinical Messaging

The CareVue Clinical Messaging feature now allows the user to generate and copy a **message digest** or **hash** value for files attached to a sent or received message. Recipients and senders of a document can now ensure that it has not been damaged or tampered with in transit. This feature does not affect the message encryption or security; it simply ensures that the message was correctly transmitted.

When this feature is enabled, a **SHA-256** link displays next to each attachment in either an inbox or sent messages folder. Click this link to display a dialog with the hash for the corresponding file. You can select and copy the hash like any other selectable text.

Since most users do not need this capability, availability is controlled via a new parameter. The new link displays only when the **MSCCM ATTACHMENT HASH ON/OFF** parameter is set to **1/YES**. Set this parameter in PuTTY using **TEST AN OPTION** and selecting **XPAR EDIT PARAMETER**.

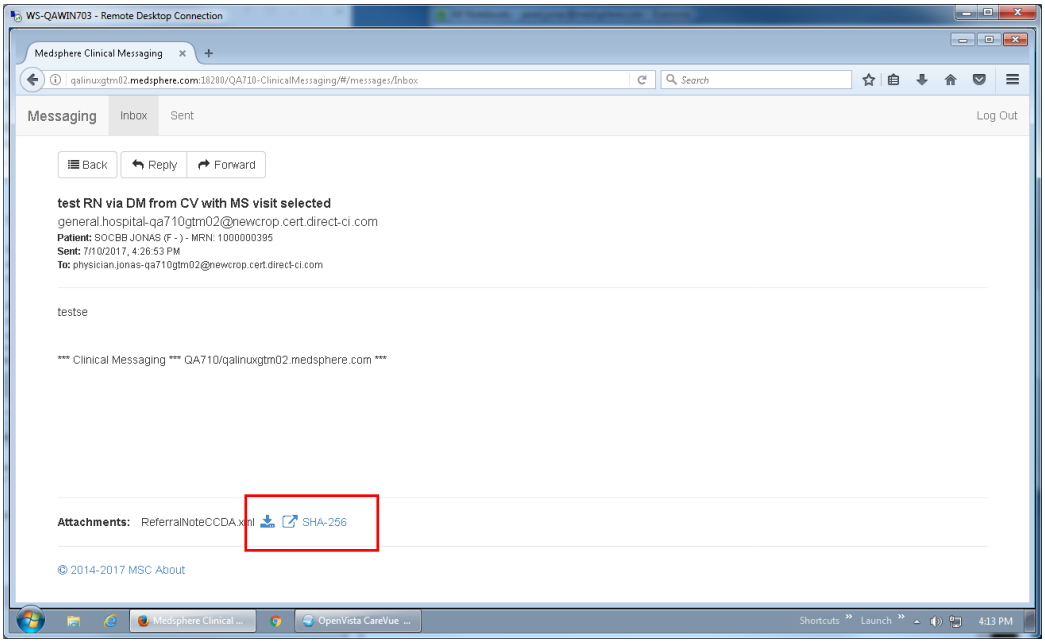

Figure 6: New Clinical Messaging link

Click the link to view the message digest or hash in a pop-up window. Copy and paste the text as needed for use in other documents or messages, and for comparison with a hash generated by the file recipient.

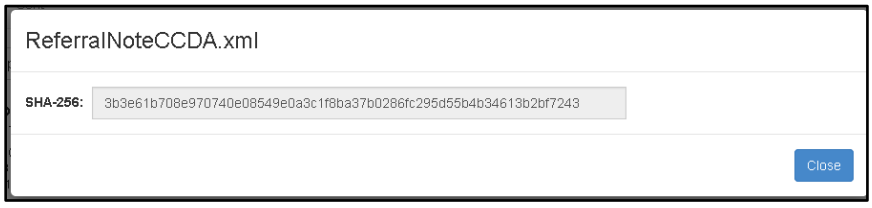

Figure 7: Display of a message digest or hash for a CCDA document attached to a message

Related artifact: 21008

Objective Reports and Quality Reporting

A new menu structure now runs **Meaningful Use Objective** reports and **Performance Measure Reporting**, a.k.a., **eCQM** reporting and submission. The top-level menu option for all Objective Reports and eCQM measures is now **MSCRU MAIN MENU**. Updated versions of all Meaningful Use Objective reports for both hospital and eligible provider reporting are available in the new top-level menu option. Users can run objective reports for Stage 2, Modified Stage 2 or Stage 3 reporting. Additionally, find updated versions of eCQM reporting for 2017 Quality Measure submissions in this new menu. Details for both Objective reporting and eCQM reporting will be available in separate System Design Blocks. An abbreviated sample of the menus is shown below:

```
Option entry to test: MSCRU MAIN MENU       Meaningful Use Performance Measure Reporting
                      **********************************
                      **    MSC REPORTING SYSTEM     **
                      **********************************
                                Version 1.0

                              GENERAL HOSPITAL

   OBJ    Meaningful Use (MU) Objective Reports ...
   CQM    Meaningful Use Performance Measure Reporting ...

Select Meaningful Use Performance Measure Reporting MUNEXT Option: OBJ

Meaningful Use (MU) Objective Reports

   EH     MU Eligible Hospital/CAH ...
   EP     MU Eligible Provider/Clinician ...

Select Meaningful Use (MU) Objective Reports MUNEXT Option: EH
  MU Eligible Hospital/CAH

   1      2014 Reporting Year - EH/CAH Stage 2 ...
   2      2015 Reporting Year - EH/CAH Modified Stage 2 ...
   3      2016 Reporting Year - EH/CAH Modified Stage 2 ...
   4      2017 Reporting Year - EH/CAH Modified Stage 2 ...
   5      2017 Reporting Year - EH/CAH Stage 3 ...

Select MU Eligible Hospital/CAH MUNEXT Option:

CQM REPORTING:

Option entry to test: MSCRU MAIN MENU       Meaningful Use Performance Measure Reporting
                      **********************************
                      **    MSC REPORTING SYSTEM     **
                      **********************************
                                Version 1.0

                              GENERAL HOSPITAL

   OBJ    Meaningful Use (MU) Objective Reports ...
   CQM    Meaningful Use Performance Measure Reporting ...

Select Meaningful Use Performance Measure Reporting MUNEXT Option: CQM  Meaningful Use
Performance Measure Reporting
                      **********************************
                      **    MSC REPORTING SYSTEM     **
                      **********************************
                                Version 1.0

                              GENERAL HOSPITAL

   14H    Hospital eCQMs - Reporting Year 2014, 2015
   16H    Hospital eCQMs - Reporting Year 2016
```

```
   17H    Hospital eCQMs - QRDA Prep - RY 2017
   14EP   EP eCQMs - Reporting Year 2014, 2015
   17EP   EP eCQMs - QRDA Prep - RY 2017
   QRDA   QRDA Submission Maintenance
   PLST   Add/Edit MSCRU QRDA PATIENT SUBSETS entries

Select Meaningful Use Performance Measure Reporting MUNEXT Option:
Required action:
```

Related artifacts: 21090 and 21092

Release 2017.2.0 Meaningful Use Fixes

Updated MU eRx Objective report

The summary report denominator in the **MU eRx Objective** report now includes the start date, time of admission, and discharge date and time when patient prescriptions are included in the report.

Required action: Test the **MU eRx Objective** report by selecting patients that have eRx prescriptions in which the **Visit Start Date/Time** is less than or equal to the **Rx Date/Time** and less than or equal to the **Visit End Date/Time**.

Related artifact: 20187

Health Information Exchange and Data Export via CCDA

Certified electronic health record technology that meets the requirements for Stage 3 Meaningful Use must enable authorized users to export selected patient records, or all patient records, as **Continuity of Care Documents (CCD)—**a type of CCDA file designed to transfer medical records between different EHR systems.

To satisfy this requirement, the **HDS Service** can now run a background task to poll for exports that need to be performed. The export process is controlled by editing two files using FileMan. This process is like using the **CCDA Importer** and **MU Report Extractor**, which import patient documents into the Patient Portal database.

In addition to CCD export, OpenVista can now export CCDA documents in several formats suitable for submitting National Health Care Surveys. Several types of export are available for reporting outpatient, emergency department, and inpatient records.

Caution: Exporting CCD and Health Care Survey documents can be resource intensive, especially when large numbers of patient records are involved. Use caution in configuring exports and do not schedule exports unless needed. As delivered, only users with the highest level FileMan access of @ can edit the **CCDA DATA EXPORT CONTROL FILE**.

The data export measure requires that a user configure an export to happen immediately or at some time in the future. The data exported are in the form of either **Continuity of Care (CCD)** or National Health **Care Survey (NHCS)** XML documents (CCDA). An export event can cover a date/time range of visits or specific visits.

Once an export is complete, it can be scheduled to recur in the future. Accomplish this using two (2) FileMan files that allow a user to configure an export job. A thread within the **HDS Service** polls every 30 seconds and kicks off the export process when the export time has arrived.

Configuration Synopsis

- In FileMan, add a record to the **CCDA DATA EXPORTER ENV CONFIG** file. This likely only needs to be done once.
- In CareVue, subscribe to **Free Text** notifications.
- In FileMan, add a record to the **CCDA DATA EXPORT CONTROL** file via the **USER** group.
- (Optional) From OpenVista, use **D REPORT^MSCHDSXP("S")** to monitor running exports.
- Wait for the notification in CareVue when the export is complete.

- Find the export files in their own directory, noted in the notification message.

Configuration Details

Field Name	Description
EXPORT DATETIME	This is the date/time that the export should occur. This field can be any valid FileMan date/time specification. As such, it can also take meta date/time specifications, such as T+1W@1100 (a week from now at 11 a.m.). Here are some examples of valid values: NOW (The current date time.) NOW+1 (Tomorrow at this time.) T+1 (Tomorrow at midnight.) T+1W@1300 (In one week at 1:00 p.m.) JULY 1, 2017@15:00 3170701.15 (July 1, 2017 @ 15:00 in FM format).
RECURS	If the job is to recur, then configure appropriately. Valid values are: N – Never D – Daily W – Weekly M – Monthly Y – Yearly Of course, N indicates a one-time job.
OUTPUT DIRECTORY	This is an optional field but should only be left blank if the user wants to default to the value of the DEFAULT OUTPUT DIRECTORY field of the CCDA DATA EXPORTER ENV CONFIG file. A value here overrides the setting in the ENV CONFIG file.
DOCUMENT TYPE	The document type to produce. There are currently four choices: C – CCD NI – NHCS INPATIENT (for National Healthcare Surveys) NO – NHCS OUTPATIENT (for National Healthcare Surveys) NE – NHCS ED PATIENT (for National Healthcare Surveys) **Note:** When choosing the NHCS ED PATIENT document type, be aware that an ED patient is one where the value of the HOSPITAL LOCATION (.22) field of the VISIT (9000010) file matches one of the values established in the MSCR ER LOCATION NAMES parameter.
PATIENT TYPE	The data export measure requires differentiation between Test patients and Non-test (e.g., real) patients. The valid values for this field are: N – Non-Test T – Test B – Both A patient is considered a test patient if either the TEST PATIENT INDICATOR field in the PATIENT (2) file is set to YES or if the patient's SSN starts with five (5) zeroes (0).
VISIT RANGE BEGIN DATETIME	This is the date/time of the earliest visit to include in the export. This field is optional. However, if omitted, the user should choose specific visits. The input formats that are allowed are the same as those described in the EXPORT DATETIME field.
VISIT RANGE END DATETIME	This is the date/time of the latest visit to include. The input formats that are

	allowed are the same as those described in the EXPORT DATETIME field.
VISITS	This is a multiple that points to the visit file. A user can choose specific patients using this field. To begin, enter the name or MRN of the patient and then choose the proper visit(s) (if there is more than one).

Two files must be configured for data export. The first, **CCDA DATA EXPORTER ENV CONFIG**, contains a single record and specifies authentication and environment information applicable to all exports. The second file, **CCDA DATA EXPORT CONTROL**, enables configuration of all necessary components for a single data export job.

Configuring the CCDA DATA EXPORTER ENV CONFIG file:

Field Name	Description
NUMBER	Only one record is allowed in this file, so NUMBER *must* be set to 1. Nothing else is allowed.
EXPORTER ACCESS CODE	The Access Code for a user who has the CIAV VUECENTRIC secondary option assigned (field 203 of the NEW PERSON file).
EXPORTER VERIFY CODE	The accompanying Verify Code for the Access Code. Choose a user with VERIFY CODE NEVER EXPIRES set to Yes.
DEFAULT OUTPUT DIRECTORY	This is an optional field. If supplied, it represents a default directory for an export for which an output directory was omitted when the user configures an individual export. This frees users from having to remember/configure an output directory each time they configure a data export job. This directory should be accessible and writable on the GlassFish server. For testing, /tmp is a valid choice for a Linux system. For production, something else would be more appropriate since /tmp gets cleaned upon reboot.

The **CCDA DATA EXPORT CONTROL** file contains records for CCDA data export jobs, both past and future. Many fields in this file require no configuration. To simplify data entry, a new **USER** field group presents only those few fields needed to configure a data export job. Examples of how to use this group are presented below. The **USER** group fields are also described below.

CCDA DATA EXPORT CONTROL (USER group fields)

Note: Users can configure both a visit date range and specific visits for an export.

This is an example of adding a new entry to the **CCDA DATA EXPORT CONTROL** file using the **USER** group fields and choosing both a visit date range and one specific visit. User input is in **bold and red**.

```
Select OPTION: 1 ENTER OR EDIT FILE ENTRIES

Input to what File: CCDA DATA EXPORT CONTROL// CCDA DATA EXPORT CONTROL
                                              (5 entries)
EDIT WHICH FIELD: ALL// USER

Fields in Group: USER
  .01     EXPORT DATETIME
  1       RECURS
  2       OUTPUT DIRECTORY
  3       PATIENT TYPE
  3.5     DOCUMENT TYPE
  4       VISIT RANGE BEGIN DATETIME
  5       VISIT RANGE END DATETIME
  6       VISITS
Edit this GROUP of fields? YES//
THEN EDIT FIELD:
```

```
STORE THESE FIELDS IN TEMPLATE:
```

```
Select CCDA DATA EXPORT CONTROL EXPORT DATETIME: NOW   FEB 13,2017@15:41:56
  Are you adding 'FEB 13,2017@15:41:56' as
    a new CCDA DATA EXPORT CONTROL (the 6TH)? No// yes  (Yes)
RECURS: ?
     Choose from:
       N        NEVER
       D        DAILY
       W        WEEKLY
       M        MONTHLY
       Y        YEARLY
RECURS: n  NEVER
OUTPUT DIRECTORY:
PATIENT TYPE: N  NON-TEST
DOCUMENT TYPE: ?
     Choose from:
       C        CCD
       NI       NHCS INPATIENT
       NO       NHCS OUTPATIENT
       NE       NHCS ED PATIENT
DOCUMENT TYPE: NE  NHCS ED PATIENTVISIT RANGE BEGIN DATETIME: T-500  (OCT 02, 2015)
VISIT RANGE END DATETIME: T  (FEB 13, 2017)
Select VISIT: patient,
   1    PATIENT,CLINICAL F      4-27-55    4-27-55     Female
   2    PATIENT,CLINICAL M      11-18-45    11-18-45     Male
   3    PATIENT,DIETARY      12-1-68    12-1-68     Female
   4    PATIENT,KARUNA      8-20-12    8-20-12     Female
   5    PATIENT,LABORATORY      11-12-60    11-12-60     Male
ENTER '^' TO STOP, OR
CHOOSE 1-5: 1  PATIENT,CLINICAL F      4-27-55    4-27-55     Female
     1   PATIENT,CLINICAL F  SEP 9,2008@03:35:06     PATIENT,CLINICAL F     ICU
    10B2-TEST
     2   PATIENT,CLINICAL F  NOV 3,2008@07:20     PATIENT,CLINICAL F     GENERAL
 RADIOLOGY     10B6-TEST
     3   PATIENT,CLINICAL F  SEP 9,2008@03:35:06     PATIENT,CLINICAL F     ICU
    10B9-TEST
     4   PATIENT,CLINICAL F  SEP 9,2008@03:35:06     PATIENT,CLINICAL F     ICU
    10BM-TEST
     5   PATIENT,CLINICAL F  APR 1,2009@13:22     PATIENT,CLINICAL F     NM
10C1-TEST
Press <Enter> to see more, '^' to exit this list,  OR
CHOOSE 1-5: 1  SEP 9,2008@03:35:06     PATIENT,CLINICAL F     ICU     10B2-TEST
  Are you adding 'SEP 9,2008@03:35:06' as a new VISITS? No// yes  (Yes)
Select VISIT:

Select CCDA DATA EXPORT CONTROL EXPORT DATETIME:
```

Once the **USER** fields are entered, the record status is **PENDING** and is processed when the **EXPORT DATETIME** arrives.

Testing Notes

How do we know an export is complete?

There are multiple ways.

- The simplest is for the user to subscribe to **Free Text** notifications in CareVue using **Tools** > **Options** > **Notifications** [Tab] and ensuring that **Free Text** notifications are checked. With this configured, the **Data Export Complete** notification (details available on drill-down) is delivered to the user's notifications tab.
- The **View Alerts** menu option in the roll-and-scroll interface always delivers notifications regardless of CareVue configuration.
- One of the last steps performed after CCDA documents are created is to create a log file called

CCDAExportResults.log in the same directory as the CCD documents. Users can monitor the directory for this file.

The user who created the **Data Export** record and the user who last modified the **Data Export** record, if different, are notified when the export is complete.

What details are available in the notification?

The notification includes the location of the output files; how many succeeded and how many failed; errors associated with any failed visit exports; information about rescheduling (if applicable).

What happens if a visit can't be exported?

After retrying the problem visit a few times (currently, 3), the export continues with the next visit. There is information in the log about the failure(s).

Where are the export files?

The output directory acts as a base directory. Beneath that is a directory named after the **HDS Service** (e.g., **PROD-HDSService**) to differentiate which service created which exports. Beneath that is a directory named **ccda-export-YYYY-MM-DD_hhmmss** where **YYYY-MM-DD-hhmmss** is the export datetime as specified in the export record. The CCDA files and log file are found in this directory.

How do we know if an export is running?

The **REPORT^MSCHDSXP** tool, available in the OpenVista prompt, reports on export records in various states. The tool has two parameters: **Status** (e.g., PENDING, COMPLETE, STARTED, ERROR, or a comma-separated list of statuses) is required; **date/time to start reporting** is optional. To see all Pending and Started exports since midnight, use **PROD>D REPORT^MSCHDSXP("P,S","T")**

Another useful report is **D REPORT^MSCHDSXP("C,P,S,E"),** which reports all Complete, Pending, Started and Errored extracts, in that order, scheduled for today (or later).

What happens if an export stops before it is complete?

If GlassFish is restarted or some other system-down event occurs before the export can be completed, it picks back up where it left off when the problem is resolved.

What security is in place to make sure only authorized users can configure a data export job?

A user must have programmer access to modify either of the **CCDA DATA EXPORT** files or even see that the files exist.

Can an authorized user change any field in the CCDA DATA EXPORT CONTROL file via FileMan?

The **CCDA DATA EXPORT CONTROL** file includes many fields besides those in the **USER** group. These fields are manipulated via RPCs by the **HDS Service** and don't allow a FileMan user to make changes.

What happens if an export is scheduled for a date in the past?

Exports scheduled for a date in the past are processed immediately when the **HDS Service** next polls for exports, since the export date/time is satisfied (e.g., current date/time > export date/time).

How often does the HDS Service poll for exports?

Currently, it is configured to poll every 30 seconds.

What happens if the HDS Service doesn't pick up an export request for a significant amount of time (e.g., a week)?

When an export is more than a day old (via the export date), a visit date/time range is supplied and the visit date/time range contains meta specifiers (e.g., T-30), the visit date/time range adjusts according to when the export should have originally kicked off. For example, if an export doesn't kick off for a week and specifies T-30 as the start time, then T-30 minus 1 week is used for the beginning visit date/time range.

How can I configure an export for every visit on a system?

A complete export is an MU requirement. The recommended approach is to specify a visit date/time range that encapsulates every possible visit. For example, T-10000 as the start of the range would go back 10000 days and would probably suffice in most instances.

Since VISIT RANGE BEGIN DATETIME, VISIT RANGE END DATETIME and VISITS multiple are all optional, what happens if a user doesn't configure any of them?

In this case, the status of the export record is **NOT READY** and does not initiate. If a user goes back and supplies visit information, the status changes to **PENDING**. Processing initiates the next time the **HDS Service** polls if the current date is after the export date.

What if a visit date range is specified, but there are no visits within that range?

Nothing is processed and no errors are logged. The user is notified that the export is complete and can see that zero (0) CCDA documents were exported.

How can we test to see if exports resume properly?

- Enter a large visit range (e.g., T-500 to T) to encapsulate many visits.
- Use **D REPORT^MSCHDSXP("S")** to see that the export has started. Note that exported and not-yet-exported visits are in the report, making it simple to monitor the export process.
- Disable the **HDS Service** in the **Admin GlassFish** console while the process is ongoing.
- Use **REPORT^MSCHDSXP** to make sure no exports are being processed.
- Enable the service.
- Use **REPORT^MSCHDSXP** to see that they've resumed.

Can two or more exports occur at the same time?

Yes, multiple can be running at one time. The thread package is configured to allow three to run at any one time. A fourth would have to wait for one of the three to finish before being allowed to run.

How can we test recurring exports if we don't want to wait a day, week, month or year between executions?

Since it is possible to schedule an export for a date in the past, schedule the export to first occur at exactly the amount of time in the past as your **RECURS** value. For example, to test that an export recurs yearly, set the export date/time to **NOW-365** and **RECURS = YEARLY**, along with other valid **USER** group settings. When the **HDS Service** polls, it picks up the year-old export, processes it and reschedules it for one year from that export date/time, which should be just before the current date/time. The **HDS Service** picks it up almost immediately after finishing the first (year-old) one.

Likewise, if:

RECURS = MONTHLY, set the export date/time to **NOW-1M**

RECURS = WEEKLY, set the export date/time to **NOW-1W**

RECURS = DAILY, set the export date/time to **NOW-1**

Is it possible to stop the CCDA Extractor task from running after it has been started?

Yes, there are **REST** calls that command the extractor to stop polling, start polling and print a simple status. Suppose the HDS service is named **QA620-HDSService** and runs on port 18280 on the qalinuxgtm01 machine, the following URLs demonstrate the use:

http://qalinuxgtm01:18280/QA620-HDSService/rest/ccda-exporter/stop-polling

http://qalinuxgtm01:18280/QA620-HDSService/rest/ccda-exporter/start-polling

http://qalinuxgtm01:18280/QA620-HDSService/rest/ccda-exporter/status

Related artifact: 21122

New Audit Report Features

A new option in OpenVista called **MSCR AUDIT REPORT** makes it easier to view changes to the records of a single patient or all patients over a given period. Previously, viewing audits required looking at each file one by one. For audit reporting, it is still necessary to enable auditing for specific files and fields. But the new report provides a consolidated view of changes made across multiple audited files. In addition to displaying audits tracked by FileMan audit logging, this report also can display entries from the Output from the **MSCV AUDIT ITEM** file. The **MSCV AUDIT ITEM** tracks user access to different parts of the patient record such as viewing tabs, printing notes and saving CCDA files.

New parameters associated with MSCR AUDIT REPORT:

Use the XPAR	To specify…
MSC AUDIT DEFAULT SORT FIELD	The default field on which to sort the results of the report. 1 DATE/TIME 2 PATIENT NAME (COMPUTED) 3 USER 4 ACTION 5 FIELD ACTED UPON
MSC AUDIT DEFAULT SORT ORDER	Whether default sort is ascending or descending
MSC AUDIT REPORT DEFAULT FILES	Default list of audited files to display

The **MSCR AUDIT REPORT** can print the results using a template for each entry, or can export a tabular version of the data as a CSV (Comma Separated Values) file.

Caution: Detailed auditing of many files can be resource intensive. Audit reports can also be very long. Some entries have been deleted from the example below.

```
Option entry to test: MSCR AUDIT REPORT       MSC Audit Report
Enter starting date/time:  8/11/17  (AUG 11, 2017)
Enter ending date/time: 8/11/17@23:59  (AUG 11, 2017@23:59)
Currently Defined Files to be Displayed:
     PATIENT
     ORDER
     PROBLEM
     V HEALTH FACTORS
     V IMMUNIZATION
     V PATIENT ED
Do you want to accept this list? Y// ES
Select only access or changes by a particular user? N// O

     Select one of the following:

          S         Single patient
          A         All patients

Select edits to a single patient, or all patients during the time frame: A// All patients

     Select one of the following:

          1         DATE/TIME
          2         PATIENT NAME (COMPUTED)
          3         USER
          4         ACTION
          5         FIELD ACTED UPON

Select item to sort by: 1//   DATE/TIME

     Select one of the following:

          A         Ascending order
          D         Descending order

Select sort order: D// escending order

     Select one of the following:

          P         Standard Printed Output
          D         Delimited Output
```

```
Select report output type: P//   Standard Printed Output
DEVICE: HOME//   TELNET

Audit Report
Selected Date Range : 8/11/17 to 8/11/17@23:59
User Selection : ALL
Patient Selection : ALL
Sort Selection : DATE/TIME
Sort Order : DESCENDING

Files with AUDIT entries:  MSCV AUDIT ITEM, PATIENT, ORDER, PROBLEM
                           V HEALTH FACTORS, V IMMUNIZATION, V PATIENT ED
Files w/o AUDIT entries:   DG SECURITY LOG


AUDIT FILE ENTRY from PATIENT:
NUMBER: 101075                          INTERNAL ENTRY NUMBER: 800
  DATE/TIME RECORDED: AUG 11,2017@17:36:43
  FIELD NUMBER: .01                     USER: MANAGER,SYSTEM
  ACCESSED: INQUIRED TO ENTRY           MENU OPTION USED: MSCR AUDIT REPORT
  ENTRY NAME (c): TEST,WHILES           PATIENT (c): TEST,WHILES

MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@17:08:23              USER: LITELLA,EMILY
  ACTION: QUERY                         PATIENT: 0 ← View of "Patient 0" is when no patient is
displayed.
  NOTE: Viewed patient in selector


MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@17:08:11              USER: LITELLA,EMILY
  ACTION: PRINT                         PATIENT: TEST,WHILES
  DEVICE: Device: Brother HL-2170W (redirected 48)
  INFORMATION TYPE: MEDICAL RECORD  Progress Notes


MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@17:07:45              USER: LITELLA,EMILY
  ACTION: QUERY                         PATIENT: TEST,WHILES
  NOTE: Viewed 'Notes' tab in CareVue


MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@17:07:36              USER: LITELLA,EMILY
  ACTION: QUERY                         PATIENT: TEST,WHILES
  NOTE: Viewed patient chart


MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@17:07:36              USER: LITELLA,EMILY
  ACTION: QUERY                         PATIENT: TEST,WHILES
  NOTE: Viewed patient in selector


< … similar entries deleted … >

MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@16:56:09              USER: LITELLA,EMILY
  ACTION: QUERY                         PATIENT: 0
  NOTE: Viewed patient in selector


MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@16:56                 USER: LITELLA,EMILY
  ACTION: COPY                          PATIENT: TEST,WHILES
  INFORMATION TYPE: VIEW DOWNLOAD TRANSMIT
```

```
MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@16:55:35                USER: LITELLA,EMILY
  ACTION: QUERY                           PATIENT: TEST,WHILES
  NOTE: Viewed 'Orders' tab in CareVue


AUDIT FILE ENTRY from PROBLEM:
NUMBER: 53                                INTERNAL ENTRY NUMBER: 1061
  DATE/TIME RECORDED: AUG 11,2017@16:55:07
  FIELD NUMBER: 80002                     USER: LITELLA,EMILY
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): R69.
  FIELD NAME (c): SNOMED CT DESIGNATION CODE
  OLD VALUE (c): 20652013                 PATIENT (c): TEST,WHILES
  NEW VALUE (c): 25292015

< … similar entries deleted … >

AUDIT FILE ENTRY from PROBLEM:
NUMBER: 49                                INTERNAL ENTRY NUMBER: 1061
  DATE/TIME RECORDED: AUG 11,2017@16:54:02
  FIELD NUMBER: 1.03                      USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 175                 DATATYPE OF NEW VALUE: P200'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): R69.                    FIELD NAME (c): ENTERED BY
  OLD VALUE (c): <no previous value>      PATIENT (c): TEST,WHILES
  NEW VALUE (c): LITELLA,EMILY

AUDIT FILE ENTRY from PROBLEM:
NUMBER: 48                                INTERNAL ENTRY NUMBER: 1061
  DATE/TIME RECORDED: AUG 11,2017@16:54:02
  FIELD NUMBER: .08                       USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 3170811             DATATYPE OF NEW VALUE: RDIa
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): R69.                    FIELD NAME (c): DATE ENTERED
  OLD VALUE (c): <no previous value>      PATIENT (c): TEST,WHILES
  NEW VALUE (c): AUG 11,2017

AUDIT FILE ENTRY from PROBLEM:
NUMBER: 47                                INTERNAL ENTRY NUMBER: 1061
  DATE/TIME RECORDED: AUG 11,2017@16:54:02
  FIELD NUMBER: .02                       USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 800                 DATATYPE OF NEW VALUE: RP9000001'Ia
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): R69.                    FIELD NAME (c): PATIENT NAME
  OLD VALUE (c): <no previous value>      PATIENT (c): TEST,WHILES
  NEW VALUE (c): TEST,WHILES

AUDIT FILE ENTRY from PROBLEM:
NUMBER: 46                                INTERNAL ENTRY NUMBER: 1061
  DATE/TIME RECORDED: AUG 11,2017@16:54:02
  FIELD NUMBER: .01                       USER: LITELLA,EMILY
  RECORD ADDED: Added Record              NEW INTERNAL VALUE: 569632
  DATATYPE OF NEW VALUE: R*P80'a          MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): R69.                    FIELD NAME (c): DIAGNOSIS
  OLD VALUE (c): <no previous value>      PATIENT (c): TEST,WHILES
  NEW VALUE (c): Z89.439

AUDIT FILE ENTRY from ORDER:
NUMBER: 679                               INTERNAL ENTRY NUMBER: 12266,1
  DATE/TIME RECORDED: AUG 11,2017@16:53:10
  FIELD NUMBER: .1,.01                    USER: LITELLA,EMILY
  RECORD ADDED: Added Record              NEW INTERNAL VALUE: 1964
  DATATYPE OF NEW VALUE: MP101.43'a       MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): 12266
  FIELD NAME (c): ORDERABLE ITEMS,ORDERABLE ITEM
  OLD VALUE (c): <no previous value>      PATIENT (c): TEST,WHILES
  NEW VALUE (c): ASPIRIN TAB,CHEWABLE
```

```
AUDIT FILE ENTRY from ORDER:
NUMBER: 678                              INTERNAL ENTRY NUMBER: 12266
  DATE/TIME RECORDED: AUG 11,2017@16:53:10
  FIELD NUMBER: 4                        USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 3170811.1653       DATATYPE OF NEW VALUE: Da
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): 12266                  FIELD NAME (c): WHEN ENTERED
  OLD VALUE (c): <no previous value>     PATIENT (c): TEST,WHILES
  NEW VALUE (c): AUG 11,2017@16:53

AUDIT FILE ENTRY from ORDER:
NUMBER: 677                              INTERNAL ENTRY NUMBER: 12266
  DATE/TIME RECORDED: AUG 11,2017@16:53:10
  FIELD NUMBER: 3                        USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 175                DATATYPE OF NEW VALUE: P200'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): 12266                  FIELD NAME (c): WHO ENTERED
  OLD VALUE (c): <no previous value>     PATIENT (c): TEST,WHILES
  NEW VALUE (c): LITELLA,EMILY

AUDIT FILE ENTRY from ORDER:
NUMBER: 676                              INTERNAL ENTRY NUMBER: 12266
  DATE/TIME RECORDED: AUG 11,2017@16:53:10
  FIELD NUMBER: .02                      USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 800;DPT(           DATATYPE OF NEW VALUE: RVa
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): 12266                  FIELD NAME (c): OBJECT OF ORDER
  OLD VALUE (c): <no previous value>     PATIENT (c): TEST,WHILES
  NEW VALUE (c): TEST,WHILES

MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@16:52:20               USER: LITELLA,EMILY
  ACTION: QUERY                          PATIENT: TEST,WHILES
  NOTE: Viewed 'Orders' tab in CareVue

MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@16:51:17               USER: LITELLA,EMILY
  ACTION: QUERY                          PATIENT: TEST,WHILES
  NOTE: Viewed 'Notes' tab in CareVue

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 9                                INTERNAL ENTRY NUMBER: 323
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: .05                      USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 8                  DATATYPE OF OLD VALUE: *P9999999.41'a
  MENU OPTION USED: CIAV VUECENTRIC
  FIELD NAME (c): LOT                    OLD VALUE (c): ABC234
  NEW VALUE (c): <deleted>

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 8                                INTERNAL ENTRY NUMBER: 323
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: .03                      USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 2271               DATATYPE OF OLD VALUE: R*P9000010'Ia
  MENU OPTION USED: CIAV VUECENTRIC
  FIELD NAME (c): VISIT                  OLD VALUE (c): JAN 20,2016@13:03:43
  NEW VALUE (c): <deleted>

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 7                                INTERNAL ENTRY NUMBER: 323
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: .02                      USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 800                DATATYPE OF OLD VALUE: RP9000001'Ia
  MENU OPTION USED: CIAV VUECENTRIC
  FIELD NAME (c): PATIENT NAME           OLD VALUE (c): TEST,WHILES
  NEW VALUE (c): <deleted>
```

```
AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 6                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: 1216                   USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 3170811.165108   DATATYPE OF NEW VALUE: Da
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER               FIELD NAME (c): DATE/TIME ENTERED
  OLD VALUE (c): <no previous value>   PATIENT (c): TEST,WHILES
  NEW VALUE (c): AUG 11,2017@16:51:08

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 5                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: 1217                   USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 175              DATATYPE OF NEW VALUE: P200'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER               FIELD NAME (c): ENTERED BY
  OLD VALUE (c): <no previous value>   PATIENT (c): TEST,WHILES
  NEW VALUE (c): LITELLA,EMILY

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 4                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: .05                    USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 12               DATATYPE OF NEW VALUE: *P9999999.41'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER               FIELD NAME (c): LOT
  OLD VALUE (c): <no previous value>   PATIENT (c): TEST,WHILES
  NEW VALUE (c): D5551T

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 3                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: .03                    USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 2271             DATATYPE OF NEW VALUE: R*P9000010'Ia
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER               FIELD NAME (c): VISIT
  OLD VALUE (c): <no previous value>   PATIENT (c): TEST,WHILES
  NEW VALUE (c): JAN 20,2016@13:03:43

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 2                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: .02                    USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 800              DATATYPE OF NEW VALUE: RP9000001'Ia
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER               FIELD NAME (c): PATIENT NAME
  OLD VALUE (c): <no previous value>   PATIENT (c): TEST,WHILES
  NEW VALUE (c): TEST,WHILES

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 1                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: .01                    USER: LITELLA,EMILY
  RECORD ADDED: Added Record           NEW INTERNAL VALUE: 227
  DATATYPE OF NEW VALUE: RP9999999.14'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER               FIELD NAME (c): IMMUNIZATION
  OLD VALUE (c): <no previous value>   PATIENT (c): TEST,WHILES
  NEW VALUE (c): ZOSTER

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 15                             INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: 1217                   USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 175              DATATYPE OF OLD VALUE: P200'a
  NEW INTERNAL VALUE: 173              DATATYPE OF NEW VALUE: P200'a
  MENU OPTION USED: CIAV VUECENTRIC
```

```
  ENTRY NAME (c): ZOSTER                FIELD NAME (c): ENTERED BY
  OLD VALUE (c): LITELLA,EMILY          PATIENT (c): TEST,WHILES
  NEW VALUE (c): NICKLAS,FLOYD M

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 14                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: 1216                    USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 3170811.165108    DATATYPE OF OLD VALUE: Da
  NEW INTERNAL VALUE: 3160210.070949    DATATYPE OF NEW VALUE: Da
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER                FIELD NAME (c): DATE/TIME ENTERED
  OLD VALUE (c): AUG 11,2017@16:51:08   PATIENT (c): TEST,WHILES
  NEW VALUE (c): FEB 10,2016@07:09:49

AUDIT FILE ENTRY from V IMMUNIZATION:
NUMBER: 13                              INTERNAL ENTRY NUMBER: 382
  DATE/TIME RECORDED: AUG 11,2017@16:51:08
  FIELD NUMBER: 1217                    USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 175               DATATYPE OF OLD VALUE: P200'a
  NEW INTERNAL VALUE: 175               DATATYPE OF NEW VALUE: P200'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): ZOSTER                FIELD NAME (c): ENTERED BY
  OLD VALUE (c): LITELLA,EMILY          PATIENT (c): TEST,WHILES
  NEW VALUE (c): LITELLA,EMILY

< … similar entries deleted … >

AUDIT FILE ENTRY from V HEALTH FACTORS:
NUMBER: 4                               INTERNAL ENTRY NUMBER: 432
  DATE/TIME RECORDED: AUG 11,2017@16:50:29
  FIELD NUMBER: 1218                    USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 3170811.165029    DATATYPE OF NEW VALUE: Da
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): CURRENT EVERY DAY SMOKER
  FIELD NAME (c): DATE/TIME LAST MODIFIED
  OLD VALUE (c): <no previous value>    PATIENT (c): TEST,WHILES
  NEW VALUE (c): AUG 11,2017@16:50:29

AUDIT FILE ENTRY from V HEALTH FACTORS:
NUMBER: 3                               INTERNAL ENTRY NUMBER: 432
  DATE/TIME RECORDED: AUG 11,2017@16:50:29
  FIELD NUMBER: 1217                    USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 175               DATATYPE OF NEW VALUE: P200'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): CURRENT EVERY DAY SMOKER
  FIELD NAME (c): ENTERED BY            OLD VALUE (c): <no previous value>
  PATIENT (c): TEST,WHILES              NEW VALUE (c): LITELLA,EMILY

AUDIT FILE ENTRY from V HEALTH FACTORS:
NUMBER: 2                               INTERNAL ENTRY NUMBER: 432
  DATE/TIME RECORDED: AUG 11,2017@16:50:28
  FIELD NUMBER: .02                     USER: LITELLA,EMILY
  NEW INTERNAL VALUE: 800               DATATYPE OF NEW VALUE: RP9000001'Ia
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): CURRENT EVERY DAY SMOKER
  FIELD NAME (c): PATIENT NAME          OLD VALUE (c): <no previous value>
  PATIENT (c): TEST,WHILES              NEW VALUE (c): TEST,WHILES

AUDIT FILE ENTRY from V HEALTH FACTORS:
NUMBER: 1                               INTERNAL ENTRY NUMBER: 432
  DATE/TIME RECORDED: AUG 11,2017@16:50:28
  FIELD NUMBER: .01                     USER: LITELLA,EMILY
  RECORD ADDED: Added Record            NEW INTERNAL VALUE: 58050
  DATATYPE OF NEW VALUE: R*P9999999.64'a
  MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): CURRENT EVERY DAY SMOKER
  FIELD NAME (c): HEALTH FACTOR         OLD VALUE (c): <no previous value>
```

```
  PATIENT (c): TEST,WHILES                NEW VALUE (c): CURRENT EVERY DAY SMOKER

AUDIT FILE ENTRY from V PATIENT ED:
NUMBER: 4                                 INTERNAL ENTRY NUMBER: 362
  DATE/TIME RECORDED: AUG 11,2017@16:50:14
  FIELD NUMBER: .01                       USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 50052               DATATYPE OF OLD VALUE: R*P9999999.09'Oa
  MENU OPTION USED: CIAV VUECENTRIC
  FIELD NAME (c): TOPIC                   OLD VALUE (c): STRK-LITERATURE
  NEW VALUE (c): <deleted>

AUDIT FILE ENTRY from V PATIENT ED:
NUMBER: 3                                 INTERNAL ENTRY NUMBER: 362
  DATE/TIME RECORDED: AUG 11,2017@16:50:14
  FIELD NUMBER: 1217                      USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 173                 DATATYPE OF OLD VALUE: P200'a
  MENU OPTION USED: CIAV VUECENTRIC
  FIELD NAME (c): ENTERED BY              OLD VALUE (c): NICKLAS,FLOYD M
  NEW VALUE (c): <deleted>

AUDIT FILE ENTRY from V PATIENT ED:
NUMBER: 2                                 INTERNAL ENTRY NUMBER: 362
  DATE/TIME RECORDED: AUG 11,2017@16:50:14
  FIELD NUMBER: 1216                      USER: LITELLA,EMILY
  MENU OPTION USED: CIAV VUECENTRIC
  FIELD NAME (c): DATE/TIME ENTERED       OLD VALUE (c): MAR 2,2016@09:24:24
  NEW VALUE (c): <deleted>

AUDIT FILE ENTRY from V PATIENT ED:
NUMBER: 1                                 INTERNAL ENTRY NUMBER: 362
  DATE/TIME RECORDED: AUG 11,2017@16:50:14
  FIELD NUMBER: .02                       USER: LITELLA,EMILY
  OLD INTERNAL VALUE: 800                 DATATYPE OF OLD VALUE: RP9000001'Ia
  MENU OPTION USED: CIAV VUECENTRIC
  FIELD NAME (c): PATIENT NAME            OLD VALUE (c): TEST,WHILES
  NEW VALUE (c): <deleted>

MSCV AUDIT ITEM ENTRY:
TIME: AUG 11,2017@16:49:14                USER: LITELLA,EMILY
  ACTION: QUERY                           PATIENT: TEST,WHILES
  NOTE: Viewed patient chart

AUDIT FILE ENTRY from PATIENT:
NUMBER: 101071                            INTERNAL ENTRY NUMBER: 800
  DATE/TIME RECORDED: AUG 11,2017@16:49:14
  FIELD NUMBER: .01                       USER: LITELLA,EMILY
  ACCESSED: INQUIRED TO ENTRY             MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): TEST,WHILES             PATIENT (c): TEST,WHILES

AUDIT FILE ENTRY from PATIENT:
NUMBER: 101070                            INTERNAL ENTRY NUMBER: 800
  DATE/TIME RECORDED: AUG 11,2017@16:49:14
  FIELD NUMBER: .01                       USER: LITELLA,EMILY
  ACCESSED: INQUIRED TO ENTRY             MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): TEST,WHILES             PATIENT (c): TEST,WHILES

AUDIT FILE ENTRY from PATIENT:
NUMBER: 101069                            INTERNAL ENTRY NUMBER: 800
  DATE/TIME RECORDED: AUG 11,2017@16:49:14
  FIELD NUMBER: .01                       USER: LITELLA,EMILY
  ACCESSED: INQUIRED TO ENTRY             MENU OPTION USED: CIAV VUECENTRIC
  ENTRY NAME (c): TEST,WHILES             PATIENT (c): TEST,WHILES
```

Related artifact: 20887