

# DSIO RPC Documentation

November 27

# 2013

## **RPC: DSIO PATIENT SEARCH**

Return a list of patients for maternity care, thus only female patients will be returned.

TAG: PATIENT                                      ROUTINE: DSIO1  
RETURN VALUE TYPE: ARRAY

The input parameter can be:

- ; LIST ALL PATIENTS
- # \$ ^ LASTNAME, FIRSTNAME ^ DIRECTION ( "" , -1 ) - FOR LISTING ALL PATIENTS
- ; FLG = DIRECTION -1 IS BACKWARDS
- ; KEY = " # \$ ^ LASTNAME, FIRSTNAME ^ DIRECTION ( "" , -1 ) ^ COUNT
- LAST NAME
- PARTIAL LAST NAME
- FULL NAME
- FULL SSN
- FIRST LETTER OF LAST NAME + LAST 4 OF SSN

INPUT PARAMETER: KEY                              PARAMETER TYPE: LITERAL  
REQUIRED: YES                                      SEQUENCE NUMBER: 1

DESCRIPTION:

KEY CAN BE:

- ; LIST ALL PATIENTS
- # \$ ^ LASTNAME, FIRSTNAME ^ DIRECTION ( "" , -1 ) - FOR LISTING ALL PATIENTS
- ; FLG = DIRECTION -1 IS BACKWARDS
- ; KEY = " # \$ ^ LASTNAME, FIRSTNAME ^ DIRECTION ( "" , -1 ) ^ COUNT
- LAST NAME
- PARTIAL LAST NAME
- FULL NAME
- FULL SSN
- FIRST LETTER OF LAST NAME + LAST 4 OF SSN

RETURN PARAMETER DESCRIPTION:

DFN ^ LASTNAME, FIRSTNAME ^ SSN ( LAST 4 ) ^ DATE OF BIRTH ^ VETERAN  
STATUS ^ LOCATION ( WARD ) ^ ROOM / BED ^ SERVICE CONNECTED ^ CURRENTLY TRACKING

CURRENTLY TRACKING:

1 for Yes, 0 for No or no tracking history for this patient.

If nothing is found:

RET(0) = "-1 ^ Patient not found."

**Current Issues:**

## **RPC: DSIO GET TRACKING**

This RPC will return a list of all Tracking History Logs, all flagged logs for flagged patients or a patient, or all logs for a single patient.

TAG: TRCLIST                      ROUTINE: DSIO1  
RETURN VALUE TYPE: GLOBAL ARRAY    WORD WRAP ON: TRUE

INPUT PARAMETER: FLG              PARAMETER TYPE: LITERAL  
REQUIRED: NO                      SEQUENCE NUMBER: 1  
DESCRIPTION:  
T: TRACKED, P: PENDING

INPUT PARAMETER: TYP              SEQUENCE NUMBER: 1  
DESCRIPTION:  
ALL (literal)^Last Entry (if multiple lists) or null^Count or null (the value is 100 if null is passed)

F        : For Currently Flagged Patients and their flagged logs  
F#       : For Currently Flagged logs for a Patient  
DFN      : For all Log Entries of a single Patient

RETURN PARAMETER DESCRIPTION:  
-1^ERROR MESSAGE

ID^DT OF TRACKING^DFN^LASTNAME,FIRSTNAME^USER^TRACKING TYPE^SOURCE^REASON|REASON|  
IDC^COMMENT

Flagged:

-----

FID(FOR THE PATIENT LIST = FDFN)^DFN^LASTNAME,FIRSTNAME^LAST 4^DOB - Single Line  
FIDP^LAST PROGRESS NOTE\* - Multi line possible  
FID^ID(FOR A LOG FOR THIS PATIENT)^LOG ENTRY - Single Line  
FID^IDC^COMMENT FOR THE LOG ENTRY - Multi line possible

### **Current Issues:**

- Progress Note not yet included

### **RPC: DSIO SET TRACKING STATUS**

This RPC will change the tracking status of a patient if that status is different from the current status. Changing the status will create a tracking log and the log's source will be set to DASHBOARD. If a reason list and comment array is provided then they will be applied to the log.

TAG: REC ROUTINE: DSIO1  
RETURN VALUE TYPE: SINGLE VALUE

INPUT PARAMETER: DFN PARAMETER TYPE: LITERAL  
REQUIRED: YES SEQUENCE NUMBER: 1  
DESCRIPTION:  
PATIENT NUMBER

INPUT PARAMETER: RES PARAMETER TYPE: LITERAL  
SEQUENCE NUMBER: 3  
DESCRIPTION:  
REASON in a caret delimited list - #^#^#

INPUT PARAMETER: COM PARAMETER TYPE: LIST  
SEQUENCE NUMBER: 4  
DESCRIPTION:  
COMMENT ARRAY/LIST (lines of free text)

INPUT PARAMETER: STAT PARAMETER TYPE: LITERAL  
REQUIRED: YES SEQUENCE NUMBER: 2  
DESCRIPTION:  
TRACKING STATUS (0:NO,1:YES,2:FLAGGED)

RETURN PARAMETER DESCRIPTION:  
-1^Error Message  
1^Success

**Current Issues:**

### **RPC: DSIO SELECT LIST**

This RPC will return user drop down lists, add or delete an entry.

#### INPUT PARAMETERS:

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TYP : 'S' for Tracking Sources

TYP : 'R' or null for Tracking Reasons

LETTER^ENTRY^A : ADD AN ENTRY TO ONE OF THE ABOVE FILES

LETTER^ENTRY^D : DELETE AN ENTRY FROM ONE OF THE ABOVE FILES

#### Return Array:

=====

Lines of free text

-1^Message (for a critical failure)

## External RPCs

### DG SENSITIVE RECORD ACCESS

Verify user is not accessing his/her own Patient file record if the Restrict Patient Record Access (#1201) field in the MAS parameters (#43) file is set to yes and the user does not hold the DG RECORD ACCESS security key. If parameter set to yes and user is not a key holder, a social security number must be defined in the New Person file for the user to access any Patient file record.

Determine if user accessing a sensitive record or an employee's record.

TAG: PTSEC  
RETURN VALUE TYPE: ARRAY

ROUTINE: DGSEC4  
AVAILABILITY: PUBLIC

INPUT PARAMETER: DFN  
REQUIRED: YES  
DESCRIPTION:  
DFN = Patient (#2) file DFN.

PARAMETER TYPE: LITERAL  
SEQUENCE NUMBER: 1

INPUT PARAMETER: DGMSG  
MAXIMUM DATA LENGTH: 1  
SEQUENCE NUMBER: 2  
DESCRIPTION:  
DGMSG = 1 - if message should be generated when a user's SSN is undefined  
0 - message will not be generated  
If not defined, defaults to 1.

PARAMETER TYPE: LITERAL  
REQUIRED: NO

INPUT PARAMETER: DGOPT  
REQUIRED: NO  
DESCRIPTION:  
Contains Option name^Menu text for DG Security Log update.

PARAMETER TYPE: LITERAL  
SEQUENCE NUMBER: 3

RETURN PARAMETER DESCRIPTION:

RESULT(1) =

- -1-RPC/API failed
  - Required variable not defined
- 0-No display/action required
  - Not an employee, not sensitive or not accessing own Patient record
- 1-Display warning message
  - Sensitive - inpatient or a DG SENSITIVITY key holder or Employee and DG SECURITY OFFICER key holder
- 2-Display warning message, require OK to continue and call
  - DG SENSITIVE RECORD BULLETIN RPC to update DG Security Log file and generate Sensitive Record Access mail message.
  - Sensitive - not an inpatient and not a key holder or Employee/not a DG SECURITY OFFICER key holder

- 3-Access to record denied
  - Accessing own Patient file record
- 4-Access to Patient file (#2) records denied
  - SSN not defined

RESULT(2-n) = error message or warning/Privacy Act message. Error and warning messages will begin in RESULT(2) array. The Privacy Act message is the longest message and will utilize RESULT(2)- RESULT(8).

If RESULT(1)=1, the DG Security Log file is updated.

If RESULT(1)=2, the user must acknowledge they want to access the restricted record and the application must call the DG SENSITIVE RECORD BULLETIN RPC to update the DG Security Log file and generate the Sensitive Record Access mail message.

## **DG SENSITIVE RECORD BULLETIN**

This Remote Procedure Call (RPC) will add an entry to the DG SECURITY LOG (#38.1) file and/or generate the sensitive record access bulletin depending on the value in ACTION input parameter. If ACTION parameter not defined, defaults to update DG Security Log file and generate Sensitive Record Access mail message.

TAG: NOTICE                      ROUTINE: DGSEC4  
RETURN VALUE TYPE: SINGLE VALUE      AVAILABILITY: PUBLIC

INPUT PARAMETER: ACTION              PARAMETER TYPE: LITERAL  
MAXIMUM DATA LENGTH: 1              REQUIRED: NO  
SEQUENCE NUMBER: 3  
DESCRIPTION:  
ACTION =              1 - Set DG Security Log entry  
                            2 - Generate Sensitive Record Access bulletin  
                            3 - Both

INPUT PARAMETER: DFN              PARAMETER TYPE: LITERAL  
REQUIRED: YES                      SEQUENCE NUMBER: 1  
DESCRIPTION:  
DFN = Patient (#2) file DFN

INPUT PARAMETER: DGOPT              PARAMETER TYPE: LITERAL  
REQUIRED: NO                      SEQUENCE NUMBER: 2  
DESCRIPTION:  
DGOPT =              Option Name^Menu test  
                            If not defined, OP^XQCHK identifies option or defaults to UNKNOWN.

RETURN PARAMETER DESCRIPTION:  
RESULT=              1 - successfully added entry and/or generated sensitive record access bulletin  
                            0 - unsuccessful



## CPRS and DG SENSITIVE RECORD...

It's also working with Notifications (Alerts) but this is just how CPRS is doing it and should just be used as a reference. The main point is that the Patient Search is going to return values of Sensitive\*, if these patients are selected then the user needs to be checked to see if they are allowed to access the record and if required, have the event logged.

DGSR_FAIL = -1; DGSR_NONE = 0; DGSR_SHOW = 1; DGSR_ASK = 2; DGSR_DENY = 3;	TX_DGSR_ERR = 'Unable to perform sensitive record checks'; TC_DGSR_ERR = 'Error'; TC_DGSR_SHOW = 'Restricted Record'; TC_DGSR_DENY = 'Access Denied'; TX_DGSR_YESNO = CRLF + 'Do you want to continue processing this patient record?'; TC_NEXT_NOTIF = 'NEXT NOTIFICATION: ';
--	---

CheckSensitiveRecordAccess
CallV('DG SENSITIVE RECORD ACCESS', [DFN]); AccessStatus := -1; MessageText := ''; with RPCBrokerV do begin if Results.Count > 0 then begin AccessStatus := StrToIntDef(Results[0], -1); Results.Delete(0); if Results.Count > 0 then MessageText := Results.Text; end; end; end;

```
CheckSensitiveRecordAccess(NewDFN, AccessStatus, AMsg);
case AccessStatus of
  DGSR_FAIL: begin
    InfoBox(PrefixT + TX_DGSR_ERR, PrefixC + TC_DGSR_ERR, MB_OK);
    Result := FALSE;
  end;
  DGSR_NONE: { Nothing - allow access to the patient. };
  DGSR_SHOW: InfoBox(PrefixT + AMsg, PrefixC + TC_DGSR_SHOW, MB_OK);
  DGSR_ASK: if InfoBox(PrefixT + AMsg + TX_DGSR_YESNO, PrefixC + TC_DGSR_SHOW, MB_YESNO or
    MB_ICONWARNING or
    MB_DEFBUTTON2) = IDYES then LogSensitiveRecordAccess(NewDFN)
  else Result := FALSE;
else
  begin
    InfoBox(PrefixT + AMsg, PrefixC + TC_DGSR_DENY, MB_OK);
    if Notifications.Active then Notifications.DeleteForCurrentUser;
    Result := FALSE;
  end;
end;
```

## Notifications (Alerts)

### **ORWORB FASTUSER**

Function returns notifications for current user.

TAG: FASTUSER                                      ROUTINE: ORWORB  
RETURN VALUE TYPE: GLOBAL ARRAY    AVAILABILITY: RESTRICTED  
WORD WRAP ON: TRUE  
DESCRIPTION:

\*Pieces are the same as the columns in CPRS

Info^Patient^Location^Urgency^Alert Date/Time^Message Text^Forwarded By/When^XQAID^Remove  
w/o process^Forwarding Comments

\*\*XQAID is the identifier used to interact with this Alert with other RPC's.

Pieces not displayed

XQAID

Remove w/o process

Forwarding comments

FOR CPRS while LOOPing on the RPC Return List there is a difference for forwarded alerts:

```
if Piece(List[I], U, 1) <> 'Forwarded by: ' then
  begin
    NewItem := lstvAlerts.Items.Add;
    NewItem.Caption := Piece(List[I], U, 1);
    for J := 2 to DelimCount(List[I], U) + 1 do
      NewItem.SubItems.Add(Piece(List[I], U, J));
    end
  else //this list item is forwarding information
    begin
      NewItem.SubItems[5] := Piece(List[I], U, 2);
      Comment := Piece(List[I], U, 3);
      if Length(Comment) > 0 then NewItem.SubItems[8] := 'Fwd Comment: ' + Comment;
    end;
```

### **ORWORB GETSORT**

Returns the method for sorting GUI alert display.

TAG: GETSORT                                      ROUTINE: ORWORB  
RETURN VALUE TYPE: SINGLE VALUE

This is just a return with the first piece as the sort method either as upper or lower case:  
I, P, L, U, D, M, F (refers to column headers)

### **ORWORB SETSORT**

Sets the GUI alert sort method for the user. This is set when a user clicks on the GUI alert columns to change the display sorting.

TAG: SETSORT		ROUTINE: ORWORB	
RETURN VALUE TYPE: SINGLE VALUE			
Two input parameters: The sort column as letter (see above) and the direction as either "F" or "R" (forward or reverse)			
Returns a single value 1 OR 0			
<b><u>ORWORB GETDATA</u></b>			
Given an XQAID, return XQADATA for an alert.			
TAG: GETDATA		ROUTINE: ORWORB	
RETURN VALUE TYPE: SINGLE VALUE			
INPUT PARAMETER: XQAID		PARAMETER TYPE: LITERAL	
MAXIMUM DATA LENGTH: 60		REQUIRED: YES	
SEQUENCE NUMBER: 1			
<b><u>ORB FORWARD ALERT</u></b>			
The rpc forwards an alert.			
TAG: FWD		ROUTINE: ORB31	
RETURN VALUE TYPE: SINGLE VALUE		AVAILABILITY: RESTRICTED	
INPUT PARAMETER: XQAID		PARAMETER TYPE: LITERAL	
MAXIMUM DATA LENGTH: 255		REQUIRED: YES	
SEQUENCE NUMBER: 1			
DESCRIPTION:			
The alert identifier used by the Kernel Alert utility to uniquely identify an alert/notification. For OE/RR alerts, the format is: "OR,<dfn>,<notif ien>;<notif date.time>"			
INPUT PARAMETER: RECIPIENT		PARAMETER TYPE: LITERAL	
MAXIMUM DATA LENGTH: 64		REQUIRED: YES	
SEQUENCE NUMBER: 2			
DESCRIPTION:			
DUZ (file 200 ien) of the person to receive the forwarded alert.			
INPUT PARAMETER: TYPE		PARAMETER TYPE: LITERAL	
MAXIMUM DATA LENGTH: 16		REQUIRED: YES	
SEQUENCE NUMBER: 3			
DESCRIPTION:			
The type of message to be forwarded. "A" indicates an alert is to be forwarded.			
INPUT PARAMETER: COMMENT		PARAMETER TYPE: LITERAL	
MAXIMUM DATA LENGTH: 255		SEQUENCE NUMBER: 4	
DESCRIPTION:			
The comment (optional) to be forwarded with the alert.			
<b><u>ORB RENEW ALERT</u></b>			
This rpc renews an alert.			
TAG: RENEW		ROUTINE: ORB31	

RETURN VALUE TYPE: SINGLE VALUE      AVAILABILITY: RESTRICTED	
INPUT PARAMETER: XQAID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 255	REQUIRED: YES
SEQUENCE NUMBER: 1	
DESCRIPTION:	
XQAID is the unique identifier used by Kernel Alerts to process and take actions on alerts.	
<b><u>ORB DELETE ALERT</u></b>	
This function deletes an alert.	
TAG: DEL	ROUTINE: ORB3FUP1
RETURN VALUE TYPE: SINGLE VALUE	AVAILABILITY: RESTRICTED
INPUT PARAMETER: XQAID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 32	REQUIRED: YES
DESCRIPTION:	
The alert identifier used by the Kernel Alert utility to uniquely identify an alert/notification. For OE/RR alerts, the format is: "OR,<dfn>,<notif ien>;<notif date.time>"	
RETURN PARAMETER DESCRIPTION:	
True or False for successful deletion or failure.	
For CPRS it is used twice:	
<pre> procedure DeleteAlert(XQAID: string); //deletes an alert begin   CallV('ORB DELETE ALERT',[XQAID]); end;  procedure DeleteAlertForUser(XQAID: string); //deletes an alert begin   CallV('ORB DELETE ALERT',[XQAID, True]); end;</pre>	
<b><u>TIU GET ALERT INFO</u></b>	
Given a TIU XQAID, return the patient and document type for the item being alerted.	
TAG: GETALRT	ROUTINE: TIUSRVR
RETURN VALUE TYPE: SINGLE VALUE	
INPUT PARAMETER: XQAID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 60	REQUIRED: YES
DESCRIPTION:	
The XQAID of the alert.	
RETURN PARAMETER DESCRIPTION:	
TIUDA^DFN^gui tab indicator	

where

TIUDA is the document IEN in ^TIU(8925

DFN is the patient IEN

gui tab indicator is an arbitrarily set constant based on the document type.

## Progress Notes

### TIU DOCUMENTS BY CONTEXT

Returns lists of TIU Documents that satisfy the following search criteria:

- 1 - signed documents (all)
- 2 - unsigned documents
- 3 - uncosigned documents
- 4 - signed documents/author
- 5 - signed documents/date range

TAG: CONTEXT                      ROUTINE: TIUSRVLO  
RETURN VALUE TYPE: GLOBAL ARRAY    AVAILABILITY: SUBSCRIPTION  
WORD WRAP ON: TRUE

INPUT PARAMETER: CLASS              PARAMETER TYPE: LITERAL  
REQUIRED: YES                      SEQUENCE NUMBER: 1  
DESCRIPTION:  
This is a pointer to the Class of TIU DOCUMENTS which the user is interested in (e.g., 3 for PROGRESS NOTES, 244 for DISCHARGE SUMMARIES, etc.).

INPUT PARAMETER: CONTEXT              PARAMETER TYPE: LITERAL  
REQUIRED: YES                      SEQUENCE NUMBER: 2  
DESCRIPTION:  
This is an integer number which maps the context in which the user wishes the notes to be returned.  
The mapping is as follows:  
1 - signed documents (all)  
2 - unsigned documents  
3 - uncosigned documents  
4 - signed documents/author  
5 - signed documents/date range

INPUT PARAMETER: DFN              PARAMETER TYPE: LITERAL  
REQUIRED: YES  
DESCRIPTION:  
Pointer to Patient File (#2).

INPUT PARAMETER: EARLY              PARAMETER TYPE: LITERAL  
REQUIRED: NO  
DESCRIPTION:  
EARLY DATE/TIME in regular FileMan format for the inclusive lower bound on the search.

INPUT PARAMETER: LATE              PARAMETER TYPE: LITERAL  
REQUIRED: NO                      SEQUENCE NUMBER: 5  
DESCRIPTION:  
LATE DATE/TIME in regular FileMan format for the inclusive upper bound on the search.

INPUT PARAMETER: PERSON              PARAMETER TYPE: LITERAL  
REQUIRED: NO                      SEQUENCE NUMBER: 6

DESCRIPTION:

This is a pointer to the NEW PERSON FILE (#200) for the author of the documents to be retrieved.

INPUT PARAMETER: OCCLIM

PARAMETER TYPE: LITERAL

REQUIRED: NO

SEQUENCE NUMBER: 7

DESCRIPTION:

This is the maximum number of documents to be retrieved in the current query.

INPUT PARAMETER: SEQUENCE

PARAMETER TYPE: LITERAL

REQUIRED: NO

SEQUENCE NUMBER: 8

DESCRIPTION:

This is the sequence by reference date/time (A=ascending (OLDEST FIRST), D=descending (NEWEST FIRST)) in which the user would like the list returned.

INPUT PARAMETER: SHOWADD

PARAMETER TYPE: LITERAL

REQUIRED: NO

SEQUENCE NUMBER: 10

DESCRIPTION:

This BOOLEAN parameter determines whether addenda will be included in the return array, when their parent documents are identified by the search criteria, and vice versa. Also if SHOWADD is TRUE (1), the "+" at the beginning of the return text will be omitted (since it offers only redundant information).

INPUT PARAMETER: INCUND

PARAMETER TYPE: LITERAL

REQUIRED: NO

DESCRIPTION:

Optional Boolean parameter determines whether Undictated and Untranscribed documents should be returned along with Unsigned documents, when the CONTEXT is passed as 2.

RETURN PARAMETER DESCRIPTION:

The return array has elements with the following positional values:

IEN^TITLE^REFERENCE DATE/TIME (INT)^PATIENT NAME (LAST I/LAST 4)^AUTHOR (INT;EXT)^HOSPITAL LOCATION^SIGNATURE STATUS^Visit Date/Time^Discharge Date/time^Variable Pointer to Request (e.g., Consult)^# of Associated Images^Subject^Has Children^IEN of Parent Document

Example:

Params		
literal	3	CLASS
literal	1	CONTEXT
literal	441	DFN
literal	-1	EARLY
literal	-1	LATE
literal	0	DUZ
literal	122	MAX ENTRIES TO RETRIEVE (OCCLIM)
literal	D	DIRECTION (SEQUENCE)
literal	1	SHOWADD

**TIU GET RECORD TEXT**

This RPC will get the textual portion of a TIU Document Record.

TAG: TGET                                      ROUTINE: TIUSRVR1  
RETURN VALUE TYPE: GLOBAL ARRAY      AVAILABILITY: SUBSCRIPTION  
WORD WRAP ON: TRUE

INPUT PARAMETER: TIUDA                      PARAMETER TYPE: LITERAL  
MAXIMUM DATA LENGTH: 10                  REQUIRED: YES  
(The first piece of the list item for TIU DOCUMENTS BY CONTEXT (IEN).)



## Clinical Reminders

### **ORQQPXRMR REMINDERS APPLICABLE**

Returns a list of clinical reminders due/applicable or not applicable to the patient.

ROUTINE: ORQQPXRMR	TAG: APPL
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: PATIENT ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
SEQUENCE NUMBER: 1	
DESCRIPTION: Patient identifier from the patient file [#2]	

INPUT PARAMETER: HOSPITAL LOCATION	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	SEQUENCE NUMBER: 2
DESCRIPTION: Patients location from HOSPITAL LOCATION [#44]. May be null.	

RETURN PARAMETER DESCRIPTION:  
List of reminders in format:  
IEN^PRINT NAME^DUE DATE/TIME^LAST OCCURRENCE DATE/TIME^PRIORITY^DUE

DUE=0 - Applicable  
DUE=1 - Due

### **ORQQPX REMINDERS LIST**

Returns a list of clinical reminders.

ROUTINE: ORQQPX	TAG: REMIND
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION

INPUT PARAMETER: PATIENT ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Patient identifier (DFN) from patient file [#2].	

RETURN PARAMETER DESCRIPTION:  
List of patient clinical reminders in format:  
IEN^PRINT NAME^DUE DATE/TIME^LAST OCCURRENCE DATE/TIME

### **ORQQPXRM REMINDER CATEGORIES**

Returns list of all CPRS lookup categories and associated reminders

ROUTINE: ORQQPXRM	TAG: CATEGORY
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: PATIENT ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
SEQUENCE NUMBER: 1	
DESCRIPTION:	
Patient Identifier from Patient file [#2]	

INPUT PARAMETER: HOSPITAL LOCATION	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: NO
SEQUENCE NUMBER: 2	
DESCRIPTION:	
Patient's HOSPITAL LOCATION [#44]. May be null.	

RETURN PARAMETER DESCRIPTION:  
Returns array of categories and reminders based on CPRS lookup categories for this patient service/location.

#### **FORMAT OF OUTPUT**

ARRAY(1)=identifier^type^name^parent identifier^reminder ien  
ARRAY(2)=identifier^type^name^parent identifier^reminder ien

### **ORQQPXRM REMINDER DETAIL**

Returns the details of a clinical reminder

ROUTINE: ORQQPXRM	TAG: REMDET
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: PATIENT ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
SEQUENCE NUMBER: 1	
DESCRIPTION:	
Patient identifier from Patient file [#2]	

INPUT PARAMETER: CLINICAL REMINDER ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
SEQUENCE NUMBER: 2	
DESCRIPTION:	
Clinical reminder (ien) from CLINICAL REMINDER DEFINITION file [#811.9]	

RETURN PARAMETER DESCRIPTION:  
Formatted details of the clinical reminder

### **ORQQPXRMR REMINDER INQUIRY**

Detailed description of reminder

ROUTINE: ORQQPXRMR	TAG: RES
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: CLINICAL REMINDER ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Clinical reminder (ien) from CLINICAL REMINDER DEFINITION file [#811.9]	

RETURN PARAMETER DESCRIPTION:  
Detailed description of clinical reminder as formatted text

#### FORMAT OF OUTPUT

ARRAY(1) = Display text line 1  
ARRAY(2) = Display text line 2  
ARRAY(3) = etc

### **ORQQPX REMINDER DETAIL**

Returns the details of a clinical reminder.

ROUTINE: ORQQPX	TAG: REMDET
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: PATIENT ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Patient identifier from Patient file [#2].	

INPUT PARAMETER: CLINICAL REMINDER ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Clinical reminder identifier (ien) from PCE REMINDER/MAINTENANCE ITEM file [#811.9].	

RETURN PARAMETER DESCRIPTION:  
Formatted details of the clinical reminder.

### **ORQQPXR EDUCATION TOPIC**

Detailed description of education topic

ROUTINE: ORQQPXR	TAG: EDU
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: EDUCATION TOPIC ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Education topic (ien) from EDUCATION TOPIC file [#9999999.09]	

RETURN PARAMETER DESCRIPTION:  
Detailed description of education topic as formatted text

FORMAT OF OUTPUT  
ARRAY(1) = Display text line 1  
ARRAY(2) = Display text line 2  
ARRAY(3) = etc

### **ORQQPXR REMINDER EVALUATION**

Allows evaluation of a list of reminders. Returns a list of clinical reminders due/applicable or not applicable to the patient.

ROUTINE: ORQQPXR	TAG: ALIST
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: PATIENT ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
SEQUENCE NUMBER: 1	
DESCRIPTION: Patient identifier from the patient file [#2]	

INPUT PARAMETER: REMINDER ARRAY	PARAMETER TYPE: LIST
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
SEQUENCE NUMBER: 2	
DESCRIPTION: List of reminders in format : array(1) = reminder ien1 (from #811.9) array(2) = reminder ien2 etc	

RETURN PARAMETER DESCRIPTION:  
List of reminders in format:  
IEN^PRINT NAME^DUE DATE/TIME^LAST OCCURRENCE DATE/TIME^PRIORITY^DUE

DUE=0 - Applicable  
DUE=1 - Due  
DUE=2 - Not Applicable

### **ORQQPXRM EDUCATION SUMMARY**

Returns list of education topics for a reminder

ROUTINE: ORQQPXRM	TAG: EDL
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: CLINICAL REMINDER ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Clinical reminder (ien) from CLINICAL REMINDER DEFINITION file [#811.9]	

RETURN PARAMETER DESCRIPTION:  
List of education topics for this reminder in format

### **ORQQPXRM EDUCATION SUBTOPICS**

Returns array of subtopics for any given education topic

ROUTINE: ORQQPXRM	TAG: EDS
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: EDUCATION TOPIC ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Education topic (ien) from EDUCATION TOPIC file [#9999999.09]	

RETURN PARAMETER DESCRIPTION:

#### **FORMAT OF OUTPUT**

ARRAY(1) = ien^name^print name^sequence number  
ARRAY(2) = ien^name^print name^sequence number

### **ORQQPXRM REMINDER WEB**

Web addresses for selected reminder

ROUTINE: ORQQPXRM	TAG: WEB
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: CLINICAL REMINDER ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Clinical reminder (ien) from CLINICAL REMINDER DEFINITION file [#811.9]	

RETURN PARAMETER DESCRIPTION:  
Formatted list of web addresses  
description^address

E.G.

ARRAY(0)=4  
ARRAY(1)=Influenza Directive^http://www.va.gov/publ/direct/194026.htm  
ARRAY(2)=Medical Home Pages^http://www.va.gov/bookmark/Medhome.htm  
ARRAY(3)=National Guideline Clearinghouse^http://www.guideline.com  
ARRAY(4)=VISN01 Web Page^http://vaww.visn1.med.va.gov

### **ORQQPXRM REMINDER DIALOG**

Dialog for a given reminder

ROUTINE: ORQQPXRM	TAG: DIALOG
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: CLINICAL REMINDER ID	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
DESCRIPTION: Clinical reminder (ien) from CLINICAL REMINDER DEFINITION file [#811.9]	

RETURN PARAMETER DESCRIPTION:  
For each dialog item in the reminder dialog for the reminder :

- 1) Initial states  
1^dialog item ien[#801.41]^dialog ien [#801.412]^  
1111
- 2) Question text  
2^dialog item ien[#801.41]^dialog ien [#801.412]^text

## **ORQQPXRMDIALOG PROMPTS**

Additional prompts for a given dialog element

ROUTINE: ORQQPXRMDIALOG	TAG: PROMPT
RETURN VALUE TYPE: ARRAY	AVAILABILITY: SUBSCRIPTION
WORD WRAP ON: TRUE	

INPUT PARAMETER: DIALOG ELEMENT IEN	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	REQUIRED: YES
SEQUENCE NUMBER: 1	
DESCRIPTION: Reminder dialog element identifier (ien) from REMINDER DIALOG file [#801.41]	

INPUT PARAMETER: CURRENT/HISTORICAL	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 16	SEQUENCE NUMBER: 2
DESCRIPTION: Used only for taxonomy dialogs.	

- 0 - Current Diagnosis/Procedure
- 1 - Historical Diagnosis/Procedure

INPUT PARAMETER: DIALOG LINE CPT/POV	PARAMETER TYPE: LITERAL
MAXIMUM DATA LENGTH: 3	SEQUENCE NUMBER: 3
DESCRIPTION: For taxonomy dialog the type of finding (POV/CPT) for this dialog line	

RETURN PARAMETER DESCRIPTION:  
For a selected dialog element

- 3) Resolutions  
3^dialog item ien[#801.41]^line id^resolution type code^ien[#various]
- 4) Additional prompts  
4^dialog item ien[#801.41]^line id^prompt text
- 5) Listbox items (cpt/pov)  
5^dialog item ien[#801.41]^line id^cpt/pov ien^code/desc

**ORQQPXRMDIALOG ACTIVE**

For a list of reminders [#811.9] returns same list with status to indicate if an active dialog exists for the reminder.

ROUTINE: ORQQPXRMDIALOG

AVAILABILITY: SUBSCRIPTION

TAG: ACTIVE RETURN VALUE TYPE: ARRAY

WORD WRAP ON: TRUE

INPUT PARAMETER: CLINICAL REMINDER IEN

MAXIMUM DATA LENGTH: 16

PARAMETER TYPE: LITERAL

REQUIRED: YES

DESCRIPTION:

Array of clinical reminder iens [#811.9] to be checked.

RETURN PARAMETER DESCRIPTION:

Array of clinical reminders in format

ORY(1)=Reminder\_U\_Status

ORY(2)=Reminder\_U\_Status

Where status:

0 - No active dialog

1 - Active dialog

**ORQQPXRMPROGRESS NOTE HEADER**

Returns header text to be inserted in each progress note.

ROUTINE: ORQQPXRMPROGRESS NOTE

RETURN VALUE TYPE: SINGLE VALUE

WORD WRAP ON: TRUE

TAG: HDR

AVAILABILITY: SUBSCRIPTION

INPUT PARAMETER: HOSPITAL LOCATION

MAXIMUM DATA LENGTH: 16

PARAMETER TYPE: LITERAL

DESCRIPTION:

Patients location from HOSPITAL LOCATION [#44]. May be null.

RETURN PARAMETER DESCRIPTION:

Returns text for progress note header

ARRAY(1)=text



### **ORQQPX NEW REMINDERS ACTIVE**

Return 1 if Interactive Reminders are active, otherwise return 0.

ROUTINE: ORQQPX

RETURN VALUE TYPE: SINGLE VALUE

WORD WRAP ON: TRUE

TAG: NEWACTIV

AVAILABILITY: RESTRICTED

### **PXRM REMINDER DIALOG (TIU)**

Dialog for a given dialog ien.

ROUTINE: ORQQPXRM

RETURN VALUE TYPE: ARRAY

TAG: TDIALOG

AVAILABILITY: SUBSCRIPTION

INPUT PARAMETER: DIALOG IEN

MAXIMUM DATA LENGTH: 16

SEQUENCE NUMBER: 1

DESCRIPTION:

Reminder Dialog ien from #801.41

PARAMETER TYPE: LITERAL

REQUIRED: YES

RETURN PARAMETER DESCRIPTION:

For each dialog element/group in the reminder dialog:

1) Initial states

1^dialog item ien[#801.41]^dialog ien [#801.412]^^^

2) Question text

2^dialog item ien[#801.41]^dialog ien [#801.412]^text

### **PXRM REMINDERS AND CATEGORIES**

Returns list of reminders and categories.

ROUTINE: PXRMRPCD

RETURN VALUE TYPE: ARRAY

TAG: SEL

AVAILABILITY: SUBSCRIPTION