



RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **iCare Population Management GUI**

(BQI)

## **Technical Manual**

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## Preface

The purpose of the Technical Manual is to provide technical information about the iCare Population Management (BQI) Graphical User Interface (GUI) package. The BQI package is designed to enable clinical case managers and providers to track, monitor, administer, and report on clinical care delivered to patients.

## 1.0 Introduction

The iCare Population Management GUI (BQI) software is a component of the Indian Health Service (IHS) Resource and Patient Management System (RPMS) that provides case management functions. Case management provides a mechanism to inform healthcare providers about single or multiple disease states and conditions and allows them to follow-up clinical interventions. RPMS applications can assist healthcare providers in identifying high-risk patients, proactively tracking care reminders and the health status of individuals or populations, providing appropriate care by embedding evidence-based guidelines, and reporting outcomes. Appropriate case management improves the delivery of care, as well as the outcome. In addition, there are documented fiscal benefits when appropriate case management is introduced into the healthcare business process model.

The Technical Manual provides IHS site managers with a technical description of the BQI routines, files, menus, cross references, globals, and other necessary information required to effectively manage the iCare Population Management GUI system.

All routines, files, options, keys and remote procedure calls (RPC) are namespaced starting with the letters BQI. The file number range for this package is 90505–90509.99.

BQI incorporates the Human Immunodeficiency Virus (HIV) Management System (HMS). The routines and files associated with the HMS are namespaced BKM and the file number range is 90450 – 90459.99.

BQI provides the first interface to Care Management Event Tracking (CMET) functionality. The CMET functionality allows sites to track specific events and follow them to completion. In CMET, the events that can be tracked are related to women's health. CMET offers users the ability to track an event, enter findings, recommend follow-up events, and create and document patient notifications.

## 2.0 Orientation

The iCare package has no RPMS menu options for users. The only RPMS preparation specifically needed to run iCare is to install the Kernel Installation and Distribution System (KIDS) package, assign the appropriate Remote Procedure Call (RPC) menu option to users, and set up the appropriate background jobs. The rest of the iCare package is run and managed on the personal computer client. See the Installation Guide for details on server and client installation and configuration.

Interaction between iCare and the RPMS system is accomplished entirely through the use of RPCs. All RPCs in this package begin with the namespace letters BQI.

## 3.0 Implementation and Maintenance

The iCare system is designed to work with RPMS through a Windows® GUI application.

### 3.1 General Information

Table 3-1 shows the prerequisite patch requirements for successfully installing iCare.

Table 3-1: Prerequisite patch requirement

Package and Version	Associated Patch Designation(s)	Brief Patch Description
ICARE MANAGEMENT SYSTEM Version 2.3	BQI*2.3*5	iCARE Version 2.3 Patch 5
Taxonomy (ATX)	v5.1 Patch 11	Taxonomy
IHS ICD/CPT Lookup & Grouper (AICD)	v4.0	ICD data files
CRS (BGP)	v15.0	Clinical Reporting System v15

### 3.2 System Requirements

Table 3-2 shows the versions of other packages that must be installed for iCare to work properly.

Table 3-2: System requirements

Module	Minimum Version	Recommended Version
VA FileMan (DI)	v22.0 Patch 1017	
VA Kernel (XU)	v8.0 Patch 1017	
BMXNet (BMX)	v4.0 Patch 4	
IHS/VA Utilities (XB)	v3.0 through Patch 11	
Patient Information Management System (PIMS)	v5.3 through Patch 1017	
IHS Clinical Reporting (BGP)	v15.0	
PCC Data Entry (APCD)	v2.0 through Patch 10	
PCC Health Summary (APCH)	v2.0 through Patch 17	
QMAN (AMQQ)	v2.0 through Patch 21	
Taxonomy (ATX)	v5.1 through Patch 11	
HIV Management System (BKM)	v2.1 Patch 2	

Module	Minimum Version	Recommended Version
IHS Asthma Register (BAT)	v1.0 Patch 1	
IHS PCC Suite (BJPC)	v2.0 Patch 11	
Referred Care Info System (BMC)	v4.0 Patch 9	
Patient Registration (AG)	v7.2 Patch 4	
Immunization (BI)	v8.5 Patch 8	
EHR	v1.1 Patch 14	
iCare Management System (BQI)	v2.3 Patch 5	
IHS User Security Audit (BUSA)	v1.0	
IHS MU Performance Reports (APCM)	v1.0 Patch 6	
IHS ICD/CPT Lookup & Grouper (AICD)	v4.0	
Text Integration Utilities (TIU)	v1.0 Patch 1013	
Clinical Reminders (PXRM)	v2.0 Patch 1003	

### 3.3 Package-wide Variables

There are no package-wide BQI variables in RPMS.

### 3.4 Security Keys

Users already having keys `AMHZ SUICIDE FORM ENTRY` and/or `APCDZ SUICIDE FORMS` will be assumed to have access to view suicide forms in iCare.

Table 3-3 lists the security keys which govern iCare that can be assigned to users.

Table 3-3: Security Keys

Key Name	Description
BQIZCMED	Assigned to iCare users who are allowed to edit care management data. This includes editing existing RPMS register data.
BQIZMGR	Assigned to users who will manage the iCare system. It should not be given to the general RPMS user population.

Key Name	Description
BQIZTXED	Assigned to the small group of iCare users who are allowed to add and delete entries from site-specified taxonomies, such as Lab and Medication, and should not be given to the general RPMS user population.
BQIZMUMGR	Assigned to the person who has been designated as the Meaningful Use (MU) Coordinator.
BQIZIPCMGR	Assigned to the person who has been designated as the Improving Patient Care (IPC) Collaborative Coordinator.
BQIZEMPHLTH	Allows users to create and view an Employee Health Panel to monitor certain information about employees. Because of the sensitivity of the data, it should not be given to the general RPMS user population.

## 4.0 Menu Diagram

There are no RPMS menus in the BQI system. Client menus are discussed in detail in the *BQI User Manual*.

## 5.0 Routine

### 5.1 Routine List

Table 5-1 lists the iCare routines being released in this version of iCare and does not include all iCare routines.

Table 5-1: Routine List for ICARE MANAGEMENT SYSTEM 2.4

BQI1POJB	BQI24POS	BQI24PRE	BQIAX	BQIAXA	BQIAXB
BQIAXC	BQIAXD	BQICAEP1	BQICAEP2	BQICAEXP	BQICALRN
BQICALRT	BQICASUI	BQICAUTL	BQICAVAL	BQICAVW	BQIDCAH3
BQIDCINP	BQIGPRA4	BQIGPRA6	BQIIPC4	BQIIPC5	BQIIPRVG
BQILYUPD	BQINIGH1	BQINIGH2	BQINIGHT	BQINOTR	BQIPDSC1
BQIPDSCM	BQIPTFHD	BQIPTFHE	BQIPTFHR	BQIPTFHS	BQIPTIMM
BQIPTMSR	BQIPTPRC	BQIRGASU	BQIRGCOP	BQIRGDMA	BQIRGDMS
BQIRGPG	BQIRGPL	BQIRMREG	BQIRPL	BQISYPRM	BQITASK
BQITASK4	BQITAXCK	BQITAXX	BQITAXX4	BQITAXX5	BQITD11
BQITD13	BQITDPAT	BQITIUTX	BQITRACB	BQITRMT	BQITRUPD
BQITRUT1	BQITRUTL	BQITUTL	BQIUL2	BQIUL3	BQIVFTLK
BQIVFTRF	BQIXV	BQIXVA	BQIY	BQIYC	

Table 5-2: Routine List for HIV MANAGEMENT SYSTEM 2.2

BKM22PRE	BKM22PST	BKMCRS	BKMIMRP1	BKMIXX	BKMIXX2
BKMIXX5	BKMQQCR1	BKMQQCR2	BKMQQCR3	BKMQQCR5	BKMQQCR9
BKMQQCRB	BKMQQCRC	BKMRMDR	BKMRMEX	BKMRMIM	BKMRMWH
BKMUL3	BKMVA1U	BKMVC6	BKMVCD	BKMFV3	BKMVSUP
BKMVSUP1	BKMVSUP2	BKMVSUP3	BKMVSUP5	BKMVSUP6	

Table 5-3: Routine List for CARE MANAGEMENT EVENT TRACKING 1.1

BTPW11PS	BTPWA	BTPWAA	BTPWAB	BTPWAC	BTPWAD
BTPWAE	BTPWAF	BTPWAG	BTPWAH	BTPWC	BTPWCA
BTPWPBTH	BTPWPCHT	BTPWPFND	BTPWPNLV	BTPWRLAB	BTPWTAX
BTPWTINT					

## 5.2 Routines with Description

Table 5-4 describes each routine being released in this version of iCare and does not include all iCare routines.

Table 5-2: Routines with Descriptions

<b>Routine</b>	<b>Description</b>
BQI21POJB	Error trapping routine
BQI24POS	Post-install routine
BQI24PRE	Pre-install routine
BQIAX	Update iCare taxonomies
BQIAXA	Taxonomy: BQI HEP C SCREEN LOINC CODES
BQIAXB	Taxonomy: BQI HEP C CONFIRM LOINC CODES
BQIAXC	Taxonomy: BQI HEP C GENOTYPE LOINC
BQIAXD	Taxonomy: BQI MEASLES ID SPEC TEST LOINC
BQICAEP1	Community Alerts Logic
BQICAEP2	Community Alerts Logic
BQICAEXP	Community Alerts Export
BQICALRN	Three Year Export of Alert Data
BQICALRT	Community Alerts Logic
BQICASUI	Community Alerts Logic
BQICAUTL	Community Alerts utilities
BQICAVAL	Community Alert Lab data for export
BQICAVW	Community Alerts View
BQIDCAH3	Ad Hoc Lab search routine
BQIDCINP	Inpatient search routine
BQIGPRA4	CRS populate by patient routine
BQIGPRA6	CRS update all patients for a selected measure
BQIIPC4	IPC4 check and update
BQIIPC5	IPC5 check and update
BQIPRVG	IPC revenue calculator routine
BQILYUPD	Update Layout Source
BQINIGH1	Nightly Background Job
BQINIGH2	Nightly Background Job
BQINIGHT	Nightly Background Job

<b>Routine</b>	<b>Description</b>
BQINOTR	Reminder notification program
BQIPDSC1	Panel Description generator routine
BQIPDSCM	Panel Description generator routine
BQIPTFHD	Family History Detail
BQIPTFHE	Family History Data Entry
BQIPTFHR	Family History Display
BQIPTFHS	Patient Family History
BQIPTIMM	Patient immunizations
BQIPTMSR	Patient Measurement data
BQIPTPRC	Patient ICD Procedures
BQIRGASU	Asthma care management data
BQIRGCOP	COPD care management data
BQIRGDMA	Set up Diabetes Audit Fields
BQIRGDMS	Update Diabetes Care Summary Fields
BQIRGPG	Prenatal care management data
BQIRGPL	Get Care management data by panel
BQIRMREG	Register reminders by panel
BQIRPL	Patient Problem List
BQISYPRM	ICARE Site Parameters
BQITASK	Weekly Dx tag and CRS update routine
BQITASK4	Update a diagnostic tag task
BQITAXCK	Taxonomy checker routine
BQITAXX	Get Taxonomy List
BQITAXX4	Update Taxonomy List
BQITAXX5	Get Taxonomy Items
BQITD11	PreDM Metabolic Syndrome Diagnostic Tag
BQITD13	Pregnant Diagnostic Tag
BQITDPAT	Populate Dx Tag by patient
BQITIUTX	Get Text Integration Utility (TIU) Document Text
BQITRACB	Best Practice Prompt for ACEI or ARB
BQITRMT	Find Treatment Prompts
BQITRUPD	Update Treatment Prompts glossary
BQITRUT1	Best Practice Prompt Utility routine
BQITRUTL	PCC utility routine
BQITUTL	Utility routine

<b>Routine</b>	<b>Description</b>
BQIUL2	Utility routine
BQIUL3	BQI utilities for Code Set Versioning
BQIVFTLK	Vfile Table Lookup routine
BQIVFTRF	Family History Trigger
BQIXV	Update taxonomy
BQIXVA	Taxonomy: BQI MMR IZ CVX CODES
BQIY	Update iCare taxonomies
BQIYC	Taxonomy: BQI NON TOBACCO USER FACTORS
BTPW11PS	Pre and Post installation code for Care Management Event Tacking
BTPWA	Update CMET CPT taxonomies
BTPWAA	Taxonomy: BTPW CONE BX CPTS
BTPWAB	Taxonomy: BTPW ECTOCERVICAL BX CPTS
BTPWAC	Taxonomy: BTPW ENDOCERVICAL CURR CPTS
BTPWAD	Taxonomy: BTPW FINE NEEDLE ASP CPTS
BTPWAE	Taxonomy: BTPW LASER CONE CPTS
BTPWAF	Taxonomy: BTPW LUMPECTOMY CPTS
BTPWAG	Taxonomy: BTPW MASTECTOMY UNS CPTS
BTPWAH	Taxonomy: BTPW CLIN BRST EXAM CPTS
BTPWC	Update CMET CPT taxonomies
BTPWCA	Taxonomy: BTPW BRST ULTRA-SND CPTS
BTPWPBTH	Batch Process TIU Letters
BTPWPCHT	Chart Review Creation
BTPWPFND	Event Data Mining routine
BTPWPNLV	CMET Panel routine
BTPWRLAB	Event Lab Result display routine
BTPWTAX	CMET Taxonomy List
BTPWTINT	TIU Note Text
BKM22PRE	Pre-installation routine
BKM22PST	Post-installation routine
BKMCRS	Checks lab, CPT4, ICD, LOINC, and refusals that meet STI definition.
BKMIMRP1	Patient Visit Report
BKMIXX	Taxonomy Access Utilities

<b>Routine</b>	<b>Description</b>
BKMIXX2	Taxonomy/Patient Check Utilities
BKMIXX5	Taxonomy/Patient Check Utilities
BKMQQCR1	Non-interactive Quality of Care report called by iCare RPC's
BKMQQCR2	Non-interactive Quality of Care report called by iCare RPC's
BKMQQCR3	Non-interactive Quality of Care report called by iCare RPC's
BKMQQCR5	Non-interactive Quality of Care report called by iCare RPC's
BKMQQCR9	Non-interactive Quality of Care report called by iCare RPC's
BKMQQCRB	Non-interactive Quality of Care report called by iCare RPC's
BKMQQCRC	Non-interactive Quality of Care report called by iCare RPC's
BKMRMDR	STI calculator for CRS and HMS
BKMRMEX	HMS examination reminders
BKMRMIM	HMS immunization reminders
BKMRMWH	HMS women's health reminders
BKMUL3	Code set versioning utilities that call the standard code set versioning APIs
BKMVA1U	Patient Register Utilities
BKMVC6	Opportunistic Infections And AIDS Defining Illnesses
BKMVCD	HMS Register Add
BKMVF3	Reminders From Patient Record and Menu Tree
BKMVSUP	Non-interactive HMS Supplement
BKMVSUP1	Non-interactive HMS Supplement
BKMVSUP2	Non-interactive HMS Supplement
BKMVSUP3	Non-interactive HMS Supplement
BKMVSUP5	Non-interactive HMS Supplement
BKMVSUP6	Non-interactive HMS Supplement

## 5.3 Function List

### 5.3.1 \$\$AGE^BQIAGE

The \$\$AGE^BQIAGE program is copied from the computed AGE field (2,.033) that calculates the age of a person based on the date of birth (DOB) (2,.03) and either the current date (DT) or the date of death (DOD) (2,.351). The computed AGE field has been modified to use another date passed into this function instead of just the previous two dates, DT, and DOD (i.e., age as of the date passed). A qualifier may also be passed indicating that years (YRS), days (DYS), and months (MOS) should be returned.

- Input Parameter Description:
  - DO: Patient IEN
  - PDATE: Other date to compare against patient's DOB
  - QUAL: Include qualifier (YRS, DYS, MOS)
- Output Description:
  - Patient's age

### 5.3.2 \$\$CDEF^BQICEVW

Returns the Care Management source default fields.

- Input Parameter Description:
  - Not applicable (N/A), but assumes the value of CARE is defined
  - CARE: The value of a View Source entry
- Output Description:
  - Returns a list of codes of data elements that can be viewed

### 5.3.3 \$\$CVW^BQICEVW

Retrieves a list of the fields for a Customized Care Management view.

- Input Parameter Description:
  - CARE: The value of a View Source entry
  - OWNR: Assumes the user
  - PLIEN: Assumes the panel
- Output Description:
  - Returns a list of codes of data elements that can be viewed

### 5.3.4 \$\$DFNC^BQICEVW

Returns the standard display order for a Care Management source.

- Input Parameter Description: N/A but assumes the value of CARE is defined
  - CARE: The value of a View Source entry
- Output Description:
  - Returns a list of codes of data elements that can be viewed

### 5.3.5 \$\$SFNC^BQICEVW

Returns the standard sort order for a Care Management source.

- Input Parameter Description: N/A but assumes the value of CARE is defined
  - CARE: The value of a View Source entry
- Output Description:
  - Returns a list of codes of data elements that can be viewed

### 5.3.6 \$\$TMPL^BQICEVW

Checks if a layout template is used for a panel.

- Input Parameter Description:
  - CARE: The value of a View Source entry
  - Assumes the owner of the panel and the panel IEN
- Output Description:
  - Returns a “0” if no layout template is being used or a “1” if a layout template is being used

### 5.3.7 \$\$FND^BQICMUTL

Determines what logic to pass to \$\$ITM^BQICMUTL to return the last entry for a specific data element for a specified Care Management source.

- Input Parameter Description:
  - CRN: Care Mgmt Source IEN
  - COLN: Column IEN
  - BQDFN: Patient IEN
- Output Description:

- Returns the information about the most recent result value as 1 ^ Visit date ^ ^ Visit internal entry number ^ associated V file internal entry number ^ Result Value ^ “refusal” (if applicable)

### 5.3.8 \$\$FTAG^BQICMUTL

Determines what logic to pass to \$\$ITM^BQICMUTL to return the last entry for a specific data element for a specified Diagnostic Tag.

- Input Parameter Description:
  - TGN - Dx Tag IEN
  - COLN - Column IEN
  - BQDFN - Patient IEN
- Output Description:
  - Returns the information about the most recent result value as 1 ^ Visit date ^ ^ Visit internal entry number ^ associated V file internal entry number ^ Result Value ^ “refusal” (if applicable)

### 5.3.9 \$\$ITM^BQICMUTL

Contains the logic to find the most recent visit for a request item and is called by \$\$FND^BQICMUTL.

- Input Parameter Description:
  - TMFRAME - Time frame to search data for
  - BQDFN - Patient internal entry number
  - FREF - File to search in
  - RREF - Search file table file
  - TIEN - Item to search on
  - TAX - Taxonomy name
- Output Description:
  - Returns the information about the most recent result value as 1 ^ Visit date ^ ^ Visit internal entry number ^ associated V file internal entry number ^ Result Value ^ “refusal” (if applicable)

### 5.3.10 \$\$CDEF^BQICMVW

Returns the Care Management source default fields.

- Input Parameter Description:
  - N/A

- Output Description:
  - Returns a string of required and default fields delimited by \$C(29)
  - All optional fields are excluded.

### 5.3.11 \$\$CVW^BQICMVW

Returns the customized Care Management view for a panel.

- Input Parameter Description:
  - CARE: The value of a View Source entry
- Output Description:
  - Returns a list of codes of data elements that were customized

### 5.3.12 \$\$DFNC^BQICMVW

Returns the standard display fields for the Care Management view.

- Input Parameter Description:
  - N/A
- Output Description:
  - Returns a string of required and default fields delimited by \$C(29). All optional fields are excluded

### 5.3.13 \$\$SFNC^BQICMVW

Returns the standard sort order for the Care Management view.

- Input Parameter Description:
  - N/A
- Output Description:
  - Returns a string of required and default fields delimited by \$C(29). All optional fields are excluded

### 5.3.14 \$\$TMPL^BQICMVW

Checks if a layout template is used for a panel.

- Input Parameter Description:
  - CARE: The value of a View Source entry
- Output Description:

- Returns a “0” if no layout template is being used or a “1” if a layout template is being used

### 5.3.15 \$\$LSET^BQIDCAH3

Returns a list of lab result codes if the lab test result is a “set of codes”.

- Input Parameter Description:
  - LN: Lab test IEN
- Output Description:
  - Returns the set of codes from the Data Dictionary

### 5.3.16 \$\$FILN^BQIDCDF

Returns the file number associated with a parameter of a predefined panel.

- Input Parameter Description:
  - SOURCE: Predefined panel name
  - PNAME: Parameter name
- Output Description:
  - Returns the table file number

### 5.3.17 \$\$MPF^BQIDCDF

Returns the mapping flag for a data element that is “mapped”.

- Input Parameter Description:
  - SOURCE: Predefined panel name
  - PNAME: Parameter name
- Output Description:
  - Returns a “1”:Yes, maps to another parameter OR “0”:No, doesn't map to another parameter

### 5.3.18 \$\$MPN^BQIDCDF

Returns the map parameter name for a data element that is “mapped”.

- Input Parameter Description:
  - SOURCE: Predefined panel name
  - PNAME: Parameter name
- Output Description:

- For example: RFROM and RTHRU are mapped to RANGE

### 5.3.19 \$\$PEXE^BQIDCDF

Returns the special executable code that creates the generated description for the parameter.

- Input Parameter Description:
  - SOURCE: Predefined panel name
  - PNAME: Parameter name
- Output Description:
  - Standard MUMPS code

### 5.3.20 \$\$PMAP^BQIDCDF

Returns the MAP TO parameter name.

- Input Parameter Description:
  - SOURCE: Predefined panel name
  - PNAME: Parameter name
- Output Description:
  - For example, RFROM and RTHRU are mapped to RANGE

### 5.3.21 \$\$PORD^BQIDCDF

Returns the parameter DESCRIPTION ORDER.

- Input Parameter Description:
  - SOURCE: Predefined panel name
  - PNAME: Parameter name
- Output Description:
  - Numeric value

### 5.3.22 \$\$PP^BQIDCDF

Returns the IEN of a predefined panel.

- Input Parameter Description:
  - SOURCE: Predefined panel name
- Output Description:

- Returns the predefined panel IEN

### 5.3.23 \$\$PTYP^BQIDCDF

Returns the parameter type associated with a parameter of a predefined panel (“D” for Date; “R” for Relative Date; “N” for Numeric; “T” for Table; and “C” for Choice; “X” for Text).

- Input Parameter Description:
  - SOURCE: Predefined panel name
  - PNAME: Parameter name
- Output Description:
  - Returns the parameter type

### 5.3.24 \$\$MEAS^BQIDCUTL

Returns the most recent V Measurement value for a specified measurement

- Input Parameter Description:
  - BQDFN: Patient IEN
  - • MEAS: Measurement
- Output Description:
  - Returns “0” if no value found or 1^Visit Date (text)^Result^Visit IEN^Measurement IEN^Visit Date (fileman) if value found

### 5.3.25 \$\$FPAT^BQIFLAG

Checks if the patient has an active flag for the user and the user preferences.

- Input Parameter Description:
  - PDFN: Patient’s DFN
  - OWNR: DUZ of panel’s owner
  - BQIPREF: Array of owner’s preferences
  - TYPE: “A”ll, “S”hown, or “H”idden
- Output Description:
  - QFLG: Returns “1” if patient has an active flag

### 5.3.26 \$\$HME^BQIGPUTL

Returns home site from the BGP SITE PARAMETERS file.

- Input Parameter Description:
  - N/A
- Output Description:
  - BHOME: Returns the site (pointer to LOCATION FILE, #9999999.06)

### 5.3.27 \$\$LKP^BQIGPUTL

Returns the internal entry number in the ICARE SITE PARAMETERS file associated with the identified GPRA year.

- Input Parameter Description:
  - BQIGYR: The GPRA year, e.g. 2006
- Output Description:
  - Returns the IEN associated with BQIGYR

### 5.3.28 \$\$MEAS^BQIGPUTL

Returns the reverse direction value for a CRS measure. Normal or blank is “NO” is bad (red). If reverse, then “NO” is good (green).

- Input Parameter Description:
  - GCODE – The CRS measure code which is CRS year\_IEN
- Output Description:
  - Returns the “R” for reverse or blank

### 5.3.29 \$\$SPM^BQIGPUTL

Returns the IEN within the ICARE SITE PARAMETERS file.

- Input Parameter Description:
  - N/A
- Output Description:
  - Returns the IEN associated with ICARE SITE PARAMETERS file (#90508)

### 5.3.30 \$\$CVW^BQIGPVW

Returns the customized view for National Measures using mnemonics to identify the associated field.

- Input Parameter Description:

- N/A
- Output Description:
  - Returns the field IEN; template name (if the template name exists); definition (if the definition exists); type which is “G”, DISPLAY which is a string of mnemonics identifying the display order sub-delimited by \$C(29); SORT which is a string of mnemonics identifying the sort order; and SDIR which is a string of mnemonics identifying the sort direction

### 5.3.31 \$\$DFNC^BQIGPVW

Returns the standard display order for National Measures using mnemonics to identify the associated field.

- Parameter Description:
  - N/A
- Output Description:
  - DVALUE: String of mnemonics identifying the display order sub-delimited by \$C(29)

### 5.3.32 \$\$GDEF^BQIGPVW

Returns the default National GPRA fields.

- Input Parameter Description:
  - N/A
- Output Description:
  - GVALUE: String of codes identifying the specific GPRA field delimited by \$C(29)

### 5.3.33 \$\$SFNC^BQIGPVW

Returns the standard National Measures sort order using mnemonics to identify the associated field.

- Input Parameter Description:
  - N/A
- Output Description:
  - SVALUE: String of mnemonics identifying the standard sort order sub-delimited by \$C(29)

### 5.3.34 \$\$TMPL^BQIGPVW

Checks if a layout template is used for a panel.

- Input Parameter Description:
  - CARE: Value of a View Source entry
  - Assumes the owner of the panel and the panel IEN
- Output Description:
  - Returns a “0” if no layout template is being used or a “1” if a layout template is being used

### 5.3.35 \$\$TPN^BQILYUTL

Returns the IEN for the provided external template name.

- Input Parameter Description:
  - OWNR: Owner of the template
  - TEMPL: Template name (e.g. “Patient List Default”)
- Output Description:
  - The IEN of the template

### 5.3.36 \$\$CURPGL^BQIMUTAB

Gets the site’s preferred performance report global to be used for Meaningful Use (MU) tabs in iCare.

- Input Parameter Description:
  - N/A
- Output Description:
  - Returns a performance report name

### 5.3.37 \$\$CURPRT^BQIMUTAB

Get the site’s current performance report routine to be used for MU Application Programmer Interface (API) in iCare.

- Input Parameter Description:
  - N/A
- Output Description:
  - Returns a routine name

### 5.3.38 \$\$CURREP^BQIMUTAB

Gets the site's current performance report

- Input Parameter Description:
  - N/A
- Output Description:
  - Returns a performance report name

### 5.3.39 \$\$PRFPGL^BQIMUTAB

Gets the site's preferred performance report global to be used for MU tabs in iCare.

- Input Parameter Description:
  - REPORT: MU report
- Output Description:
  - Returns a routine name

### 5.3.40 \$\$DUP^BQINOTF

Checks for a duplicate iCare notification message.

- Input Parameter Description:
  - USR: User IEN
  - SUBJECT: Notification message subject
  - DATE: Date of the message
- Output Description:
  - Returns a "1" if not a duplicate message or a "0" if duplicate message on the same day

### 5.3.41 \$\$LBRS^BQIPDSC1

Specialized panel description API to return Lab Result description.

- Input Parameter Description:
  - LBVAL: Lab Result parameter value
- Output Description:
  - Description using words such as "greater than" instead of the symbol ">"

### 5.3.42 \$\$TRUNC^BQIPDSCM

Truncates a descriptive value to 255 characters.

- Input Parameter Description:
  - VAL: Description value
- Output Description:
  - Shorter description ending with “. . .”

### 5.3.43 \$\$PCAT^BQIPLDF

Returns panel category/folder.

- Input Parameter Description:
  - OWNR: Owner IEN
  - PLIEN: Panel IEN
- Output Description:
  - The IEN of the category/folder for the owner

### 5.3.44 \$\$ADDAP^BQIPLDS1

Returns associated parameters text for a multiple filter.

- Input Parameter Description:
  - FNM: Filter name defined in the PARAMETERS SUB-FIELD of file #90506
  - VALUE: Value associated with the filter name
- Output Description:
  - VALS: Generated description for the \$\$ filter

### 5.3.45 \$\$FILTER^BQIPLDS1

Returns filter description that will be incorporated in the generated panel description.

- Input Parameter Description:
  - OWNR: Owner internal entry number
  - PLIEN: Panel internal entry number
- Output Description:
  - FDESC: Filter description, for example: Gender M; Age between 30 years and 32 years; Diagnostic Tag Hypertension, Obese

### 5.3.46 \$\$CSTA^BQIPLRF

Returns the current auto-populate status value.

- Input Parameter Description:
  - USR: Owner internal entry number
  - PLIEN: Panel internal entry number
- Output Description:
  - 1: Currently Running
  - 2: Pending
  - Null if completed

### 5.3.47 \$\$LCK^BQIPLRF

Attempts to lock a panel.

- Input Parameter Description:
  - USR: Owner internal entry number
  - PLIEN: Panel internal entry number
- Output Description:
  - Returns a “1” if it was able to lock the panel
  - Returns a “0” in the first piece and the user internal entry number and name of the user who currently has the panel locked in the second and third pieces, respectively

### 5.3.48 \$\$CVW^BQIPLRVW

Returns the customized view for reminders for a panel.

- Input Parameter Description:
  - N/A but assumes user (DUZ, Owner, and Panel IEN)
- Output Description:
  - Returns the field IEN, the template name (if the template name exists); the definition (if the definition exists); the type which is “G”; DISPLAY which is a string of mnemonics identifying the display order sub-delimited by \$(29); SORT which is a string of mnemonics identifying the sort order; and SDIR which is a string of mnemonics identifying the sort direction

### 5.3.49 \$\$TMPL^BQIPLRVW

The \$\$ function checks if a layout template is used for a panel.

- Input Parameter Description:
  - Assumes the owner of the panel and the panel IEN
- Output Description:
  - Returns a “0” if no layout template is being used or a “1” if a layout template is being used

### 5.3.50 \$\$CKSHR^BQIPLSH

The \$\$ function checks the write status of a shared user.

- Input Parameter Description:
  - OWNR: Owner IEN
  - PLIEN: Panel IEN
- Output Description:
  - Returns a “1” if it is okay to write to the panel or a “0” if it is not okay to write to the panel

### 5.3.51 \$\$OWNER^BQIPLUSR

The \$\$ function checks to see if the user who has signed into iCare is already in the ICARE USER File (#90505) and, if not, it creates an entry for The \$\$ user.

- Input Parameter Description:
  - USR: User’s internal entry number
  - Output Description:
- Returns “1” if user already exists in iCare or if the user was successfully added to iCare or a “0” if there was an error adding the user to iCare

### 5.3.52 \$\$CPFL^BQIPLUTL

The \$\$ function determines if the passed owner and panel contain a panel filter value and, if so, it attempts to lock those panels.

- Input Parameter Description:
  - OWNR: Owner internal entry number
  - PLIEN: Panel internal entry number
- Output Description:
  - Returns a “1” if it was able to lock the panel; if unsuccessful, it returns the panel filter information and the name of who has the record locked (if available)

**5.3.53 \$\$DFNC^BQIPLVW**

Returns the standard display order using mnemonics to identify the associated field.

- Input Parameter Description:
  - N/A
- Output Description:
  - DVALUE: String of mnemonics identifying the display order subdelimited by \$C(29)

**5.3.54 \$\$SFNC^BQIPLVW**

Returns the standard sort order using mnemonics to identify the associated field.

- Input Parameter Description:
  - N/A
- Output Description:
  - SVALUE: String of mnemonics identifying the standard sort order subdelimited by \$C(29)

**5.3.55 \$\$CVW^BQIPLVWC**

The \$\$ function returns the customized view for a panel.

- Input Parameter Description:
  - N/A but assumes user (DUZ, Owner and Panel IEN)
- Output Description:
  - Returns the field IEN; the template name (if the template name exists); the definition (if the definition exists); the type which is “G”; DISPLAY which is a string of mnemonics identifying the display order sub-delimited by \$C(29); SORT which is a string of mnemonics identifying the sort order; and SDIR which is a string of mnemonics identifying the sort direction.

**5.3.56 \$\$TMPL^BQIPLVWC**

Checks if a layout template is used for a panel.

- Input Parameter Description:
  - Assumes the owner of the panel and the panel IEN
- Output Description:

- Returns a “0” if no layout template is being used or a “1” if a layout template is being used

### 5.3.57 \$\$ETHN^BQIPTDMG

Returns the ethnicity of a patient.

- Input Parameter Description:
  - DFN: Patient IEN
  - FLD: Field in multiple to retrieve from
- Output Description:
  - Returns the ethnicity IEN\_\$C(28)\_ethnic name

### 5.3.58 \$\$RCE^BQIPTDMG

Returns the race of a patient.

- Input Parameter Description:
  - DFN: Patient IEN
  - FLD: Field in multiple to retrieve from
- Output Description:
  - Returns the race IEN\_\$C(28)\_racial name

### 5.3.59 \$\$IMM^BQIREM

Returns the immunization due/last information for immunization reminders.

- Input Parameter Description:
  - IDFN: Patient internal entry number
  - IMIEN: Immunization internal entry number
- Output Description:
  - Returns the RECOMMENDED DATE DUE (9002084.1,.04) and DATE PAST DUE (9002084.1,.05) fields from the BI PATIENT IMMUNIZATIONS DUE FILE for display in the Reminders section of iCare

### 5.3.60 \$\$VAL^BQIRMDR1

Gets the name of a reminder given the reminder code.

- Input Parameter Description:
  - CODE: Code value of a reminder

- Output Description:
  - Reminder name with the type of reminder; HS (health summary); EHR (electronic health record); HMS (HIV management system); and CMET (care management event tracking)

### 5.3.61 \$\$RDEF^BQIRMPL

Returns the reminders default.

- Input Parameter Description:
  - N/A
- Output Description:
  - String of mnemonics identifying the fields

### 5.3.62 \$\$FIND^BQISCHE

Returns the IEN for an option.

- Input Parameter Description:
  - X: Option name, for example "BQI UPDATE TASK"
- Output Description:
  - X: The IEN of the option

### 5.3.63 \$\$BP^BQITBMI

Gets the Mean Blood Pressure value for a specific patient and time frame.

- Input Parameter Description:
  - BDFN: Patient IEN
  - TMFRAME: Timeframe in relative date format
- Output Description:
  - Returns systolic, diastolic, and visit IEN data

### 5.3.64 \$\$OB^BQITBMI

Checks if a patient is classified as obese.

- Input Parameter Description:
  - BDFN: Patient IEN
  - BBMI: Patient BMI value

- AGE: Age of patient
- Output Description:
  - “1” if the patient is obese
  - “0” if the patient is not obese
  - “0^Outside Data Check Limits” if the patient’s BMI is either less than the ERROR LOW or greater than the ERROR HIGH

### 5.3.65 \$\$OBMI^BQITBMI

Calculates the Body Mass Index (BMI) for a specific patient and associated date range and returns the BMI, patient’s age, and the height and weight visit internal entry numbers used to calculate the BMI.

- Input Parameter Description:
  - BDFN: Patient IEN
  - TMFRAME: Time frame in relative date format
- Output Description:
  - Returns the patient’s BMI; age; height visit IEN; and weight visit IEN

### 5.3.66 \$\$TYP^BQITD031

Returns a “V” for visit or “P” for problem to identify the type of event that contributed to the CVD Known diagnosis tag. The \$\$ is significant, as the logic specifies that only a single active problem can be included as part of the criteria for tagging.

- Input Parameter Description:
  - DFN: Patient IEN
  - DX: Diagnosis
  - TMREF: Temporary global that contains criteria for determining diagnosis tag eligibility
- Output Description:
  - LTYP: “P” for problem or “V” for visit

### 5.3.67 \$\$PAT^BQITDGN

Checks if a patient meets the criteria for a diagnosis category.

- Input Parameter Description:
  - BQARY: Array of taxonomies and other information

- TGLOB: Global where data is to be stored and passed back to calling routine. Structure: TGLOB(DFN,"CRITERIA",criteria, or taxonomy,visit, or problem IEN) = date/time
- PTDFN: Patient internal entry number
- KEEP: Keep the temporary global when passed from another logic definition
- Output Description:
  - Returns a “1” if the patient meets the criteria and the passed global is updated with the qualifying criteria and associated visit/problem information

### 5.3.68 \$\$ACST^BQITDUTL

Determines if a status is considered active for diagnostic tags.

- Input Parameter Description:
  - STAT: Status code (“A” for accepted; “N” for not accepted)
- Output Description:
  - Returns a “1” and the associated status if the status is active

### 5.3.69 \$\$ATAG^BQITDUTL

Determines if a particular Diagnostic tag is active for a patient.

- Input Parameter Description:
  - RDFN: Patient IEN
  - RTAG: Diagnostic internal entry number
- Output Description:
  - Returns the current status and associated effective date for the tag

### 5.3.70 \$\$CTAG^BQITDUTL

Find the current status of a Diagnostic tag.

- Input Parameter Description:
  - DFN: Patient IEN
  - TAG: Diagnostic tag internal entry number
- Output Description:
  - Returns the current status of the tag; “P”roposed, “A”ccepted, “N”ot “V” No Longer Valid, or “S”uperseded.

### 5.3.71 \$\$WC^BQITDWC

Returns the most waist circumference for a patient in a specified timeframe.

- Input Parameter Description:
  - BQDFN: Patient IEN
  - TMFRAME: Timeframe to search
- Output Description:
  - Returns “^^” if no value found or Result^Visit IEN^Measurement IEN if value found

### 5.3.72 \$\$CLN^BQITRUT1

Returns the most recent visit for a specified clinic.

- Input Parameter Description:
  - TMFRAME: Timeframe to search
  - BQDFN: Patient IEN
  - CLINIC: Clinic
- Output Description:
  - Returns “0” if no value found or 1^Visit Date^^Visit IEN^ if value found

### 5.3.73 \$\$FED^BQITRUTL

Returns the most recent V Pt Education value for a specified education topic.

- Input Parameter Description:
  - TMFRAME: Timeframe to search
  - BQDFN: Patient IEN
  - TOP: Education topic
- Output Description:
  - Returns “0” if no value found or 1^Visit Date^^Visit IEN^Pt Education IEN if value found

### 5.3.74 \$\$LAB^BQITRUTL

Checks for a laboratory test result with the designated value or range of values.

- Input Parameter Description:
  - TMFRAME: Time frame used to search data

- RECENT: 1 = Only check most recent lab; 0 = Check all within time frame
- BQDFN: Patient internal entry number
- TAX: Laboratory taxonomy to search
- RESULT: Laboratory result to check for
- OPER: Operand to use for result check
- RES2: If range, the other result value
- OPER2: If range, the other result operand
- Output Description:
  - 1 ^ Visit date ^ lab result ^ Visit internal entry number ^ V LAB internal entry number

### 5.3.75 \$\$TAX^BQITRUTL

Determines if the patient has an entry that matches the criteria supplied.

- Input Parameter Description:
  - TMFRAME: Time frame to search for data
  - TAX: Taxonomy
  - NIT: Number of iterations
  - PTDFN: Patient IEN
  - FREF: File number reference
  - PRB: If Active Problem okay
  - SAME: If NIT is allowed for the same day or not (1 equals same day is acceptable)
- Output Description:
  - 1 ^ Visit date ^ ^ Visit or Problem internal entry number ^ associated V file internal entry number

### 5.3.76 \$\$GDXN^BQITUTL

Gets IEN of a Diagnosis Category definition.

- Input Parameter Description:
  - DEF: Diagnosis Category definition name
- Output Description:
  - Returns the internal entry number of the category definition

### 5.3.77 \$\$MEAS^BQITUTL

Returns the most recent V Measurement value for a specified measurement.

- Input Parameter Description:
  - BQDFN: Patient IEN
  - MEAS: Measurement
- Output Description:
  - Returns “0” if no value found or 1^Visit Date^Result^Visit IEN^Measurement IEN if value found

### 5.3.78 \$\$PLID^BQIUG1

Returns a unique identifier for the panel using the following algorithm: OWNER\_IEN concatenated with the PANEL\_IEN padded out to four digits with leading zeroes.

- Input Parameter Description:
  - OWNR: Owner IEN
  - PLIEN: Panel IEN
- Output Description:
  - PLID: Unique Panel identifier

### 5.3.79 \$\$DATE^BQIUL1

Converts standard date/time to a FileMan date/time.

- Input Parameter Description:
  - DATE: Date/time in standard format
- Output Description:
  - Returns the date/time in FileMan format or a null if it was unsuccessful

### 5.3.80 \$\$FMTE^BQIUL1

Converts FileMan Date/Time to “MMM DD,CCYY HH:MM:SS” format.

- Input Parameter Description:
  - Y: FileMan date/time (e.g. 3051024.123456)
- Output Description:
  - Returns the Date/Time in External format (e.g. OCT 24,2005 12:34:56)

### 5.3.81 \$\$FMTMDY^BQIUL1

Converts FileMan date to MM/DD/YYYY format.

- Input Parameter Description:
  - DATE: Date in FileMan format
- Output Description:
  - Returns the date in MM/DD/YYYY format

### 5.3.82 \$\$HRN^BQIUL1

Checks to see if patient has any active Health Record Numbers (HRNs).

- Input Parameter Description:
  - BQIDFN: Patient IEN
- Output Description:
  - Returns a “1” if the patient has at least one active HRN

### 5.3.83 \$\$PROB^BQIUL1

Returns the date and time of the problem. Since not all dates exist or are required data entry, the hierarchy is DATE ENTERED and then DATE LAST MODIFIED.

- Input Parameter Description:
  - PIEN: IEN of problem
- Output Description:
  - Returns the problem date in FileMan format

### 5.3.84 \$\$STRIP^BQIUL1

Removes one or more trailing characters at the end of a string.

- Input Parameter Description:
  - STR: String of data
  - VAL: Delimiter character
- Output Description:
  - Returns the string without the trailing characters

### 5.3.85 \$\$TKO^BQIUL1

Takes off the ending character at the end of a string.

- Input Parameter Description:
  - STR: String of data
  - VAL: Character to be removed
- Output Description:
  - STR: Same STR without the trailing character(s)

### 5.3.86 \$\$TRIM^BQIUL1

Removes one or more leading characters in a string.

- Input Parameter Description:
  - STR: String of data
  - VAL: Character to be removed from the string
- Output Description:
  - Returns the same string of data without the leading character(s)

### 5.3.87 \$\$VTHR^BQIUL1

Finds the most recent visit in the last three years for patient.

- Input Parameter Description:
  - BQIDFN: Patient IEN
- Output Description:
  - 1 ^ Visit IEN ^ Visit date

### 5.3.88 \$\$PTR^BQIUL2

Finds a different value for a pointer other than .01.

- Input Parameter Description:
  - FIL: FileMan File Number
  - FLD: FileMan Field Number
  - VAL: Code Value
  - VPEC: Field other than .01 from which to get the data
- Output Description:
  - Returns the other value of the pointer field

### 5.3.89 \$\$SCD^BQIUL2

Finds a description for a “set of codes” code.

- Input Parameter Description:
  - STRNG: String of the “set of codes”
  - VAL: Code whose description is being asked for
- Output Description:
  - Returns the description value of the code

### 5.3.90 \$\$STC^BQIUL2

- Finds a value for a “set of codes” code.
- Input Parameter Description:
  - FIL: FileMan File Number
  - FLD: FileMan Field Number
  - VAL: Code Value
- Output Description:
  - Returns the external value of the code

### 5.3.91 \$\$ICD0^BQIUL3

Returns the value of a piece of the ICD PROCEDURE file (#80.1).

- Input Parameter Description:
  - VAL: ICD PROCEDURE IEN
  - IDT: ICD PROCEDURE date
  - PC: Piece of the string returned by ICD API that is being requested
- Output Description:
  - The piece of data in the string returned by the ICD API that corresponds with the data originally retrieved directly from ^ICD0

### 5.3.92 \$\$ICD9^BQIUL3

Returns the value of a piece of the ICD DIAGNOSIS file (#80).

- Input Parameter Description:
  - VAL: ICD DIAGNOSIS IEN
  - IDT: ICD DIAGNOSIS date

- PC: Piece of the string returned by ICD API that is being requested
- Output Description:
  - The piece of data in the string returned by ICD API that corresponds with the data originally retrieved directly from ^ICD9

### 5.3.93 \$\$ICDD^BQIUL3

Returns the description of a specified ICD-9 code (procedure or diagnosis).

- Input Parameter Description:
  - FILE: Number of the file 80 or 80.1
  - VAL: Internal entry number of the value
  - IDT: Date (default would be today)
- Output Description:
  - Returns the description of the ICD-9 code

### 5.3.94 \$\$CALR^BQIULPT

Determines if the patient has community alerts associated with his/her community of residence.

- Input Parameter Description:
  - DFN: Patient IEN
- Output Description:
  - Returns a “Y” if there are associated community alerts or a “N” if there are none

### 5.3.95 \$\$DPCP^BQIULPT

Retrieves the patient's designated primary care provider's name. The function checks the Designated Provider Management System first for the patient's primary care provider; otherwise, it uses the Primary Care Provider field in the patient's file.

- Input Parameter Description:
  - DFN: Patient internal entry number
- Output Description:
  - Returns the internal entry number and the provider name associated with the patient's primary care provider

### 5.3.96 \$\$FLG^BQIULPT

Obtains flag indicator for a specific user and panel.

- Input Parameter Description:
  - USR: User IEN
  - PANEL: Panel IEN
  - DFN: Patient IEN
- Output Description:
  - FLG: Returns a “Y” if the patient has an active flag

### 5.3.97 \$\$HRNL^BQIULPT

Gets a patient’s HRNs

- Input Parameter Description:
  - DFN: Patient internal entry number
- Output Description:
  - Returns a list of HRNs (HRN – location abbreviation) for the patient; a leading asterisk indicates that the HRN is inactive

### 5.3.98 \$\$MFLAG^BQIULPT

If the patient was manually added to a panel, returns the current manual flag status.

- Input Parameter Description:
  - USR: User IEN
  - PANEL: Panel IEN
  - DFN: Patient IEN
- Output Description:
  - “A” if the patient was manually added
  - “R” if the patient was manually remove
  - Blank if the patient was automatically added to the panel based on the associated criteria

### 5.3.99 \$\$PFLNG^BQIULPT

Returns the preferred language of the patient.

- Input Parameter Description:

- DFN: Patient IEN
- Output Description:
  - PVAL: Text of the preferred language

### 5.3.100 \$\$SENS^BQIULPT

Checks to see if patient is designated as Sensitive and returns a flag (Y or N) to indicate if the patient is Sensitive.

- Input Parameter Description:
  - DFN: Patient IEN
- Output Description:
  - FLAG: Returns a “Y” if the patient is sensitive or a “N” if not

### 5.3.101 \$\$KEYCHK^BQIULSC

Checks to see if the security key was assigned to the user.

- Input Parameter Description:
  - KEY: Security key. If security key is not numeric, it is assumed that the security key was passed by name
  - USER: User internal entry number
- Output Description:
  - Returns a “1” if the security key is assigned to the user or a “0” if not

## 6.0 Files and Tables

### 6.1 File List

Table 6-1 contains a list of new files

Table 6-1: File List

File #	Filename	Description
90506.2	ICARE DIAGNOSIS CATEGORIES	Contains all diagnosis category definitions.
90506.3	ICARE FILE DEFINITION	Contains PCC V File definitions for PCC Add functionality in iCare; in addition, fields associated with Registers are identified here.
90507	ICARE REGISTRY INDEX	Contains mapping to RPMS registers.
90507.8	ICARE COMMUNITY ALERTS DEFINITIONS	Contains the definitions for each community alert.
90508.2	ICARE GLOSSARIES	Contains detail information for the Community Alerts, HIV/AIDS, ASTHMA, CMET, Employee Health, IPC, COPD, Prenatal, Immunizations, and Diabetes glossaries.
90508.3	ICARE TAXONOMY CATEGORY	Contains taxonomy category identification.
90508.4	ICARE TAXONOMY FILES	Contains mapping to RPMS files for taxonomy identification.
90508.5	ICARE TREATMENT PROMPTS	Contains information about CVD best practice prompts.
90621	CM EVENT	The types of events that can be tracked in the CMET module.
90451	HMS REGISTRY	General Patient Information
90454	HMS STI SCREENING	STI Definitions

### 6.2 File Access

Table 6-2 contains the FileMan access to new files. In most cases, the iCare FileMan access is “@” for programmer only access.

Table 6-2: File Access

File #	Filename	GL	RD	WR	LYG	DD	DEL
90506.2	ICARE DIAGNOSIS CATEGORIES	^BQI(90506.2,	@	@	@	@	@
90506.3	ICARE FILE DEFINITION	^BQI(90506.3,	@	@	@	@	@
90507	ICARE REGISTRY INDEX	^BQI(90507,	@	@	@	@	@
90507.8	ICARE COMMUNITY ALERTS DEFINITIONS	^BQI(90507.8,	@	@	@	@	@
90508.2	ICARE GLOSSARIES	^BQI(90508.2,	@	@	@	@	@
90508.3	ICARE TAXONOMY CATEGORY	^BQI(90508.3,	@	@	@	@	@
90508.4	ICARE TAXONOMY FILES	^BQI(90508.4,	@	@	@	@	@
90508.5	ICARE TREATMENT PROMPTS	^BQI(90508.5,	@	@	@	@	@
90621	CM EVENT	^BTPW(90621,	@	@	@	@	@
90451	HMS REGISTRY	^BKM(90451,	@	@	@	@	@
90454	HMS STI SCREENING	^BKM(90454,	@	@	@	@	@

## 6.3 Cross References

### 90506.2 (iCare Diagnosis Categories)

.01 Name

B Regular type cross reference

- .06 Order
  - AC Regular type cross reference
- .08 Associated Register
  - AD Regular type cross reference

### **3 Tooltip**

- .01 Tooltip
  - B Regular type cross reference
- .02 Order
  - AC Regular type cross reference

### **4 Hierarchy**

- .01 Hierarchy
  - B Regular type cross reference

### **90509.4 (iCare Reminder Notifications)**

- .01 Patient
  - B Regular type cross reference
- .01;.09 Patient,Reminder
  - C New Style cross reference
- .01;.04 Patient,Date
  - D New Style cross reference.

### **90507 (iCare Registry Index)**

- .01 Registry Name
  - B Regular type cross reference
- .17 Related To
  - C Regular type cross reference

### **10 Taxonomy**

- .01 Taxonomy Name
  - B Regular type cross reference
- .02 Taxonomy Pointer
  - AC Regular type cross reference

### **15 Reminders**

- .01 Reminders
  - B Regular type cross reference

.09 Order

AC Regular type cross reference

## **20 Reports**

.01 Name

B Regular type cross reference

## **10 Taxonomy**

.01 Taxonomy

B Regular type cross reference

## **90507.8 (iCare Community Alerts Definitions)**

.01 Label

B Regular type cross reference

.03 Display Group

C Regular type cross reference

## **11 Taxonomies**

.01 Taxonomy Name

## **12 Lab Taxonomies**

.01 LOINC Taxonomy

B Regular type cross reference

## **13 SNOMED Subsets**

.01 SNOMED Subset

B Regular type cross reference

## **90508.3 (iCare Taxonomy Category)**

.01 Name

B Regular type cross reference

## **90508.4 (iCare Taxonomy Files)**

.01 Name

B Regular type cross reference

## **90508.5 (iCare Treatment Prompts)**

.01 Name

B Regular type cross reference

.03 Priority

AC Regular type cross reference

**5 Logic Definition**

- .02 Taxonomy Name
  - C regular type cross reference
  - New Style Cross reference
- .02 and .03 Tag and Priority AD cross reference

**90621 (CM Event)**

- .01 Name
  - B Regular type cross reference
- .05 Mapped To
  - AP Regular type cross reference
- .1 Category
  - AD Regular type cross reference

**1 Taxonomy**

- .01 Taxonomy
  - B Regular type cross reference
  - AB Regular cross reference by entire file
- .03 File Type
  - AC Regular cross reference by entire file

**3 Followup**

- .01 Finding Interpretation
  - B Regular type cross reference

**6 Findings**

- .01 Results
  - B Regular type cross reference

**7 Findings Category**

- .01 Findings Category
  - B Regular type cross reference

**90451 (HMS REGISTRY)**

- .01 PATIENT NAME
  - B Regular type cross reference
  - #1 TRIGGER type cross reference
  - When the value is created, set #.02 to INTERNAL(PATIENT NAME)

When the value is deleted, remove #.02

.02 VA PATIENT

VA Regular type cross reference

**1 REGISTER (90451.01)**

.01 REGISTER

B Regular type cross reference

D Regular type cross reference

.02 RECORD CREATION DATE/TIME

#1 TRIGGER type cross reference

When the value is created, set #.025 to DUZ

When the value is deleted, there is no effect

#2 TRIGGER type cross reference

When the value is created, set #.5 to "R"

When the value is deleted, there is no effect

#3 TRIGGER type cross reference

When the value is created, set #.75 to today

When the value is deleted, there is no effect

#4 TRIGGER type cross reference

When the value is created, set #.8 to DUZ

When the value is deleted, there is no effect

.03 DATE/TIME INACTIVATED

#1 TRIGGER type cross reference

When the value is created, set #.035 to removed from register by

When the value is deleted, set #.035 to removed from register by

#2 TRIGGER type cross reference

When the value is created, set #.75 today

When the value is deleted, set #.75 today

#3 TRIGGER type cross reference

When the value is created, set #.8 to who last changed status

When the value is deleted, set #.8 to who last changed status

.5 STATUS

STATUS Regular type cross reference

E MUMPS type cross reference  
 #1 TRIGGER type cross reference  
 When the value is created, set #.75 to today  
 When the value is deleted, set #.75 to today  
 #2 TRIGGER type cross reference  
 When the value is created, set #.8 to who last changed status  
 When the value is deleted, set #.8 to who last changed status  
 #3 TRIGGER type cross reference  
 When the value is created, set #.03 to today  
 When the value is deleted, set #.03 to today  
 #4 TRIGGER type cross reference ^90451.01^.035  
 When the value is created, set #.035 to inactivated by  
 When the value is deleted, remove #.035

## **1 STATUS COMMENTS**

### **AC MUMPS type cross reference**

#### 2.7 DIAGNOSIS COMMENTS

AD MUMPS type cross reference

#### 6.5 REGISTER CASE MANAGER

C Regular type cross reference

#### 7.5 ETIOLOGY COMMENTS

AE MUMPS type cross reference

### **40 HAART APPROPRIATE DATE (90451.03)**

#### .01 HAART APPROPRIATE DATE

B Regular type cross reference

### **50 HAART COMPLIANCE DATE (90451.07)**

#### .01 HAART COMPLIANCE DATE

B Regular type cross reference

### **51 HMS DIAGNOSIS CATEGORY HISTORY (90451.151)**

#### .01 HMS DX CAT HIST DATE/TIME

B Regular type cross reference

### **90454 (HMS STI SCREENING)**

#### .01 STI NAME

B Regular type cross reference

.02 TYPE

C Regular type cross reference

.03 CODE

D Regular type cross reference

## 10 SCREENINGS (90454.01)

.01 SCREENINGS

B Regular cross reference type

## 6.4 Table File

This section contains a simplified structure for each of the files in this release.

**Global: ^BQI(90506.2,**

Table 6-3: Table File: 90506.2 iCare Diagnosis Categories

Field #	Field Name	Subscript	Piece	Type
.01	NAME	D0,0	1	F
.02	ID	"	2	F
.03	INACTIVE	"	3	S
.04	PROGRAM	"	4	F
.05	SUBDEFINITION	"	5	S
.06	ORDER	"	6	N
.07	SHORT DESCRIPTION	"	7	F
.08	ASSOCIATED REGISTER	"	8	P
.09	TREATMENT PROMPT PREFIX	"	9	F
.1	HIERARCHICAL	"	10	S
1	EXECUTABLE	D0,1	K	
2	DESCRIPTION (90506.22)			
.01	DESCRIPTION	D0,2,D1,0	1	W
3	TOOLTIP (90506.23)			
.01	TOOLTIP	D0,3,D1,0	1	W

Field #	Field Name	Subscript	Piece	Type
.02	ORDER	"	2	N
4	HIERARCHY (90506.24)			
.01	HIERARCHY	D0,4,D1,0	1	P
.02	HIERARCHY ORDER	"	2	N
5	LOGIC DEFINITION (90506.25)			
.01	SEARCH ORDER	D0,5,D1,0	1	N
.02	TAXONOMY	"	2	F
.03	TAXONOMY TYPE	"	3	S
.04	NUMBER OF ITERATIONS	"	4	N
.05	TIME FRAME	"	5	F
.06	SEARCH FILE	"	6	F
.07	PROBLEM FILE CHECK	"	7	S
.08	SAME DAY CHECK	"	8	S
.09	CLINICAL RANKING	"	9	S
.1	SERVICE CATEGORY	"	10	F
.11	TAXONOMY CHECK ONLY	"	11	S

**Global: ^BQI(90506.3,**

Table 6-4: File: 90506.3 iCare File Definition

Field #	Field Name	Subscript	Piece	Type
.01	FILE NAME	D0,0	1	F
.02	FILE NUMBER	"	2	F
.03	ACTIVE/INACTIVE	"	3	S
.04	DISPLAY RPC CALL	"	4	F
.05	NON-DISPLAY	"	5	S
.06	GROUP	"	6	S
.07	SUB-DEFINITION	"	7	S

Field #	Field Name	Subscript	Piece	Type
.08	SUB-DEFINITION TO	"	8	P
.09	REFUSAL FILE NUMBER	"	9	F
.1	SUB-FILE NUMBER	"	10	F
.11	SUB-FIELD NUMBER	"	11	F
.12	ADD/EDIT RPC CALL	"	12	F
.13	INITIAL TRIGGER RPC CALL	"	13	F
.14	ASSOCIATE CARE MGMT	"	14	P
1	SUB-EXECUTABLE	D0,1	K	
10	DISPLAY COLUMNS (90506.31)			
.01	DISPLAY COLUMN NAME	D0,10,D1,0	1	F
.02	INTERNAL COLUMN NAME	"	2	F
.03	COLUMN SIZE	"	3	N
.04	COLUMN TYPE PEND	"	4	S
.05	DISPLAY ORDER	"	5	N
.06	SORT ORDER	"	6	N
.07	CODE	"	7	F
.08	TRIGGER	"	8	S
.09	TRIGGER RPC	"	9	F
.1	TRIGGER CODES	"	10	F
.11	INACTIVE	"	11	S
.12	COLUMN TYPE VIEW	"	12	S
.13	SORT DIRECTION	"	13	S
.14	NEW GROUP	"	14	S
1.01	CODE TYPE	D0,10,D1,1	1	S
1.02	CODE UPPER	"	2	F
1.03	CODE LOWER	"	3	F

Field #	Field Name	Subscript	Piece	Type
1.04	CODE DEFAULT	"	4	F
1.05	CODE ACTION	"	5	S
1.06	CODE REQ/OPT	"	6	S
1.07	CODE EXCLUSION	"	7	F
1.08	MULTIPLE REFERENCE	D0,10,D1,1	8	P
2.01	CODE VALIDATION	D0,10,D1,2	1	F
2.02	CODE VALID INPUT	"	2	F
2.03	CODE TABLE	"	3	F
2.04	CODE TABLE LOOKUP	"	4	S
2.05	PROVIDER SCREEN	"	5	S
2.06	TABLE PRELOAD	"	6	S
2.07	DECIMAL PLACES	"	7	F
2.08	ALTERNATE DISPLAY	"	8	F
3.01	FMAN FIELD	D0,10,D1,3	1	F
3.02	RETRIEVAL FLAG	"	2	S
3.03	RECORD IEN	"	3	S
3.04	GROUP NAME	"	4	F
3.05	GRID DISPLAY ORDER	"	5	N
3.06	ALTERNATE HELP TEXT	"	6	F
4	TRANSFORM	D0,10,D1,4	K	
5	CHOICES (90506.315)			
.01	CHOICES TEXT	D0,10,D1,5,D2,0	1	F
.02	CHOICES CODES	"	2	F
.03	VALIDATION	"	3	S
.04	HELP ASSOC WITH	"	4	F
.05	INACTIVE	"	5	S
.06	ORDER	"	6	N

Field #	Field Name	Subscript	Piece	Type
1	HELP TEXT (90506.3151)			
.01	HELP TEXT	D0,10,D1,5,D2,1,D3,0	1	W
6	TABLE SCREEN	D0,10,D1,6	1	F
7	CODE EDIT	D0,10,D1,7	K	
10	CLEAR FIELDS (90506.32)			
.01	CLEAR FIELDS	1	F	

**Global: ^BQI(90507,**

Table 6-5: File: 90507 iCare Registry Index

Field #	Field Name	Subscript	Piece	Type
.01	CODE	D0,0	1	F
.02	TEXT	"	2	F
.03	TYPE	"	3	S

**Global: ^BQI(90507.8,**

Table 6-6: File: 90507.8 iCare Community Alerts Definitions Registry Index

Field #	Field Name	Subscript	Piece	Type
.01	CODE	D0,0	1	F
.02	TEXT	"	2	F
.03	TYPE	"	3	S

**Global: ^BQI(90508.2,**

Table 6-7: File: 90508.2 iCare Glossaries

Field #	Field Name	Subscript	Piece	Type
1	GLOSSARY TEXT	D1		W
2	RETRIEVAL EXECUTABLE CODE	D2	1	M

**Global: ^BQI(90508.3,**

Table 6-8: File: 90508.3 iCare Taxonomy Category

Field #	Field Name	Subscript	Piece	Type
.01	NAME	D0,0	1	F
.02	ID	"	2	F

**Global: ^BQI(90508.4,**

Table 6-9: File: 90508.4 iCare Taxonomy Files

Field #	Field Name	Subscript	Piece	Type
.01	NAME	D0,0	1	P
.02	CATEGORY	"	2	P
.03	SITE-SPECIFIED	"	3	S
.04	USER EDITABLE	"	4	S

**Global: ^BQI(90508.5,**

Table 6-10: File: 90508.5 iCare Treatment Prompts

Field #	Field Name	Subscript	Piece	Type
.001	NUMBER			N
.01	NAME	D0,0	1	F
.02	ASSOCIATED DX TAG	"	2	P
.03	PRIORITY	"	3	N
.04	INACTIVE	"	4	S
1	REMARK	D0,1		W
2	M CODE	D0,2		M
3	GLOSSARY	D0,3		W
4	TOOLTIP	D0,4		W
5	LOGIC DEFINITION (90508.055)	D0,5,D2,0		
.01	ORDER	"	1	N
.02	TAXONOMY NAME	"	2	F
.03	# ITERATIONS	"	3	N
.04	TIMEFRAME	"	4	F
.05	SEARCH FILE	"	5	F
.06	ABSENCE/PRESENCE	"	6	S
.07	Contraindication	"	7	S
1	EXECUTABLE	D0,5,D2,1		M

**Global: ^BQI(90621,**

Table 6-11: File: 90621 CM EVENT

Field #	Field Name	Subscript	Piece	Type
.01	CODE	D0,0	1	F
.02	TEXT	"	2	F
.03	TYPE	"	3	S

**Global: ^BQI(90507,**

Table 6-12: File: 90507 iCare Registry Index

Field #	Field Name	Subscript	Piece	Type
.01	NAME	D0,0	1	F
.02	MNEMONIC	"	2	F
.03	INACTIVATION DATE	"	3	D
.04	INACTIVATION REASON	"	4	S
.05	MAPPED TO	"	5	P
.06	AUTOCLOSE	"	6	S
.07	NO RESULT TRIGGER	"	7	F
.08	NO FOLLOWUP TRIGGER	"	8	F
.09	NO NOTIFICATION TRIGGER	"	9	F
.1	CATEGORY	"	10	P
1	TAXONOMY (90621.01)	D0,1,D2,0		
.01	TAXONOMY	"	1	F
.02	TAX POINTER	"	2	V
.03	FILE TYPE	"	3	P
.04	SITE SPECIFIED	"	4	S
1	CPT MODIFIER (90621.11)	D0,1,D2,1,D3,0		
.01	CPT MODIFIER	"	1	F
.02	ACTION	"	2	S
3	FOLLOWUP (90621.03)	D0,3,D2,0		
.01	FINDING INTERPRETATION	"	1	S
.02	FREQUENCY	"	2	F
.03	WHO LAST MODIFIED	"	3	P
.04	WHEN LAST MODIFIED	"	4	D
4	SEARCH LOGIC	D0,4	4	K
5.01	GENDER SPECIFIC	D0,5	1	S

Field #	Field Name	Subscript	Piece	Type
5.02	AGE LOWER CRITERIA	"	2	F
5.03	AGE HIGHER CRITERIA	"	3	F
5.04	TIMEFRAME LIMIT	"	4	F
6	FINDINGS (90621.06)	D0,6,D2,0		
.01	RESULTS	"	1	F
.02	INTERPRETATION	"	2	S
7	FINDINGS CATEGORY (90621.07)	D0,7,D2,0		
.01	FINDINGS CATEGORY	"	1	S
.02	DEFAULT TIU TEMPLATE	"	2	P

**Global: ^BQI(90451,**

Table 6-13: File: 90451 HMS REGISTRY

Field #	Field Name	Subscript	Piece	Type
.01	PATIENT NAME	D0,0	1	P
.02	VA PATIENT	"	3	P
.05	REGISTER ID	"	2	F
1	REGISTER (90451.01)			
.01	REGISTER	D0,1,D1,0	1	P
.015	WHERE FOLLOWED	"	2	P
.016	OUTSIDE LOCATION	"	13	F
.017	OUTSIDE PROVIDER NAME	"	14	F
.02	RECORD CREATION DATE/TIME	"	3	D
.025	RECORD CREATED BY	"	4	P
.03	DATE/TIME INACTIVATED	"	5	D
.035	INACTIVATED BY	"	6	P
.5	STATUS	"	7	S
.55	PRIOR STATUS	"	8	S
.75	DATE OF LAST STATUS CHANGE	"	9	D

Field #	Field Name	Subscript	Piece	Type
.8	WHO LAST CHANGED STATUS	"	10	P
1	STATUS COMMENTS	D0,1,D1,5	4	F
2.3	HMS DIAGNOSIS CATEGORY	D0,1,D1,3	7	S
2.5	DIAGNOSIS DATE	D0,1,D1,0	12	D
2.7	DIAGNOSIS COMMENTS	D0,1,D1,5	3	F
3	CLINICAL CLASSIFICATION	D0,1,D1,2	1	P
3.5	CLINICAL CLASS. CHANGE DT	"	2	D
3.55	PRIOR CLINICAL CLASSIFICATION	"	3	P
4	STATE HIV REPORTING DATE	"	4	D
4.1	STATE HIV ACK STATUS	"	12	S
4.2	STATE HIV ACKNOWLEDGEMENT DATE	"	5	D
4.3	STATE HIV REPORT STATUS	"	6	S
4.4	STATE HIV RPT LAST UPDATED	"	14	D
4.41	STATE HIV ACK LAST UPDATED	"	15	D
4.5	STATE AIDS REPORT DATE	"	9	D
4.51	STATE AIDS ACK STATUS	"	13	S
4.52	STATE AIDS ACKNOWLEDGEMENT DT	"	10	D
4.53	STATE AIDS REPORT STATUS	"	11	S
4.54	STATE AIDS RPT LAST UPDATED	"	16	D
4.541	STATE HIV ACK LAST UPDATED	"	17	D
5	INITIAL HIV DX DATE	"	7	D
5.5	INITIAL AIDS DX DATE	"	8	D

Field #	Field Name	Subscript	Piece	Type
6	REGISTER PROVIDER	D0,1,D1,3	1	P
6.5	REGISTER CASE MANAGER	"	2	P
7	ETIOLOGY	"	3	P
7.5	ETIOLOGY COMMENTS	D0,1,D1,5	2	F
7.51	ETIOLOGY LAST UPDATED	D0,1,D1,3	4	D
11	NOT APPROPRIATE REASON	D0,1,D1,3	5	S
15	PARTNER NOTIFICATION STATUS	D0,1,D1,6	3	S
16	PARTNER NOTIFICATION DATE	"	4	D
17	PARTNER NOTIFIED LAST UPDATED	"	5	D
20	NEW STATUS COMMENTS (90451.02)			
.01	NEW STATUS COMMENTS	D0,1,D1,20,D2,0	1	W
21	NEW DIAGNOSIS COMMENTS (90451.121)			
.01	NEW DIAGNOSIS COMMENTS	D0,1,D1,21,D2,0	1	W
22	NEW ETIOLOGY COMMENTS (90451.122)			
.01	NEW ETIOLOGY COMMENTS	D0,1,D1,22,D2,0	1	W
30	DATE/TIME OF LAST EDIT (90451.05)			
.01	DATE/TIME OF LAST EDIT	D0,1,D1,9,D2,0	1	D
1	LAST EDITED BY	"	2	P
35	PRIOR DIAGNOSIS	D0,1,D1,5	1	S
40	HAART APPROPRIATE DATE (90451.03)			
.01	HAART APPROPRIATE DATE	D0,1,D1,40,D2,0	1	D

Field #	Field Name	Subscript	Piece	Type
1	HAART APPROPRIATE	"	2	S
2	HAART NOT APPROPRIATE REASON	"	3	S
3	HAART APPROPRIATE COMMENT	"	4	F
4	LAST EDITED BY	"	5	P
5	LAST EDITED DATE	"	6	D
20	NEW HAART APPROPRIATE COMMENT (90451.04)			
.01	NEW HAART APPROPRIATE COMMENT	D0,1,D1,40,D2,20,D3,0	1	W
50	HAART COMPLIANCE DATE (90451.07)			
.01	HAART COMPLIANCE DATE	D0,1,D1,50,D2,0	1	D
1	HAART COMPLIANT	"	2	S
2	HAART COMPLIANCE COMMENT	"	3	F
3	LAST EDITED BY	"	4	P
4	LAST EDITED DATE	"	5	D
20	NEW HAART ADHERENCE COMMENT (90451.08)			
.01	NEW HAART ADHERENCE COMMENT	D0,1,D1,50,D2,20,D3,0	1	W
51	HMS DIAGNOSIS CATEGORY HISTORY (90451.151)			
.01	HMS DX CAT HIST DATE/TIME	D0,1,D1,10,D2,0	1	D
.02	HMS DX CAT HIST VALUE	"	2	S
.03	HMS DX CAT HIST EDITED BY	"	3	P
4	LAST EDITED BY	"	5	P

**Global: ^BQI(90454,**

Table 6-14: File: 90454 iCare Registry Index

Field #	Field Name	Subscript	Piece	Type
.01	STI NAME	D0,0	1	F
.02	TYPE	"	2	S
.03	CODE	"	3	F
1	DENOMINATOR	D0,1		K
2	PERFORMANCE	D0,2		K
3	REFUSAL	D0,3		K
10	SCREENINGS (90454.01)			
.01	SCREENINGS	D0,10,D1,0	1	P

## 6.5 Callable Routines

Table 6-6 lists the remote procedures added in this version and the associated tag and routine called by the remote procedure. The tags and routines in this table are considered callable entry points, but are only available through the GUI interface.

Table 6-15: Callable Routines

Name	Tag	Routine
BQI GET ED TOPIC ITEMS	MTIT	BQIUTB4
BQI GET MATCH CRITERIA COLUMN	COL	BQIMTCRT
BQI GET MATCH CRITERIA DATA	EN	BQIMTCRD
BQI GET MATCH CRITERIA DROP	TAB	BQIMTCRT
BQI GET MU CURRENT PERF	GCUR	BQIMUTAB
BQI GET PICKLIST ITEMS	PKIT	BQIUTB4
BQI GET SITE DIVISIONS	GET	BQISYDIV
BQI GET TEMPLATE USE	TMUSE	BQITMPLE
BQI GET USER DIVISIONS	USR	BQISYDIV
BQI GET USER VERSION	UGVMCH	BQIPLUS1
BQI MU CQM BY DIV HOVER	CQM	BQIMUDFH
BQI MU CQM BY DIVISION	CQM	BQIMUDFC
BQI MU GET PERF PERIODS	PPER	BQIMUPER

Name	Tag	Routine
BQI MU GET PROV CQM	PROV	BQIMUDCQ
BQI MU GET PROV CQM EXPORT	CQM	BQIMUPRE
BQI MU GET PROV CQM HOVER	HOV	BQIMUDCQ
BQI MU GET PROV EXPORT	EN	BQIMUPRE
BQI MU GET PROV HOVER	HOV	BQIMUDPR
BQI MU GET PROVIDER	PROV	BQIMUDPR
BQI MU PERF BY DIV HOVER	PERF	BQIMUDFH
BQI MU PERF BY DIVISION	PERF	BQIMUDFC
BQI MU PERF REPORT	MURP	BQIMUTAB
BQI NOTIFICATION INITIAL	INIT	BQINOTT
BQI PAT DIABETES AUDIT REPORT	AUD	BQIRGDBA
BQI REFRESH REMINDER NOTIFY	REF	BQINOTR
BQI SET MU CURRENT PERF	UCUR	BQIMUTAB
BQI SET SITE DIVISIONS	UPD	BQISYDIV
BQI SET TEMPLATE DFLT	DFLT	BQITMPLE
BQI SET USER VERSION	USVMCH	BQIPLUS1
BQI SNOMED SEARCH	SEARCH	BQILKSMD
BQI TRIGGER NOTIFICATION	NOT	BQINOTT
BQI UPDATE REMINDER NOTIFY	UPD	BQINOTR

## 6.6 Published Entry Points

There is a new published entry points (PEP) for this version of iCare. The published entry points is to log a reminder notification entry for MU performance measures.

LOG^BQINOTR(DFN,NTYP,TIUP,IMML,PWHN,REM,PROV) ;PEP – Log a notification entry

; Input

; DFN – Patient IEN

; NTYP – Notification Type LETTER, EMAIL, and PHONE

; TIUP – TIU note IEN

; IMML – Immunization letter IEN

; PWHN – Patient Wellness Handout IEN

; REM – Reminder e.g. IMMUNIZATIONS if from immunization package

; PROV – Provider IEN (if needed)

## 7.0 Internal Relations

All functions within iCare work independently.

There are no documented internal relations in BQI.

## 8.0 External Relations

### 8.1 8.1 External Calls

The iCare Population Management GUI external calls are shown in Figure 8-1, Figure 8-2 and 3.

Routine	is Invoked by:
^%DT	BQIDCERA, BQIUL1,  dd90505,  dd90505.01,  dd90505.012  dd90505.015,  dd90505.03,  dd90505.04,  dd90505.12  dd90505.152,  dd90505.16,  dd90505.17,  dd90505.4  dd90505.431,  dd90505.441,  dd90505.45,  dd90505.46  dd90505.6,  dd90505.631,  dd90505.64  dd90505.66,  dd90506.1,  dd90508,  dd90508.01,  dd90508.019  dd90508.1,  dd90508.223
NOW^%DTC	BQIRPL
^%ZTER	BQICAVW, BQINOTR, BQIPTFHD, BQIPTFHE, BQIPTFHR, BQIPTFHS BQIPTMSR, BQIPTPRC, BQIRGCOP, BQIRGPG, BQIRGPL, BQIRMREG BQIRPL, BQISYPRM, BQITAXX, BQITIUTX, BQIVFTLK, BQIVFTRF
^%ZTLOAD	BQIIPCFX, BQINIGHT, BQITASK4
\$\$ADDPROB^APCDALV2	BQIRPL
\$\$DELPROB^APCDALV2	BQIRPL
FMH^APCHSAS1	BQIRGASU
\$\$LASTSEV^APCHSAST	BQIRGASU
\$\$LASTACON^APCHSMAS	BQIRGASU
\$\$LASTITEM^APCHSMU	BQIRGASU
\$\$LASTFLU^APCLAPI4	BQIRGASU
\$\$LASTPLU^APCLAPI6	BQIRPL
\$\$PNM^APCLSIL1	BQITD13
\$\$PBM^APCLV	BQICAEXP, BQICAVAL, BQIPTMSR, BQITD11
BLDTAX^ATXAPI	BQITUTL
BULL^ATXSTX2	BQIYC
KILL^ATXSTX2	BQIYC
TAX^ATXSTX2	BQIYC
\$\$COMMRES^AUPNPAT	BQICAEXP, BQICAVAL
\$\$HRN^AUPNPAT	BQICAEXP, BQICAVAL
FHCHK^AUPNSICD	BQINIGH1
^AUPNVMS2	BQINIGH1
\$\$UIDV^AUPNVSIT	BQICAEXP, BQICAVAL
\$\$PNPROB^AUPNVUTL	BQIPTFHD, BQIPTFHR, BQIPTFHS, BQIPTPRC, BQIRPL
IMMFORC^BIRPC	BQINOTR
\$\$STRIP^BIUTL5	BQINOTR
\$\$ACTMED^BKMQQCR4	BQIRGASU, BQIRGCOP
\$\$AGE^BQIAGE	BQICAEXP, BQICAVAL
LB^BQICAEP1	BQICAEP2
DXF^BQICAEP2	BQICAEP1
^BQICAEXP	BQINIGH2
^BQICAHLO	BQICAEXP, BQICAVAL
^BQICALRT	BQINIGH2
^BQICASUI	BQINIGH2
\$\$LAB^BQICAUTL	BQICAEP1, BQICAEP2
\$\$LBB^BQICAUTL	BQICAEP2
\$\$MEAS^BQICAUTL	BQICAEP2
\$\$TAX^BQICAUTL	BQICALRT
MIC^BQICAUTL	BQITRUT1
EN^BQICAVAL	BQICALRN
LAB^BQICAVAL	BQICAEXP

PROC^BQICAVAL	BQICAEXP
\$\$NRPC^BQICMDNM	BQIRMREG
\$\$FND^BQICMUTL	BQINOTR , BQIRGPL
\$\$FTAG^BQICMUTL	BQIRGPL
\$\$ITM^BQICMUTL	BQIRGPG
\$\$MEAS^BQIDCUTL	BQIRGASU
PROB^BQIDCUTL	BQIRGASU
VISIT^BQIDCUTL	BQIRGASU
FND^BQIFLG	BQINIGHT
COMP^BQIGPRA5	BQINIGHT
GCHK^BQIGPUPD	BQINIGHT
\$\$HME^BQIGPUTL	BQINIGHT
\$\$LKP^BQIGPUTL	BQINIGHT
\$\$SPM^BQIGPUTL	BQICALRN , BQICALRT , BQICASUI , BQINIGHT , BQISYPRM , BQITAXX
	BQITAXX5
^BQIIPC4	BQI24POS
^BQIIPCFX	BQI24POS
DM^BQIIPOTC	BQIIPCFX
EN^BQIIPOTC	BQIIPCFX
^BQILYUPD	BQI24POS
\$\$TPN^BQILYUTL	BQIRGPL
CQ^BQIMUMON	BQINIGHT
PF^BQIMUMON	BQINIGHT
NUM^BQIMUSIT	BQINIGHT
EN^BQIMUUPD	BQINIGHT
AST^BQINIGH1	BQINIGHT
MEAS^BQINIGH1	BQINIGHT
ARM^BQINIGH2	BQINIGHT
CMA^BQINIGH2	BQINIGHT
IMM^BQINIGH2	BQINIGHT
NGHT^BQINIGH2	BQINIGHT
PRF^BQINIGH2	BQINIGHT
PRN^BQINIGH2	BQINIGHT
IJB^BQINIGH3	BQINIGHT
JBC^BQINIGH3	BQINIGHT
DESC^BQIPDSCM	BQINIGH2
POP^BQIPLPP	BQINIGH2
\$\$CSTA^BQIPLRF	BQINIGH2
\$\$LCK^BQIPLRF	BQINIGH2
NNOTF^BQIPLRF	BQINIGH2
STA^BQIPLRF	BQINIGH2
ULK^BQIPLRF	BQINIGH2
\$\$CPFL^BQIPLUTL	BQINIGH2
CPFLU^BQIPLUTL	BQINIGH2
PFILL^BQIPLUTL	BQINIGH2
PFILU^BQIPLUTL	BQINIGH2
\$\$ETHN^BQIPTDMG	BQICAEXP , BQICAVAL
\$\$RCE^BQIPTDMG	BQICAEXP , BQICAVAL
PAT^BQIRGASP	BQINIGH1
LBT^BQIRGPG	BQINIGH2
CHK^BQIRMDR	BQINIGHT
PAT^BQIRMDR	BQINIGHT
EN^BQIRSPR	BQIVFTLK
FIL^BQITASK	BQITASK4
NPT^BQITASK	BQINIGH1 , BQINIGHT
DZ^BQITASK1	BQINIGHT
JB^BQITASK4	BQISYPRM
CA^BQITAXCK	BQICALRN
EN^BQITAXCK	BQICALRN
\$\$ENTRS^BQITAXX	BQITAXX4
ALL^BQITAXX4	BQITAXX

\$\$BP^BQITBMI	BQITD11
ABMI^BQITBMI	BQITD11
ABP^BQITBMI	BQITD11
\$\$PAT^BQITDGN	BQITD11
POP^BQITDGN	BQITD11
PAT^BQITDPAT	BQINIGHT
EN^BQITDPRC	BQINIGHT
\$\$ACST^BQITDUTL	BQITRMT
\$\$ATAG^BQITDUTL	BQIRGASU , BQITD11
\$\$CTAG^BQITDUTL	BQIRGPL
NCR^BQITDUTL	BQITASK4
\$\$WC^BQITDWC	BQITD11
AWC^BQITDWC	BQITD11
\$\$FED^BQITREDU	BQITRUT1
PAT^BQITRMT	BQINIGHT
\$\$FND^BQITRPPT	BQITRMT
^BQITRUPD	BQI24POS
\$\$TAX^BQITRUT1	BQITRUT1
\$\$BP^BQITRUTL	BQITRACB
\$\$FED^BQITRUTL	BQIRGASU
\$\$LAB^BQITRUTL	BQICAEP1 , BQICAEP2 , BQITRACB
\$\$NEGATIVE^BQITRUTL	BQICAUTL , BQITRUT1
\$\$POSITIVE^BQITRUTL	BQICAUTL , BQITRUT1
\$\$TAX^BQITRUTL	BQICAEP1 , BQICAEP2 , BQIRGASU , BQIRGCOP , BQITD13 , BQITRACB
EDTP^BQITRUTL	BQITRUT1
BLDTAX^BQITUIX	BQITUTL
\$\$GDXN^BQITUTL	BQITD11
\$\$MEAS^BQITUTL	BQIRGCOP , BQIRGPG
ARY^BQITUTL	BQITASK4 , BQITD11
BLD^BQITUTL	BQICAEP1 , BQICAEP2 , BQICALRN , BQICALRT , BQICASUI , BQICAUTL BQICAVAL , BQIRGASU , BQIRGCOP , BQIRGPG , BQITAXX5 , BQITD11 BQITD13 , BQITRUT1
BLDSV^BQITUTL	BQICAEP2
GDF^BQITUTL	BQITD11
\$\$DATE^BQIUL1	BQICAEP1 , BQICAEP2 , BQICALRN , BQICALRT , BQICASUI , BQICAUTL BQICAVAL , BQICAVW , BQINIGHT , BQIPTFHE , BQIPTFHS , BQIPTMSR BQIPTPRC , BQIRGASU , BQIRPL , BQITD11 , BQITRACB , BQITRUT1
\$\$FMTE^BQIUL1	BQICAEP2 , BQICAUTL , BQINOTR , BQIPTFHD , BQIPTFHR , BQIPTFHS BQIPTMSR , BQIPTPRC , BQIRGASU , BQIRGPG , BQIRGPL , BQIRMREG BQIRPL , BQITAXX5 , BQITRUT1
\$\$FMTMDY^BQIUL1	BQINOTR , BQIRGCOP , BQIRGPL
\$\$HRN^BQIUL1	BQINIGH1 , BQINIGHT , BQITRMT
\$\$PROB^BQIUL1	BQICAUTL
\$\$TKO^BQIUL1	BQICAEXP , BQICAVAL , BQINOTR , BQIPTMSR , BQIRGASU , BQIRGPL BQIRMREG , BQIUL3 , BQIVFTLK
\$\$TRIM^BQIUL1	BQIRPL
\$\$VTHR^BQIUL1	BQINIGH1 , BQINIGHT , BQITRMT
CMSI^BQIUL1	dd90507
\$\$PTR^BQIUL2	BQICAEXP , BQICAVAL
\$\$ICD0^BQIUL3	BQIPTPRC , BQITAXX5
\$\$ICD9^BQIUL3	BQICALRT , BQIPTFHD , BQIPTFHE , BQIPTFHR , BQIPTFHS , BQIRPL BQITAXX5
\$\$ICDD^BQIUL3	BQIVFTLK
\$\$CALR^BQIULPT	BQIRGPL , BQIRMREG
\$\$COUN^BQIULPT	BQICAEXP , BQICAVAL
\$\$FLG^BQIULPT	BQIRGPL , BQIRMREG
\$\$MFLAG^BQIULPT	BQIRGPL , BQIRMREG
\$\$SENS^BQIULPT	BQIRGPL , BQIRMREG
\$\$KEYCHK^BQIULSC	BQIRGPL , BQIRMREG
FH80^BQIUTB	BQIVFTLK
FHREL^BQIUTB	BQIVFTLK

TBL^BQIUTB	BQIVFTLK
\$\$MREC^BQIUTIL	BQIPTMSR
EN^BQIVFADD	BQIRPL
^BQIY	BQI24POS
^BQIYC	BQIY
\$\$SUBLST^BSTSAPI	BQICALRT, BQITAXX5, BQITUTL
SUBSET^BSTSAPIA	BQITAXX
EN^BTPWPFND	BQINIGHT
\$\$FLG^BTPWPPAT	BQIRGPL, BQIRMREG
CMET^BTPWTAX	BQITAXX
EN^DDIOL	BQICALRN
^DIC	BQI24POS, BQICALRT, BQICASUI, BQICAVW, BQILYUPD, BQINOTR BQIPTFHE, BQITUTL, BQIVFTRF,  dd90506.24,  dd90506.38
\$\$FIND1^DIC	BQI24POS, BQICAEP2, BQICAUTL, BQINIGH2, BQIPTMSR, BQIRGPL BQITAXX, BQITAXX5, BQITRUPD, BQITRUT1, BQITUTL
FIND^DIC	BQIVFTLK
IX^DIC	BQICALRT, BQICASUI
FILE^DICN	BQI24POS, BQICAEXP, BQICALRT, BQICASUI, BQICAVW, BQILYUPD BQINIGH1, BQINIGH2, BQINOTR, BQIPTFHE, BQIPTFHS, BQIRGPG BQISYPRM, BQITAXX4, BQITRMT, BQITRUPD, BQIVFTRF
DT^DICRW	BQICALRN, BQICALRT, BQINIGH1, BQINIGHT
\$\$GET1^DID	BQIVFTLK
FIELD^DID	BQIUL2, BQIVFTLK
^DIE	BQINIGH2
FILE^DIE	BQI24POS, BQI24PRE, BQICAEXP, BQICALRT, BQICASUI, BQICAVW BQIIPC4, BQIIPCFX, BQILYUPD, BQINIGH1, BQINIGH2, BQINIGHT BQINOTR, BQIPTFHE, BQIPTFHS, BQIRGPG, BQIRPL, BQISYPRM BQITAXX4, BQITRMT, BQITRUPD
WP^DIE	BQINIGH1, BQINIGH2, BQIRGPG, BQITRMT, BQITRUPD
^DIK	BQI24PRE, BQICALRT, BQICAVW, BQINIGH1, BQINIGH2, BQINIGHT BQIPTFHE, BQIPTFHS, BQISYPRM, BQITASK4, BQITRMT
ENALL^DIK	BQICALRT, BQICASUI, BQILYUPD
IX1^DIK	BQINIGHT
IXALL^DIK	BQIIPC4
\$\$IENS^DILF	BQICAEXP, BQICALRN, BQICALRT, BQICASUI, BQICAVW, BQIIPC4 BQIIPCFX, BQINIGH1, BQINIGH2, BQINIGHT, BQINOTR, BQIRGPG BQIRGPL, BQIRPL, BQITAXX, BQITAXX4, BQITAXX5, BQITRMT
\$\$ROOT^DILFD	BQICAUTL, BQINIGHT, BQITAXX5, BQITD11, BQITRUT1, BQIVFTLK
\$\$VFIELD^DILFD	BQIPTMSR
\$\$VFILE^DILFD	BQIVFTLK
^DIM	dd90506.2,  dd90506.3,  dd90506.31,  dd90507,  dd90507.8  dd90508.2,  dd90508.5,  dd90508.55
\$\$GET1^DIQ	BQICAEXP, BQICALRN, BQICALRT, BQICASUI, BQICAUTL, BQICAVAL BQICAVW, BQIIPCFX, BQINIGH1, BQINIGH2, BQINIGHT, BQINOTR BQIPTFHD, BQIPTFHE, BQIPTFHR, BQIPTFHS, BQIPTMSR, BQIPTPRC BQIRGASU, BQIRGPG, BQIRGPL, BQIRMREG, BQIRPL, BQISYPRM BQITASK4, BQITAXX, BQITAXX5 BQITD11, BQITRUT1, BQITUTL, BQIVFTLK
GETS^DIQ	BQIPTFHE, BQIPTFHR, BQIVFTRF
^DIR	BQICALRN
EN^DIU2	BQI24PRE
DELETE^HLOPURGE	BQINIGH2
\$\$ICDD^ICDCODE	BQIUL3
\$\$ICDDX^ICDCODE	BQIPTFHE, BQIUL3, BQIVFTRF
\$\$ICDOP^ICDCODE	BQIUL3
\$\$CSI^ICDEX	BQINIGH1, BQIUL3
\$\$ICDDX^ICDEX	BQINIGH1, BQIUL3
\$\$ICDOP^ICDEX	BQIUL3
\$\$IMP^ICDEXA	BQICASUI
\$\$ICDDESC^ICDXCODE	BQIUL3
\$\$CPT^ICPTCOD	BQITAXX5, BQIUL3

GET4EDIT^TIUSRVR	BQITIUTX
TGET^TIUSRVR1	BQITIUTX
\$\$LOWER^VALM1	BQINIGH1
^XBGSAVE	BQICAEXP, BQICAVAL
\$\$DT^XLFD	BQINIGH2, BQINIGHT, BQIRPL, BQITD11
\$\$FMADD^XLFD	BQICALRT, BQICASUI, BQICAUTL, BQIIPCFX, BQINIGH1, BQINIGH2
	BQINIGHT, BQIRPL, BQITASK4, BQITD11, BQITD13
\$\$FMDIFF^XLFD	BQITD11
\$\$FMTE^XLFD	BQICAEXP, BQICAVAL, BQINIGHT, BQINOTR, BQIRPL
\$\$FMTHL7^XLFD	BQICAEXP, BQICAVAL
\$\$NOW^XLFD	BQICAVW, BQIIPCFX, BQINIGH1, BQINIGH2, BQINIGHT, BQINOTR
	BQIPTFHD, BQIPTFHE, BQIPTFHR, BQIPTFHS, BQIPTMSR, BQIPTPRC
	BQIRGCOP, BQIRGPG, BQIRGPL, BQIRMREG, BQIRPL, BQISYPRM
	BQITASK4, BQITAXX, BQITIUTX, BQITRMT, BQIVFTLK, BQIVFTRF
\$\$STRIP^XLFSTR	BQICAEXP, BQITAXX, BQITAXX5, BQITIUTX, BQIUL2
\$\$SUP^XLFSTR	BQICAEXP, BQICAVAL, BQITRUT1, BQIUL2
\$\$PATCH^XPDUTL	BQIPTFHD, BQIPTFHR, BQIPTFHS, BQIPTPRC, BQIRPL, BQITUTL
\$\$VERSION^XPDUTL	BQICALRT, BQICASUI, BQIIPCFX, BQINIGH1, BQINIGHT, BQIPTFHD
	BQIPTFHE, BQIPTFHR, BQIPTFHS, BQIPTPRC, BQIRGASU, BQIRPL
	BQIUL3, BQIVFTLK, BQIVFTRF
\$\$PROD^XUPROD	BQICAEXP, BQICAVAL

Figure 8-1: iCare Population Management GUI

Routine	is Invoked by:
^%DT	BKMVA1U, BKMVSUP,  dd90451.01,  dd90451.03,  dd90451.05  dd90451.07,  dd90451.145,  dd90451.151
HELP^%DTC	BKMVA1U
NOW^%DTC	BKMVSUP
\$\$DATE^APCHSMU	BKMRMEX, BKMRMIM, BKMRMWH
WRITE^APCHSMU	BKMRMEX, BKMRMIM, BKMRMWH
\$\$PBMI^APCLV	BKMVSUP
\$\$ICD^ATXAPI	BKMIXX, BKMIXX2, BKMIXX5, BKMVC6, BKMVSUP6
BLDTAX^ATXAPI	BKMIXX5    \$\$ICD^ATXCHK                    BKMIXX5
DXBUL^BKMILK	dd90451.01
ETIXHLP^BKMILK	dd90451.01
STATBUL^BKMILK	dd90451.01
\$\$AGE^BKMIMRP1	BKMQQCR3
ADATAX^BKMIXX	BKMQQCR3, BKMQQCR5, BKMRMEX, BKMVSUP3
CPPTAX^BKMIXX	BKMCRS, BKMQQCR1, BKMQQCR2, BKMQQCR3, BKMQQCR5, BKMRMEX BKMRMIM, BKMRMWH, BKMVSUP1, BKMVSUP2, BKMVSUP3, BKMVSUP5 BKMVSUP6
HFTAX^BKMIXX	BKMQQCR5, BKMVSUP2
LABTAX^BKMIXX	BKMCRS, BKMQQCR1, BKMQQCR2, BKMQQCR3, BKMRMEX, BKMVSUP1 BKMVSUP5
LOINC^BKMIXX	BKMCRS, BKMQQCR1, BKMQQCR2, BKMQQCR3, BKMRMEX, BKMVSUP1 BKMVSUP5
MEDTAX^BKMIXX	BKMQQCR2, BKMVSUP3
PRBTAX^BKMIXX	BKMQQCR5, BKMRMIM, BKMVSUP2
PTEDTAX^BKMIXX	BKMQQCR5, BKMVSUP2, BKMVSUP5
CVXTAX^BKMIXX1	BKMQQCR2, BKMQQCR3, BKMRMIM, BKMVSUP1, BKMVSUP2, BKMVSUP5
EXAMTAX^BKMIXX1	BKMQQCR3, BKMQQCR5, BKMRMEX, BKMVSUP2, BKMVSUP3
ICDTAX^BKMIXX1	BKMCRS, BKMQQCR1, BKMQQCR2, BKMQQCR3, BKMQQCR5, BKMRMEX BKMRMIM, BKMRMWH, BKMVSUP1, BKMVSUP2, BKMVSUP3, BKMVSUP5
NDCTAX^BKMIXX1	BKMQQCR2, BKMVSUP3
PRCTAX^BKMIXX1	BKMQQCR1, BKMQQCR2, BKMQQCR3, BKMQQCR5, BKMRMIM, BKMRMWH BKMVSUP1, BKMVSUP2, BKMVSUP3
PTEDTAX^BKMIXX1	BKMVSUP5
RADTAX^BKMIXX1	BKMRMWH, BKMVSUP3

SKNTAX^BKMIXX1	BKMQQCR2 , BKMVSUP1 , BKMVSUP5
BHPRBTAX^BKMIXX2	BKMQQCR5 , BKMVSUP2
BHPTAX^BKMIXX2	BKMQQCR5 , BKMVSUP2
CLNTAX^BKMIXX2	BKMQQCR3 , BKMQQCR5 , BKMRMEX , BKMVSUP3
MSRTAX^BKMIXX2	BKMQQCR5 , BKMVSUP2
PRVTAX^BKMIXX2	BKMQQCR3 , BKMRMEX , BKMVSUP3
REFUSAL^BKMIXX2	BKMCRS , BKMQQCR1 , BKMQQCR2 , BKMQQCR3 , BKMVSUP1 , BKMVSUP2 BKMVSUP3 , BKMVSUP5 , BKMVSUP6
WHTAX^BKMIXX2	BKMQQCR3 , BKMRMWH
\$\$BKMREG^BKMIXX3	BKMVSUP
\$\$SHIVIEN^BKMIXX3	BKMVF3 , BKMVSUP
\$\$ICD^BKMIXX5	BKMIXX , BKMIXX2 , BKMVC6 , BKMVSUP6
BLDTAX^BKMIXX5	BKMIXX2 , BKMQQCR2 , BKMVA1U , BKMVSUP6
BLDTAX1^BKMIXX5	BKMIXX , BKMIXX2
DXCK^BKMOFF	dd90451.01
DXCS^BKMOFF	dd90451.01
ETCK^BKMOFF	dd90451.01
ETCS^BKMOFF	dd90451.01
STCK^BKMOFF	dd90451.01
STCS^BKMOFF	dd90451.01
\$\$POS^BKMQQCR7	BKMVSUP5
ED01^BKMRMED	BKMVF3
ED02^BKMRMED	BKMVF3
EX01^BKMRMEX	BKMVF3
EX02^BKMRMEX	BKMVF3
IZ01^BKMRMIM	BKMVF3
IZ02^BKMRMIM	BKMVF3
IZ03^BKMRMIM	BKMVF3
IZ04^BKMRMIM	BKMVF3
IZ05^BKMRMIM	BKMVF3
CD4^BKMRMLB	BKMVF3
CHL^BKMRMLB	BKMVF3
GON^BKMRMLB	BKMVF3
HEPB^BKMRMLB	BKMVF3
HEPBR^BKMRMLB	BKMVF3
HEPCE^BKMRMLB	BKMVF3
HEPCR^BKMRMLB	BKMVF3
PPD^BKMRMLB	BKMVF3
SYPF^BKMRMLB	BKMVF3
SYPR^BKMRMLB1	BKMVF3
TOX^BKMRMLB1	BKMVF3
VIR^BKMRMLB1	BKMVF3
MAM^BKMRMWH	BKMVF3
PAP^BKMRMWH	BKMVF3
\$\$ICD9^BKMUL3	BKMCRS , BKMVSUP
\$\$ICDD^BKMUL3	BKMVSUP
\$\$ICPT^BKMUL3	BKMCRS
AHLP^BKMVA1U	dd90451.01
AIDDT^BKMVA1U	dd90451.01
HHLP^BKMVA1U	dd90451.01
HIVDT^BKMVA1U	dd90451.01
AIDCDT^BKMVA9	dd90451.01
AIDCHLP^BKMVA9	dd90451.01
AIDRDT^BKMVA9	dd90451.01
AIDRHLP^BKMVA9	dd90451.01
HIVCDT^BKMVA9	dd90451.01
HIVCHLP^BKMVA9	dd90451.01
HIVRDT^BKMVA9	dd90451.01
HIVRHLP^BKMVA9	dd90451.01
PNOTDT^BKMVA9	dd90451.01
PNOTHLP^BKMVA9	dd90451.01

REMINDE^BKMVF3	BKMVSUP5
ADDLINE^BKMVF32	BKMRMEX , BKMRMIM , BKMRMWH
LABCODES^BKMVF32	BKMRMWH
GET^BKMVSRP1	BKMVSUP
\$\$LINE^BKMVSUP	BKMVSUP1 , BKMVSUP2 , BKMVSUP3 , BKMVSUP5
BLANK^BKMVSUP	BKMVSUP1 , BKMVSUP2 , BKMVSUP5
NEWPG^BKMVSUP	BKMVSUP1 , BKMVSUP2 , BKMVSUP3 , BKMVSUP5
UPD^BKMVSUP	BKMVSUP1 , BKMVSUP2 , BKMVSUP3 , BKMVSUP5 , BKMVSUP6
CD4^BKMVSUP1	BKMVSUP
CHL^BKMVSUP1	BKMVSUP
CMV^BKMVSUP1	BKMVSUP
COC^BKMVSUP1	BKMVSUP
GENO^BKMVSUP1	BKMVSUP
GON^BKMVSUP1	BKMVSUP
LTAXPRT^BKMVSUP1	BKMVSUP2 , BKMVSUP3 , BKMVSUP5 , BKMVSUP6
PAP^BKMVSUP1	BKMVSUP
PHENO^BKMVSUP1	BKMVSUP
PPD^BKMVSUP1	BKMVSUP
RPR^BKMVSUP1	BKMVSUP
TOX^BKMVSUP1	BKMVSUP
VIRAL^BKMVSUP1	BKMVSUP
\$\$HTWT^BKMVSUP2	BKMVSUP
IMM^BKMVSUP2	BKMVSUP
SCREENS^BKMVSUP2	BKMVSUP
\$\$PAUSE^BKMVSUP3	BKMVSUP
DEN^BKMVSUP3	BKMVSUP
DRUGS^BKMVSUP3	BKMVSUP
MAM^BKMVSUP3	BKMVSUP
RET^BKMVSUP3	BKMVSUP
HEP^BKMVSUP4	BKMVSUP
HEPA^BKMVSUP4	BKMVSUP
HEPB^BKMVSUP4	BKMVSUP
HEPC^BKMVSUP4	BKMVSUP
ED^BKMVSUP5	BKMVSUP
FLOW^BKMVSUP5	BKMVSUP
REM^BKMVSUP5	BKMVSUP
\$\$CONF^BKMVSUP6	BKMVSUP
\$\$HIVTAG^BKMVSUP6	BKMVSUP
GETALL^BKMVSUP6	BKMVSUP
HEADER^BKMVSUP6	BKMVSUP
LIPID^BKMVSUP6	BKMVSUP
\$\$PROB^BKMVUTL	BKMIXX , BKMVC6 , BKMVSUP6
\$\$AGE^BQIAGE	BKMQQCR1 , BKMRMWH
EDTP^BQITRUTL	BKMQQCRC
BLD^BQITUTL	BKMQQCRC
\$\$TKO^BQIUL1	BKMUL3 , BKMVSUP
\$\$DPCP^BQIULPT	BKMVSUP
\$\$HCSM^BQIVFDEF	BKMVSUP
\$\$HPRV^BQIVFDEF	BKMVSUP
EN^DDIOL	BKMVA1U
^DIC	dd90451.01
\$\$FIND1^DIC	BKMVSUP2
FILE^DICN	BKMVCD
^DICR	dd90451 ,  dd90451.01
FILE^DIE	BKM22PST
^DIK	BKM22PRE
\$\$IENS^DILF	BKMVC6 , BKMVSUP6
^DIM	dd90454
\$\$GET1^DIQ	BKMIMRP1 , BKMIXX , BKMIXX2 , BKMIXX5 , BKMQQCR2 , BKMQQCR3 BKMVA1U , BKMVC6 , BKMVF3 , BKMVSUP , BKMVSUP2 , BKMVSUP3 , BKMVSUP5 BKMVSUP6

GETS^DIQ	BKMVSUP , BKMVSUP2
^DIR	BKMVSUP
EN^DIU2	BKM22PRE , BKM22PST
\$\$ICDD^ICDCODE	BKMUL3
\$\$ICDDX^ICDCODE	BKMUL3
\$\$ICDOP^ICDCODE	BKMUL3
\$\$CSI^ICDEX	BKMUL3
\$\$ICDDX^ICDEX	BKMUL3
\$\$ICDOP^ICDEX	BKMUL3
\$\$ICDDESC^ICDXCODE	BKMUL3
\$\$CPT^ICPTCOD	BKMUL3
\$\$LOWER^VALM1	BKMVSUP , BKMVSUP6
\$\$FMADD^XLFDI	BKMQQCR1 , BKMQQCR2 , BKMQQCR3 , BKMQQCR5 , BKMQQCRC , BKMVSUP2 BKMVSUP3 , BKMVSUP5
\$\$FMDIFF^XLFDI	BKMIMRP1 , BKMVSUP5
\$\$FMTE^XLFDI	BKMCRS , BKMVSUP , BKMVSUP1 , BKMVSUP2 , BKMVSUP3 , BKMVSUP5 BKMVSUP6
\$\$NOW^XLFDI	BKMVSUP6
\$\$SCH^XLFDI	BKMRMEX , BKMRMIM , BKMRMWH
\$\$PATCH^XPDUTL	BKMIXX , BKMIXX2 , BKMIXX5 , BKMVC6 , BKMVSUP6
\$\$VERSION^XPDUTL	BKMCRS , BKMUL3 , BKMVSUP

Figure 8-2: HIV Management System

Routine	is Invoked by:
^%ZTER	BTPWPBTH , BTPWPNLV , BTPWTAX , BTPWTINT
EN^APCDALV	BTPWPCHT
EN^APCDALVR	BTPWPCHT
BULL^ATXSTX2	BTPWAA , BTPWAB , BTPWAC , BTPWAD , BTPWAE , BTPWAF , BTPWAG , BTPWAH
KILL^ATXSTX2	BTPWAA , BTPWAB , BTPWAC , BTPWAD , BTPWAE , BTPWAF , BTPWAG , BTPWAH
TAX^ATXSTX2	BTPWAA , BTPWAB , BTPWAC , BTPWAD , BTPWAE , BTPWAF , BTPWAG , BTPWAH
LOAD^BEHOENP1	BTPWPBTH , BTPWTINT
\$\$TPN^BQILYUTL	BTPWPNLV
\$\$ENTRS^BQITAXX	BTPWTAX
BLD^BQITUTL	BTPWPBTH
\$\$CTRL^BQIUL1	BTPWTINT
\$\$DATE^BQIUL1	BTPWPCHT
\$\$FMTE^BQIUL1	BTPWPNLV
\$\$TKO^BQIUL1	BTPWPNLV
\$\$CALR^BQIULPT	BTPWPNLV
\$\$FLG^BQIULPT	BTPWPNLV
\$\$MFLAG^BQIULPT	BTPWPNLV
\$\$SENS^BQIULPT	BTPWPNLV
^BTPWA	BTPW11PS
^BTPWAA	BTPWA
^BTPWAB	BTPWA
^BTPWAC	BTPWA
^BTPWAD	BTPWA
^BTPWAE	BTPWA
^BTPWAF	BTPWA
^BTPWAG	BTPWA
^BTPWAH	BTPWA
\$\$CRPOV^BTPWPBTH	BTPWPCHT , BTPWTINT
\$\$ADD^BTPWPCHT	BTPWPBTH , BTPWTINT
\$\$EN^BTPWPCHT	BTPWPBTH , BTPWTINT
\$\$CAT^BTPWPDSP	BTPWTAX
\$\$PEFIL^BTPWPEVF	BTPWPNLV
FINIT^BTPWPEVF	BTPWPNLV
^DIC	BTPWTINT ,  dd90621.07
\$\$FIND1^DIC	BTPWPCHT , BTPWPNLV

FILE^DICN	BTPWTINT
^DIK	BTPW11PS , BTPWPCHT
\$\$IENS^DILF	BTPWPNLV , BTPWTAX
^DIM	dd90621
\$\$GET1^DIQ	BTPWPNLV , BTPWTAX
\$\$IMP^ICDEXA	BTPWPBTH
MAKE^TIUSRVP	BTPWPBTH , BTPWTINT
UPDATE^TIUSRVP	BTPWTINT
SETTEXT^TIUSRVP	BTPWPBTH , BTPWTINT
TGET^TIUSVR1	BTPWTINT
GETTEXT^TIUSRV	BTPWPBTH
\$\$LOWER^VALM1	BTPWTAX
\$\$NOW^XLFD	BTPWPBTH , BTPWPCHT , BTPWPNLV , BTPWTAX , BTPWTINT
\$\$STRIP^XLFSTR	BTPWTINT
\$\$VERSION^XPDUTL	BTPWPBTH

Figure 8-3: Care Management Event Tracking System

## 8.2 Callable Routines—Published Entry Points

Table 8-1 provides a list of callable routines and their descriptions.

Table 8-1: Callable Routines

Routine Called	Description
EN^APCDALV; PEP	Called to create PCC Visits
EN^APCDALVR; PEP	called to create PCC V File entries
GVHMR^APCHSMU; PEP	Call accessible by any application
LASTMAM^APCLAPI1; PEP	Date of last MAMMOGRAM
LASTFLU^APCLAPI4; PEP	Date of last FLU
LASTNAP^APCLAPI6; PEP	Date of last NO ACTIVE PROBLEMS
LASTPLR^APCLAPI6; PEP	Date of last PROBLEM LIST REVIEWED
LASTPLU^APCLAPI6; PEP	Date of last PROBLEM LIST UPDATE
START1^APCLDF; PEP	Main entry point for data fetcher utility
CLINIC^APCLV; PEP	Given "V" is visit, "F" is format, returns clinic on visit
PBMI^APCLV; PEP	Returns a patient's most current BMI as of a specified date
PRIMPROV^APCLV; PEP	Returns primary provider on that visit in F format
ICD^ATXAPI; PEP	Checks to see if ICD code is found in certain taxonomy
BLDTAX^ATXAPI; PEP	Expand a taxonomy into a target
FHCHK^ AUPNSICD; PEP	Called from input tx on FAMILY HISTORY .01 field
ALLDP^BDPAPI; PEP	Returns array of designated providers in all categories or 1-category

<b>Routine Called</b>	<b>Description</b>
BQI^BGPMUEHD; PEP	iCARE
BQI^BGPMUEP ; PEP	iCARE
IMMPROF^BQIRPC; PEP	Returns ImmServe Profile in global array

### 8.3 Exported Options

There are no callable options in iCare since the user interface is GUI. Table 8-2 shows BQIRPC, which is the broker option which must be used to access iCare.

Table 8-2: Exported options

<b>Option Name</b>	<b>Description</b>
BQIRPC	Hosts RPCs in the BQI namespace. iCare users must have access to this option to use iCare.

## **9.0 Archiving and Purging**

There is no archiving or purging in iCare.

## 10.0 Documentation Resources

This section describes the methods to generate iCare system technical documentation.

### 10.1 %INDEX Option

The %INDEX option analyzes the structure of a routine to determine in part if the routine adheres to RPMS programming standards. Its output can include the following components:

- Compiled list of errors and warnings
- Routine listing
- Local variables
- Global variables
- Naked globals
- Label references
- External references

Running %INDEX for a specified set of routines allows users to discover any deviations from RPMS programming standards that exist in the selected routines and to see how routines interact with one another i.e., which routines call or are called by other routines.

To run %INDEX for the iCARE package, type the BQI namespace at the Routine(s)?> prompt.

### 10.2 List File Attributes Option

This Department of Veterans Affairs (VA) FileMan option allows users to generate documentation pertaining to files and file structure. Using the standard format of the VA FileMan option yields the following data dictionary information for a specified file:

- File name and description
- Identifiers
- Cross-references
- Files pointed to by the file specified
- Files that point to the file specified
- Input, print, and sort templates

In addition, the following applicable data is supplied for each field in the file:

- Field name, number, title, and description
- Global location
- “Help” prompt
- Cross-references
- Input transform
- Date last edited
- Notes

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

- All cross-references for the file selected
- Global location of each field in the file
- Input, print, and sort templates

For a comprehensive listing of iCARE package files, please refer to Section 6.0.

## 11.0 SAC Requirements and Exemptions

Figure 11-1 is a Standards and Conventions (SAC) Exemption Request for use of third-party User Interface (UI) controls.

<b>Request for Exemption to RPMS Programming Standards</b>	
<b>Package:</b> BQI-iCare	<b>Date:</b> Jan. 07
<b>Program:</b> N/A	
<b>Line Number:</b> N/A	
<b>Applicable Standard:</b> Section 9 of the 2006 SAC	
Item #7 under Section 9.3 states that a SAC exemption must be requested for use of commercially purchased controls.	
<b>Reason for Exemption:</b>	
Requirements for the iCare application required the use of enhanced UI controls for datagrid, toolbars, tabbed MDI interface and print preview displays. To accommodate these needs without significant additional development time and cost associated with developing these custom controls, commercially available user interface controls were purchased from Infragistics® for a nominal fee and were utilized within the GUI portion of the iCare application. The set of controls used at the time of this writing is the NetAdvantage® for Windows® Forms–Version 2007 Vol 1.	
The licensing agreement is attached with this application, and our understanding is that the control dll files may be incorporated and distributed with applications freely. The charge only comes into play for the developer licenses, i.e. in order for a developer to use these controls within a new application; they must have a properly licensed copy of the developer tools on the machines used for development.	
Use of these tools was suggested and encouraged by IHS liaisons early in the design phase of the project.	
Additional information about these controls is available from the Infragistics® Web site:	
<b>Product Description:</b>	
<a href="http://www.infragistics.com/dotnet/netadvantage/winforms.aspx#Overview">http://www.infragistics.com/dotnet/netadvantage/winforms.aspx#Overview</a>	
<b>508 Accessibility Information:</b>	
<a href="http://www.infragistics.com/learn/accessibility.aspx">http://www.infragistics.com/learn/accessibility.aspx</a>	
<b>Current license agreement:</b>	
<a href="http://www.infragistics.com/products/license.aspx#LicenseAgreements">http://www.infragistics.com/products/license.aspx#LicenseAgreements</a>	
<b>Developer:</b>	
<b>SACC Review</b>	<b>Date:</b>
Recommend APPROVAL___ DISAPPROVAL___	
<b>Duration:</b>	
<b>Comments:</b>	
<b>OIT Action</b>	<b>Date:</b>
Request APPROVED___ DISAPPROVED___	
<b>Comments:</b>	
Director, DIT	

Figure 11-1: Exemption Request

## **12.0 Templates, Forms, and Protocols**

### **12.1 Print Templates**

There are no print templates in iCare.

### **12.2 Sort Templates**

There are no sort templates in iCare.

### **12.3 Input Templates**

There are no input templates in iCare.

### **12.4 List Templates**

There are no list templates in iCare.

### **12.5 Forms**

There are no forms in iCare.

### **12.6 Protocols**

There are no protocols in iCare.

## 13.0 iCare Windows Client

### 13.1 Description of Development Environment

The iCare application was developed using the programming language C# within Microsoft® (MS) Visual Studio® (VS) 2012 integrated development environment (IDE). iCare is written to utilize the Microsoft® .NET 4.0 framework (Client Profile). All new classes created for the iCare application exist within the namespace IndianHealthService.iCare.

In addition to the standard .NET object classes, the iCare application also uses commercially available Windows® form controls from Infragistics®. All the controls used were part of a package of controls named Infragistics® NetAdvantage® for Windows® Forms 2012 Volume 2.

In addition, the iCare application also utilizes the BMX version 4.0 software to facilitate security authentication and communication between the GUI Windows® application and the RPMS server data. All data retrieval and updates are handled through the RPCs defined in the BQIRPC and BMXRPC namespaces.

All of the dynamic link library (dll) files upon which iCare depend are delivered with the iCare application install package and are stored in the iCare program directory. The default iCare install directory is: C:\%ProgramFiles%\Indian Health Service\iCare Version {Version Number}. There are no Active-X/COM files installed or registered with the iCare application.

### 13.2 iCare RPMS Server Requirements

The RPMS server portion of the iCare application does not require a specific version of Cache® or operating system (OS). However, the server needs to be able to support BMX 4.0 fully, and is therefore subject to any requirements needed to run that application. Please refer to the BMX version 4.0 Technical Manual for details.

The iCare GUI client has certain workstation OS and hardware requirements, as detailed in Section 2.32 of the iCare (BQI) Installation Guide and Release Notes.

### 13.3 List of iCare GUI Dependencies

Table 13-1 shows the GUI dependencies associated with the iCare application.

Table 13-1: GUI dependencies

Dependency	Assembly Version	Description
Microsoft .Net 4.0 Framework (Client Profile)	Version 4.0 with any subsequent service packs from Microsoft®	The Microsoft® .NET 4.0 Framework is required for the iCare allocation. The iCare installation package will check this prerequisite during install and will assist with the download of this update from Microsoft®. If online download is not available, installation will not be allowed until .Net 4.0 has been installed by other means.
BMXNet20.dll	2.0.2459.21970	This is the original BMXNet 2.0 dll utilized by BMXNet 4.0 to map existing connection information cached on clients to the new BMXNet 4.0 configuration.
BMXNet40.dll	4.0.0.2	This library file contains the general BMXNet 4.0 client-side utilities and functions for connecting to the RPMS server and managing data connections.
BMXWIN40.dll	4.0.0.2	This dll contains BMXNet 4.0 client side utilities and functions that are specific to use within the Windows stand-alone application environment.
bqi-iCareControlLibrary1.dll	2.1.4869.28313	The iCareControlLibrary1 is a Visual Studio® 2012 collection of custom UI controls used by the iCare client.
bqi-ultraGridToolBar.dll	2.1.4869.28313	The ultraGridToolBar is a Visual Studio® 2012 custom UI control used by the iCare client.

Dependency	Assembly Version	Description
RichTextBoxPrintControl.dll	1.0.0.0	This class extends the RichTextBox control to allow for generation of formatted print documents for use in print preview and print to printer functions. Specifically, this is used to print character based reports pulled from RPMS and displayed in the iCare application.
UserInactivityMonitoring.dll	0.0.0.0	This class allows the iCare application to monitor user activity and implement locking and timeout functionality required by IHS for implementation on shared client machines.
Infragistics® NetAdvantage® for Windows® Forms 2012 Vol.2	12.2.20122.2038	These dll files are also distributed with the iCare installation package. See Section 6.1 for details of individual files that are distributed.
Microsoft.Office.Interop.Excel.dll	14.0.0.0	Microsoft® Office Interoperability dll used to allow iCare to open, edit and save MS Excel® files.

Table 13 1 GUI dependencies

## 13.4 iCare Windows Client–Install %

Table 13-2 shows all of the files that will be installed with the iCare application. These files are installed into the main iCare application folder, which defaults to C:\%ProgramFiles%\Indian Health Service\iCare {Version Number}.

Table 13-2: iCare Windows® install client

Filename	Assembly Version	Description
bqi-iCare.exe	2.4.0.11	This is the main iCare executable used to launch and run the iCare application.
BMXNet20.dll	2.0.2459.21970	This is the original BMXNet 2.0 dll utilized by BMXNet 4.0 to map existing connection information cached on clients to the new BMXNet 4.0 configuration.

Filename	Assembly Version	Description
BMXWIN40.dll	4.0.0.2	This dll contains BMXNet 4.0 client side utilities and functions that are specific to use within the Windows® stand-alone application environment.
BMXNET40.dll	4.0.0.2	This library file contains the general BMXNet 4.0 client-side utilities and functions for connecting to the RPMS server and managing data connections.
bqi-iCareControlLibrary1.dll	2.1.0.0	The iCareControlLibrary1 is a Visual Studio® 2012 collection of custom UI controls used by the iCare client.
bqi-ultraGridToolBar.dll	2.1.0.0	The ultraGridToolBar is a custom Visual Studio® 2012 UI control that handles the set of buttons for search, print, copy, and export to MS Excel® on each datagrid in the iCare application.
RichTextBoxPrintControl.dll	1.0.0.0	This class extends the RichTextBox control to allow for generation of formatted print documents in print preview and print to printer functions. Specifically, this is used to print character based reports pulled from RPMS and displayed in the iCare application.
UserInactivityMonitoring.dll	0.0.0.0	This class allows the iCare application to monitor user activity and implement locking and timeout functionality required by IHS for implementation on shared client machines.
Microsoft.Office.Interop.Excel.dll	14.0.0.0	Microsoft® Interop dll. Used to reference Microsoft® Office® documents.
CMET.chm		Compiled HTML file that contains the online help for CMET.
HIV_AIDS.chm		Compiled HTML file that contains the online help for HIV/AIDS.
Improving_Patient_Care.chm		Compiled HTML file that contains the online help for IPC.
Meaningful_Use.chm		Compiled HTML file that contains the online help for Meaningful Use.
Natl_Measures.chm		Compiled HTML file that contains the online help for National Measures.

Filename	Assembly Version	Description
Panel_Definition.chm		Compiled HTML file that contains the online help for Panel Definition.
Panel_List.chm		Compiled HTML file that contains the online help for Panel List.
Panel_View.chm		Compiled HTML file that contains the online help for Panel View.
Patient_Record.chm		Compiled HTML file that contains the online help for Patient Record.
Taxonomy_Maintenance.chm		Compiled HTML file that contains the online help for Taxonomy Maintenance.

Table 13-3 shows all of the files that are part of a set of enhanced UI controls from Infragistics<sup>®</sup> called NetAdvantage<sup>®</sup> for Windows Forms<sup>®</sup> Version 2012 Volume 2.

Table 13-3: Enhanced UI controls

Filename	Assembly Version	Description
Infragistics4.Documents.Core.v12.2.dll	12.2.20122.2038 .1000	This file contains the Infragistics <sup>®</sup> Document Engine that allows export of PDF and XML formats.
Infragistics4.Documents.Excel.v12.2.dll	12.2.20122.2038	This file contains helper classes that allow export to Excel <sup>®</sup> format without requiring that Excel <sup>®</sup> is installed on the client machine.
Infragistics4.Documents.Reports.v12.2.dll	12.2.20122.2038	This file contains the Infragistics Document Engine that allows export of PDF and XML formats.
Infragistics4.Shared.v12.2.dll	12.2.20122.2038	This file contains general functions and types common to all of the Infragistics <sup>®</sup> controls.
Infragistics4.Win.Misc.v12.2.dll	12.2.20122.2038	This is a set of other miscellaneous functions and data types used when working with the other Infragistics <sup>®</sup> classes.

Filename	Assembly Version	Description
Infragistics4.Win.UltraWinCalcManager.v12.2.dll	12.2.20122.2038	This dll file contains functionality to allow definition of functions and calculations with the Infragistics® UltraGrid™ enhanced DataGrid class.
Infragistics4.Win.UltraWinChart.v12.2.dll	12.2.20122.2038	This dll file contains functionality used when charting patient measurements from PCC over time.
Infragistics4.Win.UltraWinDataSource.v12.2.dll	12.2.20122.2038	This dll file contains functionality to create manage data sources that can be used with the Infragistics® UltraGrid™, etc.
Infragistics4.Win.UltraWinDock.v12.2.dll	12.2.20122.2038	This dll file contains functionality to create manage docks that can be used with the Infragistics® UltraGrid™, etc.
Infragistics4.Win.UltraWinEditors.v12.2.dll	12.2.20122.2038	This dll file contains enhanced UI input controls such as the calendar date picker and special combo boxes.
Infragistics4.Win.UltraWinGauge.v12.2.dll	12.2.20122.2038	This dll file contains enhanced UI input control such as gauges.
Infragistics4.Win.UltraWinGrid.ExcelExport.v12.2.dll	12.2.20122.2038	This file contains the classes used to handle export of information from UltraGrid™ DataGrid to Excel® format.
Infragistics4.Win.UltraWinGrid.v12.2.dll	12.2.20122.2038	The UltraGrid™ is an enhanced data-bound DataGrid used to display tabular data to the user. This also allows users to sort, filter, arrange columns, and select rows of data at run time.

Filename	Assembly Version	Description
Infragistics4.Win.UltraWinListBar.v12.2.dll	12.2.20122.2038	The UltraWinListBar is used to aid with navigation to forms.
Infragistics4.Win.UltraWinListView.v12.2.dll	12.2.20122.2038	The UltraWinListView is a user interface control to display lists of items.
Infragistics4.Win.UltraWinPrintPreviewDialog.v12.2.dll	12.2.20122.2038	This file contains classes to handle print preview windows for printable items with the application and allows for zoom, page layout adjustments, etc.
Infragistics4.Win.UltraWinSchedule.v12.2.dll	12.2.20122.2038	This file contains classes for scheduling controls for uses such as calendar, week views and month views, etc.
Infragistics4.Win.UltraWinStatusBar.v12.2.dll	12.2.20122.2038	The UltraWinStatusBar provides the enhanced status bar used at the bottom of form to provide status text and row counts.
Infragistics4.Win.UltraWinTabbedMdi.v12.2.dll	12.2.20122.2038	The classes within this file provide a way to present multiple forms within a tabbed interface style.
Infragistics4.Win.UltraWinTabControl.v12.2.dll	12.2.20122.2038	The UltraWinTabControl provides an enhanced tab UI interface used on forms to present multiple pages of data.
Infragistics4.Win.UltraWinToolbars.v12.2.dll	12.2.20122.2038	This file contains classes to handle the toolbars, menu and context menus (right-click) within Windows forms.
Infragistics4.Win.UltraWinTree.v12.2.dll	12.2.20122.2038	The UltraWinTree allows presentation of data in a tree style layout where the user is able to drill down into categories of data.

Filename	Assembly Version	Description
Infragistics4.Win.v12.2.dll	12.2.20122.2038	This file contains classes used at a high level to control application-wide styles and appearances and interface with Windows XP themes, etc.

## 13.5 iCare Windows Client — List of Object Classes

Table 13-4 shows the new object classes used within the iCare Windows<sup>®</sup> application. All of the specified class names exist within the namespace IndianHealthService.iCare.

Table 13-4: Object Classes

Class Name	Assembly	Description
CMETUtilities	bqi-iCare.exe	The CMETUtilities class provides utilities for implementation of CMET functionality in iCare.
CmetWorksheet	bqi-iCare.exe	The CmetWorksheet class is a custom user control used to implement the CMET Worksheet functionality for processing a CMET tracked event through iCare.
DAddTemplate	bqi-iCare.exe	DAddTemplate class provides a view to allow users to select layout type and template name before editing template.
DAppTimeCountdown	bqi-iCare.exe	DAppTimeCountdown class provides a 60 second timer gauge for counting down before minimizing iCare application.
DBackProcProperties	bqi-iCare.exe	The DBackProcProperties class provides a grid view of the status for background jobs that iCare utilizes. The screen displays the name of the process, the last run date/time, and the next run date/time.
DCategoryPicker	bqi-iCare.exe	The DCategoryPicker class provides the user the ability to pick a desired category for a panel. Category editing can also be accessed from this class.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DChartView	bqi-iCare.exe	The DChartView class provides the user the ability to graph PCC Measurement data for a specific patient through iCare.
DChartViewIPCFacAgg	bqi-iCare.exe	The DChartViewIPCFacAgg class provides the user the ability to graph IPC Facility Aggregated Measurement data through iCare.
DChartViewIPCProvAggByMeas	bqi-iCare.exe	The DChartViewIPCProvAggByMeas class provides the user the ability to graph IPC Provider Aggregated Measurement selected by measure data through iCare.
DChartViewIPCProvAggByProv	bqi-iCare.exe	The DChartViewIPCProvAggByProv class provides the user the ability to graph IPC Provider Aggregated Measurement selected by provider data through iCare.
DChartViewNationalMeasures	bqi-iCare.exe	The DChartViewNationalMeasures class provides the user the ability to graph National Measurement data for a specific patient through iCare.
DChoiceDlg	bqi-iCare.exe	The DChoiceDlg class allows the user to select one or more selections in a generic dialog as a list of radiobuttons or checkboxes.
DCMETSiteParameters	bqi-iCare.exe	The DCMETSiteParameters class allows the user with CMET Package Manager access to edit the CMET Site Parameters.
DColorPicker	bqi-iCare.exe	The DColorPicker class allows the user to select a desired color and is implemented to support the new panel category feature.
DCommAlerts	bqi-iCare.exe	The DCommAlerts class provides a display of any active community alerts at login.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DCopyPanel	bqi-iCare.exe	The DCopyPanel class allows the user to create a copy of a panel from the user's panel list in iCare.
DGenEdit	bqi-iCare.exe	The DGenEdit class is a table-driven dynamic data entry form that can be used to provide an interface to simpler RPMS data entry screens.
DGenEditForm	bqi-iCare.exe	This class simply provides a prewrapped DGenEdit control in a form with appropriate default form settings preconfigured.
DGridView	bqi-iCare.exe	The DGridView class provides a generic grid data display form with the standard grid functions (search, print, etc.) for data best displayed in a tabular fashion.
DiCareMain	bqi-iCare.exe	The iCareMain class provides the main form for the iCare application. It currently contains a tabbed multiple document interface (MDI) control that holds the Panel List and the Flag List for the signed-in iCare user. Closing the main form will exit the application.
DInputDialog	bqi-iCare.exe	The DInputDialog class provides a generic user input form used primarily when copying panels to a different name. Updated in to allow masked input and encryption for electronic signature functionality.
DInputDialogMultiline	bqi-iCare.exe	The DInputDialogMultiline class provides a generic user input form to allow multiline data entry.
DlpcExport	bqi-iCare.exe	The DlpcExport class provides a method for the user to select month and provider to export for IPC reporting.
DLabFilter	bqi-iCare.exe	The DLabFilter class allows users to edit an existing Lab Detail filter entry for use in DPanelDef as panel filter

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DLetterView	bqi-Care.exe	The DLetterView class allows users to create a TIU note through iCare, save it to RPMS and sign it electronically to complete it.
DManageTemplates	bqi-Care.exe	The DManageTemplates class provides window for users to manage templates for panel view. Templates are now shareable across users.
DMsgBox	bqi-iCare.exe	The DMsgBox class provides a generic message box that displays a message to the user when the application is performing a task that must complete before the user can continue.
DNewVersion	bqi-iCare.exe	The DNewVersion class allows users to choose to revisit their User Preferences when a new version of the software is released.
DNotifications	bqi-iCare.exe	The DNotifications class provides a form to allow the user to manage notifications received for the user regarding changes to shared panels, panel repopulate issues, etc.
DPanelDef	bqi-iCare.exe	The DPanelDef class provides a form to allow the user to manage an individual panel definition used to generate the patient list, as well as preview changes to the list, customize the patient list and detail layouts, manage sharing, and auto-repopulate options.
DPanelProperties	bqi-iCare.exe	This form provides a display of some of the panel's more detailed properties in tabbed interface.
DPanelSearch	bqi-iCare.exe	The DPanelSearch class provides a form to allow the user to search the patient list from DPanelView based on demographic fields.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DPanelView	bqi-iCare.exe	The DPanelView class provides a form to allow the user to view and manage an individual panel of patients. This form contains a customizable patient list, flag list, customizable GPRA detail list, and GPRA Aggregate all based on patients in the panel.
DPatientProperties	bqi-iCare.exe	The DPatientProperties form class provides a display of additional demographic and other fields related to the patient record in a pop-up window display.
DPatientView	bqi-iCare.exe	The DPatientView class provides a form to allow the user to view and manage an individual patient. This form contains the following tabs: Cover Sheet, Flags, Reminders, Patient GPRA, Face Sheet, Health Summary, Wellness Summary, Labs, Meds, Radiology, and Problem List. The user can manage an individual patient's flags and view patient results in this form.
DPccEdit	bqi-iCare.exe	The DPccEdit class provides the user interface for entering historical PCC event data through iCare.
DPnlAddRemove	bqi-iCare.exe	The DPnlAddRemove class provides a form to allow users to select/deselect panels. This functionality is used when selecting panel filters, adding a patient to panels, and selecting panels to immediately repopulate in the background.
DQueuedEventsTrack	bqi-iCare.exe	The DQueuedEventsTrack class allows users to track CMET data mined events as a batch or singly with the ability to continue on to the CMET Worksheet.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DReassignPanel	bqi-iCare.exe	The DReassignPanel class allows users with iCare Package Manager access to reassign panels from one iCare user to another – especially if users are no longer with the organization.
DRegBatchEdit	bqi-iCare.exe	This class provides a dialog that allows the user to change selected values on multiple selected patients within a panel.
DReportGenCancel	bqi-iCare.exe	The DReportGenCancel provides a way to cancel Async loading reports.
DReportMsgCancel	bqi-iCare.exe	The DReportMsgCancel provides a cancel message box after a user cancels an Async report.
DSearchInfo	bqi-ultraGridToolBar.dll	The DSearchInfo class provides a form for the user to search for values within the context of a bound UltraGrid™ (Infragistics® control).
DSearchText	bqi-iCare.exe	The DSearchText class allows users to search RichTextBox controls to implement Find functionality.
DSelectPatient	bqi-iCare.exe	The DSelectPatient class provides a form to allow users to select patients from the RPMS system based on name, HRN, and DOB searches.
DSiteParametersDivision	bqi-iCare.exe	The DSiteParametersDivision class provides a way for users to set Division site parameters settings.
DSiteParametersEmployer	bqi-iCare.exe	The DSiteParametersEmployer class provides a way for users to set Employer site parameters settings.
DSiteParametersGroupOrder	bqi-iCare.exe	The DSiteParametersGroupOrder class provides a way for users to set Group Order site parameters settings.
DSiteParametersIPC	bqi-iCare.exe	The DSiteParametersIPC class provides a way for users to set IPC site parameters settings.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DSiteParametersLockiCare	bqi-iCare.exe	The DSiteParametersLockiCare class provides a way for users to set iCare time out settings.
DSiteParametersMU	bqi-iCare.exe	The DMUSiteParameters class allows users with the appropriate security key to maintain the site's MU site parameters.
DSiteParametersPregnancy	bqi-iCare.exe	The DSiteParametersPregnancy class provides a way for users to set Pregnancy site parameters settings.
DSplash	bqi-iCare.exe	The DSplash class provides the initial splash screen displayed when starting iCare to show startup progress and installed version.
DTableLookup	bqi-iCare.exe	The DTableLookup class provides the ability for users to search for items for generic table search and is implemented in support of the DGenEdit class for generic form generation.
DTagHistory	bqi-iCare.exe	The DTagHistory class provides the user the ability to review the audit history of changes related to a patient's diagnostic tags including the factors that proposed the tag.
DTagReason	bqi-iCare.exe	The DTagReason class provides the user with a form to enter the reason for proposing, accepting or not accepting a diagnostic tag for a patient.
DTaxonomyLookup	bqi-iCare.exe	The DTaxonomyLookup class provides the ability to search for taxonomy items to be included in site populated taxonomies.
DTaxonomyMaint	bqi-iCare.exe	The DTaxonomyMaint class provides a form to allow users to review and edit site-populated taxonomies if the users have the proper access rights.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DTemplate	bqi-iCare.exe	The DTemplate class provides the user the ability to enter user data into existing TIU templates in order to include the template and input into a TIU note.
DTextView	bqi-iCare.exe	The DTextView class provides the user the ability to view text detail such as visit detail, lab detail, etc. for review in iCare.
DToast	bqi-iCare.exe	The DToast class provides the display of Notifications received by iCare displayed as a pop-up message that will appear and disappear like other MS® notifications.
DTrackedEventClose	bqi-iCare.exe	The DTrackedEventClose class allows users to enter a close reason and comment when closing a CMET tracked event.
DUnLock	bqi-iCare.exe	The DUnLock class prompts a user to enter their current verify code to unlock iCare.
DUserAppPrefs	bqi-iCare.exe	The DUserAppPrefs class provides a form to allow the user to manage their application preferences such as My Patients Definition, Flag Preferences, and Default Startup View. The form defined by this class also doubles as the Initial Login Wizard that allows users to set up their preferences when first logging into iCare.
DUserRoles	bqi-iCare.exe	The DUserRoles class gives users the ability to manage iCare access rights to manager keys and editor keys for iCare and the CMET package manager keys.
DValAddRemove	bqi-iCare.exe	The DValAddRemove class allows users to select one or more values from RPMS tables.
DValTreeAddRemove	bqi-iCare.exe	The DValTreeAddRemove class allows users to select one or more values from RPMS tables using TreeView controls.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
DViewLayout	bqi-iCare.exe	The DViewLayout class allows users to edit their individual panel layouts and default layout templates.
DVisitFilter	bqi-iCare.exe	The DVisitFilter class allows users to define a Visit Detail filter associated with a panel definition. The DVisitFilter class is only referenced from DPanelDef at this time.
iCareDocumentManager	bqi-iCare.exe	The iCareDocumentManager class provides the framework for RPMS session connectivity, authentication, and other sign-on tasks. The iCareDocumentManager class also serves as the main document controller for the application by managing a list of open windows, document locking, most recently used (MRU) list, and logic to handle cleanup on application exit.
iCareUser32	bqi-iCare.exe	The iCareUser32 class provides access to User32.dll methods and is implemented to lock iCare.
iCareUtilities	bqi-iCare.exe	The iCareUtilities class contains utility functions used through the iCare application.
LabelLookup	bqi-iCare.exe	The LabelLookup class is a custom user control implemented in DGenEdit for table lookups when the RPMS table is too big to display as a combo box.
mdiAlerts	bqi-iCare.exe	The mdiAlerts class provides the MDI form that allows users to manage flags for any patient in at least one panel of the user's panel list. Flags can be refreshed, shown, and hidden from this form and patients can be opened from the form defined by this class, as well.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
mdiCommunityAlerts	bqi-iCare.exe	The mdiCommunityAlerts class provides a form that can be added as a tab on iCareMain screen to provide a list of current community alerts.
mdiEventTracking	bqi-iCare.exe	The mdiEventTracking class provides a form that is added as a tab on the iCare Main form to provide access to CMET events via three sub-tabs, Events, Tracked Events, and Follow-up Events, where users can manage their site's CMET workflow.
mdiIPC	bqi-iCare.exe	The mdiIPC class provides a form that is added as a tab on the iCare Main form to provide access to IPC measurements via four sub-tabs where users can review their site's IPC performance: Patient Detail; Provider Detail; Providers Aggregated; and Facility Aggregated.
mdiMeaningfulUse	bqi-iCare.exe	The mdiMeaningfulUse class provides a form that is added as a tab on the iCare Main form to provide access to Meaningful Use measurements via four sub-tabs where users can review their site's MU performance: Providers – Obj; Hospital/CAHs – Obj; Providers – CQ; and Hospital/CAHs – CQ.
mdiNationalMeasures	bqi-iCare.exe	The mdiNationalMeasures class provides a form that is added as a tab on the iCare Main form to provide access to the site's National Measures performance.
mdiPanelList	bqi-iCare.exe	The mdiPanelList class provides the MDI-child form that allows users to manage panels that are owned (created) by them or shared with them by another user. In addition, the form defined by this class, allows panels to be created, edited, repopulated, deleted, shared, opened, and copied.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
MultiltemEditor	bqi-iCareControlLibrary1.dll	This is a grid editing control that allows display and editing of multicolumn subrecord data within a single data entry form.
NotificationProcess	bqi-iCare.exe	The NotificationProcess class is a custom user control used to implement Reminders Notification, PatientBatchProcessing uses to method to control groupbox updates.
PatientBatchProcessing	bqi-iCare.exe	The PatientBatchProcessing class is a custom user control used to implement the Definition Details Reminder Notification, Notification Process functionality for processing a notification sent to a user through iCare.
PnlDocument	bqi-iCare.exe	The PnlDocument class is the primary panel object for the RPMS panel file.
PnlFilters	bqi-iCare.exe	The PnlFilters class is the object used to contain the filters associated with a panel definition.
PnlLayout	bqi-iCare.exe	The PnlLayout class is the object used to contain a layout associated with the panel or the user preference default template layout.
PnlParams	bqi-iCare.exe	The PnlParams class is the object used to contain the parameters associated with a panel definition.
PtDocument	bqi-iCare.exe	The PtDocument class is the primary patient object based on the RPMS patient file.
TabFormattedTextBox	bqi-iCareControlLibrary1.dll	The TabFormattedTextBox class to override default behavior for UltraFormattedTextEditor.
ToastHelper	bqi-iCare.exe	The ToastHelper class describes the arguments used for the event arguments when the user opens the Notifications form from the Notification window.

<b>Class Name</b>	<b>Assembly</b>	<b>Description</b>
ToolSeparatorDrawFilter	bqi-iCare.exe	This ToolSeparateDrawFilter class provides a mechanism for changing properties on Begin new group on menu.
UltraColorPickerPlus	bqi-iCare.exe	The UltraColorPickerPlus class is a copy of Infragistics Color Picker modified to allow disabling of color selection tabs.
UltraGridToolBar	bqi-ultraGridToolBar.dll	The ultraGridToolBar class is a toolbar control that provides printing, exporting, copy, and search for a bound UltraGrid™ (Infragistics control).
UltraGridUtilities	bqi-ultraGridToolBar.dll	The ultraGridUtilities class is a grouping of methods by ultraGridToolBar.

## 14.0 Accessibility Checklist

### 14.1 Indian Health Service (IHS) Section 508 36 CFR Part §1194.21 Software Applications and Operating Systems Checklist

**Software Application and Version:** IHS iCare Version 2.4.0.11

**Manufacturer/Contractor/Developer:** General Dynamics IT

**Tester:** General Dynamics IT

**Date:** October 2014

- Fully Compliant (FC): All instances are Fully Compliant
- Non-Compliant (NC): All instances are Non-Compliant
- Partially Compliant (PC): Requires further explanation
- Not Applicable (N/A): Standard is not applicable to this application

Compliance is defined as meeting the requirement set forth in the Section 508 Technical Standards 36 CFR Part 1194, <http://www.access-board.gov/sec508/guide/>.

Table 14-1: ID number and an explanation for any PC or NC results.

ID	36 CFR Part 1194.21: Software Applications and Operating Systems Standards & Checklist Test Question	FC	PC	NC	N/A
1	(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually. Can you navigate and use all aspects of the application using only the keyboard?	FC-w/ minor			

ID	<b>36 CFR Part 1194.21: Software Applications and Operating Systems Standards &amp; Checklist Test Question</b>	FC	PC	NC	N/A
2	(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer. Are all of the accessibility options that were previously set still available?	FC			
3	(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes. Is the focus well defined?	FC			
	Is there no evident change in on-screen focus as you navigate through one or more components of an application?	FC			
4	(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text. Can the screen reader distinguish and read all controls to the user, such as prompts for edit fields, text, radio buttons, checkboxes, menus, and toolbars?		PC –Testing is Pending with Assistive Technology Products		

ID	<b>36 CFR Part 1194.21: Software Applications and Operating Systems Standards &amp; Checklist Test Question</b>	FC	PC	NC	N/A
5	(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance. Do individual icons used to identify controls, status indicators, or other programmatic elements mean the same thing throughout the application?	FC			
6	(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes. Is all text presented in the application readable by assistive technologies?	FC–Testing is Pending with Assistive Technology Products			
7	(g) Applications shall not override user selected contrast and color selections and other individual display attributes. Does the software not override user-selected contrast and color selections and other individual display attributes or settings?	FC			
8	(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user. If animated objects exist, does the information conveyed by the animated object exist in another mode, i.e., captions?	FC			

ID	<b>36 CFR Part 1194.21: Software Applications and Operating Systems Standards &amp; Checklist Test Question</b>	FC	PC	NC	N/A
9	(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. If color is the sole means used to prompt a response, indicate an action, distinguish a visual element, or convey information, is the information displayed in another mode? For example: If the color red indicates negative numbers, are those numbers also represented with a negative sign (-)?	FC			
10	(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided. If users can adjust color and contrast settings, are a variety of color and contrast settings available to choose from?				N/A
11	(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz. If any flashing or blinking objects or text occurs in the application, are the frequencies less than 2 Hz and greater than 55Hz?	FC			
12	(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues. Can you navigate and follow links and forms with the keyboard?	FC–Pending			
	Can the electronic forms be used with assistive technologies?		PC –Testing is Pending with Assistive Technology Products		

ID	36 CFR Part 1194.21: Software Applications and Operating Systems Standards & Checklist Test Question	FC	PC	NC	N/A
	Can a screen reading program read all prompts, directions, explanations, or instructions on the form and understand the purpose of each field?		PC –Testing is Pending with Assistive Technology Products		
13	Documentation Are all manuals and documentation provided in electronic format, as well as text files, including text descriptions of any charts, graphs, pictures, or graphics of any nature?	FC–Pending			

Table 14-2: Explanation of results

ID	Explanation
1	Currently all functionality in the application is accessible via keyboard except for changing sort order and applying list filters to DataGrid lists. Staff is working with the vendor of the DataGrid to find a way to make this functionality available by keyboard only, but changing sort order and applying list filters to DataGrid lists is not considered a critical functionality. The most important data lists have user customizable column order and sort screens that are accessible via the keyboard-only usage.
4	Testing with screen reading assistive technology software is pending. It is anticipated that the application will need some modification to work effectively with screen reading software; however, all components used in development claim to meet Section 508 compliance measures and each control makes accessibility-related properties available to help the screen reader software. Therefore the application will be able to meet compliance, but may need adjustments with respect to accessibility properties.
6	See comment on ID #4. One challenge for the iCare application is that by its very nature it involves working with long lists of patients, laboratory results, GPRA data, etc. which may be challenging to convey in a practical way via screen reading software, but the current design seems to be as appropriate as any for handling long lists.
10	iCare uses Windows® system or theme colors for all controls in the application, and does not offer any functionality within iCare itself to modify the colors, etc.
12	Testing is pending. See comment ID #4 and #6.
13	All documentation is being prepared using IHS form templates and documentation standards and guidelines.

Application results:

Fully Compliant \_\_ Partially Compliant \_\_ Noncompliant \_\_ N/A \_\_

Additional Comments:

This initial review is based on application status prior to alpha and beta testing. Testing related to Section 508 compliance will continue and improvements will continue to be made prior to national release and potentially thereafter.

## Glossary

### **Care Management Event Tracking (CMET)**

New functionality created in the BTPW namespace to implement event tracking for specific events from identification through patient notification. iCare is the first interface to use the CMET functionality.

### **Case File Manager(s)**

The system owner(s) of the individual CM application. The case file manager(s) will have full security access to the application to perform various setup functions and assign access roles to other users.

### **Case Manager(s) (CM)**

A term used to describe a particular type of clinical role within a clinic. Case managers are typically, but not always, nurses who perform clinical management tasks for specified groups of patients, e.g. diabetics.

### **Centers for Disease Control and Prevention (CDC)**

An agency within the Department of Health and Human Services (HHS).

### **Centers for Medicare & Medicaid Services (CMS)**

An agency within the HHS.

### **Electronic Health Record (EHR)**

An application used by medical organizations to track patient medical records and care.

### **Health Resources and Services Administration**

An agency within HHS.

### **ICD Codes**

One of several code sets used by the healthcare industry to standardize data. The International Classification of Disease (ICD) codes are an international diagnostic coding scheme. In addition to diseases, ICD also includes several families of terms for medical-specialty diagnoses, health status, disablements, procedures, and reasons for contact with health care providers. IHS currently uses ICD-9 for coding.

**Improving Patient Care (IPC)**

The Improving Patient Care program's aim is to change and improve the Indian Health system. IPC will develop high performing and innovative healthcare teams to improve the quality of and access to care. The IPC results will be a medical home that sets new standards for healthcare delivery and further advances the health and wellness of the American Indian and Alaska Native people. iCare is a tool used by the IPC healthcare teams to evaluate the quality of care and identify areas for improvement.

**Meaningful Use (MU)**

Meaningful Use (MU) is a term used by CMS to ensure that providers and hospitals that have adopted certified EHR are using the technology to further the goals of information exchange among health care professionals. Eligible Providers (EPs) and Eligible Hospitals (EHs) will achieve meaningful use if the EP or EH : (a) demonstrate use of certified EHR technology in a meaningful manner, (b) demonstrate the certified EHR technology provides for electronic exchange of health information to improve quality of care, and (c) use certified EHR technology to submit information on clinical quality and other measures.

**Office of Information Technology (OIT)**

The organization within IHS that is responsible for developing and maintaining RPMS and related IT functions.

**PCC form**

The paper form used in most IHS direct, Tribal, and urban (I/T/U) clinics on which the provider(s) document all data from the patient's visit. Used by data entry staff to enter patient data into RPMS PCC.

**PCC+**

The RPMS PCC+ software produces automated, customizable PCC forms.

**Purpose of Visit (POV)**

In RPMS, ICD codes and narrative describing the patient's purpose of visit (POV) are documented in PCC V POV.

**Resource and Patient Management System (RPMS)**

A series of integrated software components that includes clinical, administrative, and financial functions.

**RPMS Patient Care Component (PCC)**

Refers to functions within RPMS as a clinical data repository, storing visit-related data about a patient.

**Software Quality Assurance (SQA)**

The office within OIT responsible for ensuring that the system conforms to RPMS Programming Standards and Conventions (SAC).

**Taxonomy**

In RPMS, a grouping of functionally related data elements, such as ICD codes. For iCare, taxonomies will be used as definitions for diagnoses, procedures, laboratory tests, medications, and other clinical data types.

**Text Integration Utility (TIU)**

Refers to functions within RPMS used to store long blocks of text in the medical record.

**Visual Studio<sup>®</sup>**

Microsoft<sup>®</sup> software development tool and integrated development environment (IDE) used to develop the iCare client application.

## Acronym List

Acronym	Term Meaning
API	Application Programmer Interface
BMI	Body Mass Index
BQI	Namespace for iCare files and routines
CDC	Centers for Disease Control and Prevention
CM	Case Manager(s)
CMET	Care Management Event Tracking
CMS	Center Medicaid and Medicare Services, an agency within IHS
COTS	Commercial off the Shelf, refers to commercially available software applications
CPT	Current Procedural Terminology
CVD	Cardiovascular Disease
CVD MS	Cardiovascular Disease Management System
DOB	Date of Birth
DSM	Digital Standard Mumps
DT	Current Date
DX	Diagnosis
ED	Education
EHR	Electronic Health Record
FC	Fully Compliant
GOTS	Government off the Shelf, refers to existing Government-owned and developed software applications
GPRA	Government Performance and Results Act
GUI	Graphical User Interface
HMS	HIV Management System
HRN	Health Record Number within RPMS
HRSA	Health Resource and Services Administrator
HTML	HyperText Markup Language
ICD	International Classification of Diseases
IDE	Integrated development environment
IHS	Indian Health Service
IPC	Improving Patient Care programs
I/T/U	Abbreviation referring to all IHS direct, Tribal, and urban facilities. Using the abbreviation I/T/U generally refers to all components of the Indian healthcare system.

<b>Acronym</b>	<b>Term Meaning</b>
ITSC	Information Technology Support Center currently referred to as Office of Information Technology (OIT)
KIDS	Kernel Installation and Distribution System
MRU	Most Recently Used
MDI	Multiple Document Interface
MS	Microsoft®
MU	Meaningful Use
N/A	Not Applicable
NC	Non-Compliant
OIT	Office of Information and Technology
OS	Operating System
PC	Partially Compliant
PCC	RPMS Patient Care Component
PDF	Portable Document Format
PEP	Published Entry Points
POV	Purpose of Visit
RCIS	RPMS Referred Care Information System
REM	Reminder
RPC	Remote Procedure Call
RPMS	Resource and Patient Management System
SAC	Standards and Conventions
SQA	Software Quality Assurance
SRD	Software Requirements Document
TIU	Text Integration Utility
V-file	Visit File
UI	User Interface
VA	Department of Veterans Affairs
VMS	Virtual Memory System
XML	Extensible Markup Language

## Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

**Phone:** (888) 830-7280 (toll free)

**Web:** <http://www.ihs.gov/helpdesk/>

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